A MORPHO-SEMANTIC CLASSIFICATION OF IGBO V-V COMPOUNDS

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A THESIS

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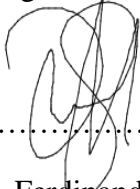
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OCTOBER 2018

CERTIFICATION

I declare that no portion of the work referred to in this thesis has been submitted to support an application for another degree or qualification in this or any other university or institution of learning. References to other works have been duly acknowledged.

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APPROVAL PAGE

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DEDICATION

To the evergreen memory of my lovely father Ichie Ogbuefi Pius Duru.

And

My Lovely Family.

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I am grateful to God Almighty for His abundant and sustaining grace throughout my MA program at this university. I am also thankful to God for His provisions, journey mercies, good health, divine wisdom, knowledge, power, and strength to complete this work.

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LIST OF GLOSSES AND ABBREVIATIONS

EMPH	-	Emphasis
M-V	-	Modifier-Verb
V-M	-	Verb-Modifier
P	-	Preposition
Pl	-	Plural
PST	-	Past (tense)
POSS	-	Possession
Sg	-	Singular
V	-	Verb
V1	-	First compounding verbal lexeme
V2	-	Second compounding verbal lexeme
1s	-	First Person singular
1pl	-	First Person Plural
2s	-	Second Person singular
2pl	-	Second Person plural
3s	-	Third Person singular
3pl	-	Third Person plural

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Abstract

This study is a morpho-semantic classification of the V-V compound structures in Igbo. It seeks to establish the kind of internal semantic relationship that characterizes compounding lexemes as well as the degree of semantic relativity between the compounding lexemes and their compound units. Several studies have been carried out on Igbo compound verbs. However, none of the previous works on Igbo compound verbs has accounted for the internal semantic relationships that underlie compound verbs and their compounding constituents, nor classify Igbo compound verbs using such semantic correlations. This study projects the conceptual idea that the Igbo V-V compound is derived from the composition of two verbal lexemes where their idiosyncratic semantic readings are determined by the native speakers' intuition, cognition, and cultural knowledge. The study adopts the compound verb classificatory framework of Shibatani (1990) and Fabb (1998). This theory seeks to provide a systematic semantic basis for the description and classification of compound verb compositions in languages. This study finds out that the concept of endocentricity; exocentricity and coordinative relationships as projected in this work are stimulated by semantic headedness. It also discovers that the V+nye compound verb structures with benefactive readings are the only compound verb formations that manifest coordinate compound relationships in Igbo. The study concludes that V-V compound formations in Igbo are products of semantic correlation between independent discrete verbal lexemes and that the description and identification of V-V compound heads in Igbo compound structures is solely dependent on the degree of semantic relativity between the compound units and their compounding constituents.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Compounding in linguistics can be described as a morpho-semantic reality where two or more independent discrete linguistic elements combine to form a new linguistic unit, which may or may not be semantically related to the semantic specification of the individual combining elements. Fabregas and Scalise (2012) defined Compounding as "a word-formation process that combines two or more roots inside the same word". They likened the relationship between compounding lexemes to that which exists between other grammatical elements within a sentence when they stated that "the relation which is established between the elements combined inside a compound is generally not very different from the relations seen between phrases in syntax: modification, coordination or subordination".

A compound verb therefore is a composition of two verbal lexemes that metamorphose to the formation of a new verbal lexeme. They are linguistic elements that represent lexical units that are made up of two or more elements, each of which can function as a lexeme independent of the other(s) in other contexts, and which shows some phonological or grammatical isolation from normal syntactic usage. In line with this explanation, V-V compound verb structures can be said to be verbal entities made up of two or more independent verbal lexemes. The V-V compound structure comprises two discrete verbal constituents with idiosyncratic semantic specifications where the first compounding constituent is known as V1 the corresponding compounding constituent is known as V2, and the V1 and the V2 must portray verbal readings.

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The concept of compound and compounding is not novel to linguistics literature. A variety of approaches and methods have been adapted to the universal study of compound structures, especially the area of compound formations that account for V-V compounds.

Studies in Igbo literature show that Igbo verbs have been greatly investigated through diverse approaches and theoretical frameworks. The great interest attracted by the Igbo verb can be attributed to the centrality of the Igbo verb to the general Igbo language studies (Nwachukwu: 1987). Linguistic evidence has shown that the study of Igbo verbs is central to the study of Igbo grammar. As noted by different scholars, a comprehensive knowledge of the structural and semantic dispositions of Igbo verbs amounts to the understanding of the workings of Igbo grammar in general. Despite these colorations of Igbo verbs, an aspect of Igbo verbs known as compound verbs has received minute attention, especially the V-V compound structures.

In Igbo, there has been a consensus about the composition of compound verb structures. This general perception portrays compound verbs in Igbo as a composition of two independent elements. Agbo (2014:133-134) notes that compound verbs in Igbo are made up of lexical stems or bases that combine to form new structures. This explains the binary constituent structure of compound verbs in Igbo.

However, existing studies in Igbo compound verbs have adopted syntactic and semantic approaches to the analysis and description of Igbo compound verb structures. The proponents of the syntactic approach claim that the syntactic foundation of Igbo compounds is motivated by principles of transformational generative grammar and to some extent minimalist program. The proponents of this notion include Lord (1975), Uwalaka (1995, 1997) Mbah (1999, 2005), and Anyanwu (2005, 2007). These scholars employ a syntactic approach in their analysis and description of Igbo compound verbs. Typical constructions resulting from their analyses are illustrated in examples 1(a)-(d) below:

1. a. Ọ́ tụ́-fù-rù ákwụ́kwọ́
        3s throw-lose-PST paper
        'He threw away the paper'   (Lord 1975:25)

b. Ònyé Ézè mé-bì-rì ókwú ahụ̀
Person chief do-end-PST talk/case that
'The chief put an end to that case'   (Uwalaka 1995:157)

c. Ṅgọzí dú-pù-rù Íjè
Ngozi lead-exit-PST Ije
'Ngozi led Ije out'   (Mbah 2005:590)

d. Ezè mme-dhà-rà óché nà
Eze make-fall-PST chair one
'Eze made this chair to fall'   (Anyanwu 2005:615)

The illustrations in 1(a) by Lord (1975:25), assume that the compound verb unit *tụfuru* is a product of the transformational process and it is derived from two underlying constructions of *Ọ́ tụ̀rù ákwụ́kwọ́* 'he threw book' and *Ákwụ́kwọ́ fùrù* 'book lost' respectively. According to her, syntactic principles, rules, and conditions are imposed on these underlying syntactic manifestations to derive the construction in 1(a). She claims that the analysis of the resulting compound verb *tụ́fú* ('throw away') is a product of syntactic configuration between *tụ̀rụ̀* 'throw' and *furu* 'lost. She attributes the first component *tụ́* with the characteristic of an action verb while the second component *fù* indicates the goal or result of the action verb. Lord concludes by saying that the canonical example of a compound verb in Igbo as illustrated in 1(a) is characterized by action-goal compound formations. However, in example 1(b) the compound verb *mé-bì*, which indicates a causative specification "belongs to the subset of Igbo complex predicates" (Uwalaka 1995:157). To Uwalaka, the compound verb structure *mébìrì* is typical of a complex predicate rather than an overt compound structure. The clause in 1(b) is also analyzed within the framework of the Government and Binding Theory (Agbo: 2014). Mbah (2005:590) opines that the typical compound verb unit *dú-pù* ('lead out') demonstrated in 1(c) is "made possible by transformations and the meaning of the compound derived from the structure". He claims "that the interpretation and comprehension of the compound formation is derived from the structural disposition of the compound structure. To him, the formation and interpretation of compound verbs in Igbo are dependent on structures rather than intuition and cognition (Agbo 2014). This implies that the syntactic configurations that characterized a canonical compound verb unit in Igbo account for their semantic integrity. Anyanwu (2005) adopts the Principles and

Parameters approach in his evaluation and analysis of Igbo compound verbs as illustrated in example 1(d). According to him, a typical compound verb *mmé-dhà* ('make-fall') in example 1(d) can be classified under the causative family of compound verbs where the causative attribute that characterized this class of compound verbs was stimulated by some syntactic processes (Agbo: 2014). As a result, the causative reading of the verb *mé-dhà* is the result of syntactic derivations from a bi-clausal structure, where *mé* ('make/do') in one instance is a predicate head of a clause, and *dhà* ('fall') is also a predicate of another clause respectively. Anyanwu's analysis portrays compound verbs in Igbo as having a double-headed clausal structure at the deep structure. By this postulation, the V1 and V2 are conceived as independent predicate heads respectively (Anyanwu (2005). The idea in 1(a)-(d) is that verb compounds derive their meaning from syntactic derivations and structures. These scholars describe compound verbs in Igbo as products of syntactic configurations and transformational movements.

In another development, Oha (2010) examines the combining inter-relation between the compounding elements of the V-V compound formations including their constraints in terms of the operative relations that hold between them. Typical constructions resulting from Oha (2010) analysis of causative compound verbs as a class of Igbo compound verbs identified by him are illustrated below:

2. a. kpọ́-wa: VI-KPỌ = peg.   V2-WÁ = break, slice
    b. pì-wá: V1-PÌ   = press, squeeze   V2-WÁ = break, slice
    c. gbá-ji: V1-GBÁ = MOTION   V2-JÍ = snap
    d. mé-bì: V2-MÉ   = do, act   V2-BÌ = end, stop
    e. kú-wa: V1-KÚ   = hit, knock   V2-WÁ = break, slice

Oha (2010)

The illustrations in 2(a)-(e) above contain canonical samples of compound verb structures outside context. Oha (2010) random and arbitrary approach in the selection and identification of compound units independent of contextual usage appears short of the orientation of this study. Such an approach projects compound verb formations as mere assumptions and introspective phenomena stimulated by syntactic configurations between compounding verbal lexemes.

As we have illustrated above, it is obvious that previous studies of compound verbs in Igbo have focused largely on the transformational process from which these compounds are derived. The central idea behind the syntactic base of compound verbs in Igbo is that the semantic interpretation of conventional compound verbs is usually parsed from these syntactic derivations largely stimulated by the tenets of Transformational Generative principles. The syntactic-based approach to the formation and interpretation of Igbo compound verb structures, as adopted by some Igbo grammarians, and the implicit consensus that Igbo compound verb formation and interpretation is a function of syntactic configuration, constitute part of the motivation for this research. However, none of the previous works on V-V compound formations in Igbo have given an account of the headedness relationship that characterized compounding verbal constituents. Also, none of the existing works in Igbo have any evidence of semantic classification of Igbo compound verbs with reference to the degree of semantic relativity between compound verbs and their compounding constituents. This study is set to address this gap in Igbo compound verb studies. To adequately account for these internal semantic correlations that characterized V-V compound formations in Igbo, this study will adopt the compound verb classificatory system of Shibatani (1990) and Fabb (1998) as its theoretical model. These and many more residual issues constitute and explain the researcher's motivation for this study.

1.2 Statement of the problem

Previous studies in Igbo such as Lord (1975), Uwalaka (1995, 1997) Mbah (1999, 2005), Anyanwu (2005, 2007), Obiamalu and Mbagwu (2014), and Agbo (2014) have looked at the compound verbs from different perspectives. Lord (1975), Uwalaka (1995, 1997), Mbah (1999, 2005), and Anyanwu (2005, 2007), are of the view that the concept of compound verbs in Igbo is a product of syntactic configurations and transformations. They claimed that the syntactic processes that stimulate the formation of compound verbs in Igbo were guided by the rules and principles of Transformational Generative Grammar. In another development, Obiamalu and Mbagwu (2014), and Agbo (2014) approach the concept of compound verbs in Igbo from the domain of semantics. However, there is a consensus among these Igbo scholars on the binary compounding structure of Igbo V-V formations. However, none of these studies have accounted for the internal semantic relationship that exists between the compounding constituents (V1 and

V2) in V-V compound structures. Also, none of the existing studies in Igbo V-V compound formations have given a comprehensive account of the semantic headedness that characterized compound verb structures. Also, none of the previous investigations in Igbo compound verbs have given semantic interpreted of Igbo V-V compounds with recourse to the semantic specifications of the compounding lexemes. We postulate that these gaps have impeded a better understanding of the structure, formation, and proper interpretation of the Igbo V-V compounds. Therefore, this work will explore these intellectual gaps by demonstrating a systematic exposition of the semantic relationships between the compounding lexemes and their compound units and will also utilize such grammatical correlations to classify Igbo V-V compound units using Shibatani (1990) and Fabb (1998) compound verb classificatory frameworks.

1.3 Purpose of the study

This study is a morpho-semantic investigation of Igbo V-V compounds. The following constitute the fundamental aim of the study:

1. To account for the semantic headedness in Igbo V-V compound formations within the classificatory model of Shibatani (1990) and Fabb (1998).

2. To establish the kind of grammatical relationship that underlies compounding constituents of Igbo V-V compound structures.
3. To demonstrate how the grammatical relationship between the compounding constituents accounted for the semantic headedness in Igbo V-V compounds.
4. To systematically demonstrate and establish the connection between the semantics of the compounding elements and their compound elements.
5. To give a systematic exposition of the role of the compounding lexemes in the semantic decomposition and interpretation of the V-V compound structures.

1.4 Research questions

This study seeks to answer the following research questions:

1. How can semantic headedness be accounted for in Igbo V-V compound structures within the classificatory model of Shibatani (1990) and Fabb (1998)?

2. What nature of grammatical relationship exists between the compounding constituents in the Igbo compound verb structures?

3. How can the semantic relationship between V1 and V2 account for semantic headedness in Igbo compound formations?

4. What kind of internal relationship exists between Igbo compound verbs and their compounding lexemes?

5. What role do V1 and V2 compounding constituents play in the semantic decomposition of V-V compound verb units in Igbo?

1.5 Significance of the study

This work will provide a morpho-semantic description and interpretation of V-V compound formations in Igbo. The semantic headedness that the work seeks to account for is a canonical departure from the traditional transformational generative approach to the study of compound verbs currently subsisting in Igbo grammar. As a result, it evokes a new dimension of research in the study of Igbo verbs for linguists, language researchers, and Igbo language teachers alike. Also, this work will lay a solid foundation for future classifications of Igbo compound verb structures with reference to the grammatical relationship that underlies compounding elements. This study also introduces a new typological and classificatory system in the study of Igbo compound verbs and verbs in general. Above all, it establishes a new approach to the study of Igbo morphology and Igbo grammar in general.

1.6 Scope of the study

The focus of this work is to investigate the degree of semantic relationship between V-V compounds and their compounding constituents in Igbo. And use such semantic correlation to account for the semantic headedness that characterized V-V compounds in Igbo. Therefore, the scope of the study is limited to the semantic headedness disposition of V-V compound formations in Igbo. The study is undertaken within the classificatory framework of Shibatani (1990) and Fabb (1998). It focuses on the semantic classification of Igbo V-V compound structures using the idiosyncratic semantic specifications of compounding verbal lexemes as a parameter. The study aims to establish the semantic significance of the compounding verbal elements to the semantic integrity of the compound verb units in Igbo. In reality, the study of

compound verbs in general especially in Igbo is practically inexhaustible. Therefore, this study focuses on an aspect of Igbo compound verbs known as V-V compound structures. However, there are diverse approaches to the study and classification of compound verbs in Igbo. These approaches include the transformational approach, minimalist approach, pragmatic approach, Semantax approach, etc. This work did not go into the discussion of all available approaches to the analysis of compound verbs in Igbo. The scope of this study is strictly limited to the idiosyncratic semantic specifications of the compounding lexemes as well as the semantic relationship that underlies compounding constituents and their compound units. Other semantic features of Igbo compound verbs outside the headedness condition are relatively excluded from this study. Also, the semantic interpretations and specifications of the compound verb units and their compounding elements are context-sensitive. This implies that the semantic readings of this compound and compounding elements outside their contextual usage are practically inconsequential to the analysis of the data, and therefore fall outside the scope of this study.

1.7 Limitation to the study

The researcher was constrained by some factors during his plenary research for data, especially the secondary data. Part of these constraints were attributed to the theoretical framework adopted for this study. The classificatory framework of Shibatani (1990) and Fabb (1998) as a theory of compound verb description and analysis is quite a novel theory, especially in the analysis and classification of Igbo compound verbs. Based on this, there is a paucity of material in Igbo compound verbs from the adopted theoretical model's perspective. However, the semantic headedness relationship that characterized V-V compounds in Igbo has not been accounted for. This stimulated a kind of artificial scarcity of literature on this area of linguistic study especially in Igbo. The available literature on V-V compound verb formations in Igbo did not give an adequate account of the semantic correlation between V1 and V2 compounding constituents. This posed a serious challenge for the researcher in the area of previous work assembling.

Another limitation of the study is finance. The researcher was not under any form of external funding other than self. This constituted a serious challenge as many research instruments that require capital funding could not be procured and as a result, were technically excluded from the work plan. However, despite all these challenges, limitations, and constraints, the commitment, disposition, and resilience of the researcher stimulated the successful completion of this research.

1.8 Tone and Tone-marking Conventions

The tone is an integral attribute of West African Languages to which the Igbo language belongs. The Igbo language uses variation in pitch to distinguish lexical and grammatical meanings. As a result, it can be said to be a Tonal Language. In Igbo, Ugorji (2008) stated that three-level tones

are contrasted in lexical formation. These include High, Low, and Mid-tones respectively. He observes that while high and low tones have unrestricted distribution and occurrence, Mid-tones have restricted distribution. According to him, Mid-tones occur only after a high tone and do not occur as an initial syllable in a word. Also, it does not occur in monosyllabic CV roots and may behave as a variant of the high tone in syntactic derivations. Tonal symbols for the registered three-level tone in Igbo are represented below:

High   [´]

Low   [`]

Mid   [¯]

In this Igbo V-V compound investigation, we shall adopt the traditional tone marking convention where all the registered tone levels are marked in correlation with the Tone Bearing Units (TBU). Canonical examples of the traditional tone marking conventions are demonstrated below.

ákwà	[H L]	'cloth'
àkwá	[L H]	'egg'
ákwá	[H H]	'cry'
àkwà	[L L]	'bed/bridge'
ísī '	[H S]	'to cook'

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CHAPTER TWO

LITERATURE REVIEW

This chapter examines some available literature considered relevant to this study. It acts as a reference point as it exposes the researcher to previously accomplished works by scholars in different languages that are related to the research title and above all relevant to the researcher's intellectual intent and purposes. It explored previous studies in Igbo verbs, accesses morpho-syntactic constructions in Igbo, as well as intellectual assertions that contain ideas relating to compound verb configurations with a focus on V-V compound types. Also, empirical studies on the compound verb phenomenon in Igbo were reviewed. The purpose of the latter is to achieve a systematic exposition of the intellectual gaps that characterize existing studies in Igbo compound verbs, especially the V-V compound formations. And this fits into the researcher's designed purpose and objective. The theoretical framework adopted in this work was also reviewed to demonstrate its choice and to reflect its ideal theoretical orientation which this study signifies.

2.1 Conceptual Review

2.1.1 The Universal Concept of Compound and Compounding

As we stated in chapter one, this study investigates the morphosemantic manifestation of V-V compounds in Igbo with the view of establishing their headedness properties. It considers the idiosyncratic semantic specifications of the compounding lexemes and the degree of their semantic relativity with their compound units. The study classifies Igbo compound verbs based on the internal semantic relationships between the compounding verbal lexemes and the compound structures.

The concept of compound and compounding is not restricted to linguistics or Igbo language alone. As noted by Mbah (2005), other disciplines, and fields of human endeavor such as chemistry, Mathematics, etc explore the principles of compounding in their relative studies.

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Discussing compounding in chemistry, Robins (1969) explains the concept of a compound in chemistry as "a substance which contains two or more elements chemically combined where an element is assumed to be a substance which cannot be by any known physical process be split into two or simpler substances". This by implication means that the metamorphosed element cannot be disintegrated by any identifiable empirical process. Nevertheless, if by any chemically stimulated process there appears incident of chemical split of the element, the compound chemical element loses its substantial value. According to this explanation, the value of a compound element in chemistry is a function of the inseparable form of the compounding elements. A similar idea is portrayed in Mendelson (1970) as regards compounding in mathematics, where it was stated that the mathematical compound process is a principle that conforms to the intricacies that are identical to the universal concept of compound. Mendelson (1970) in Mba (2005), supported this notion with the following algebraic principle; "when sets A and B form a compound – a union, then A and B intersect. By inductive mathematical reasoning, the relationship between union and intersection is given by the following formularized distributive laws":

$$
\begin{aligned}
&\text{if} && A \cup B \\
&\text{then} && A \cap B \\
&\text{and if} && A \cup B \\
&\text{then} && A \cap B \ (A \cup B) = (A \cap B) \cup (A \cap B) \\
&\text{and} && A \cup B \ (A \cap B) = (A \cup B) \cap (A \cup B)
\end{aligned}
$$

(Where U means unites and ∩ means intersects)

(cf Mbah 2005)

Application of this mathematical theory expressed above to a typical verbal compound structure in linguistics will mean that if a verbal element A unites with another verbal element B, then verbal element A intersects with verbal element B. By implication since verbal element B unites with verbal element A, then all other elements united with verbal element B logically intersects and units with verbal element A. The implication of this explanation is a testimony of the morpho-semantic contributive attribute of compounding verbal elements in the semantic interpretation of compound verb structures.

The understanding that underlies the concept of compound in linguistics shares similar idea with the conceptualization of compound as we observed in chemistry and mathematics respectively. Mbah (2005:584) follows this explanation with the identification of certain attributes that characterize compounds. These according to him include;

- ➢ Free forms form compounds: This specifically means that compounds are made up of more than two independent elements with distinct semantic specifications. The compounding elements must have idiosyncratic semantic features which may or may not be related to the semantic readings of their compound form.

- ➢ Compounding of free forms produces new matter or words. This simply means that the coming together of the compounding lexemes or elements gives rise to a new lexical item or chemical substance. This justifies the notion of compound and compounding as a lexical derivational device.

- ➢ The meaning of the compound incorporates the individual meaning of the constituents. This means that in some instances the semantic readings of the compound verb may exhibit semantic relativity with the compounding constituents.

- ➢ Any of the constituting elements may exist without destroying the independence of the other elements or elements within the structure. This implies that there are instances of semantic equality among the compounding lexemes where the compounding elements can exist in isolation and still retain the conceptual integrity of their compound form.

(Mba 2005)

Compound structures in linguistics are universal phenomena that represent lexical units. They consist of two or more elements each of which can function as a lexeme independent of the other(s) in some designated morphosyntactic environment. Compound structures in linguistics also exhibit some morphophonological independence and show remarkable isolation attributes

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from conventional syntactic usage. In line with this explanation, we identify a compound verb to be a verbal entity made up of two or more independent verbal elements or lexemes.

2.2 Studies in Compound Verbs

Compound verbs have been defined as words that consist of two words. In his account of the nature of compounds and compounding in English, Selkirk (1982:12) stated that compounds in English are a type of word structure made of two constituents, each belonging to one of the categories of noun, adjective, verb, or preposition. According to him, the compound itself may belong to the category noun, Verb, or adjective. Selkirk portrayed that what is special about compounds in English is the fact that the two constituents are linked by a grammatical relation that is not overtly expressed.

Scalise (1992), affirms the assertion by Selkirk (1982) about the morphological structure of universal compound verbs when he stated that compounds are generally acknowledged to be formed by at least two words. Bauer (2001), Plag (2003), Lieber (2004), and Booij, (2005) agree to the notion of structural binarity that characterizes compound formations. Their consensus viewpoint is that compound formations consist of two or more elements and the compounding units may be bound lexemes or independent words. The constitution of compounds, therefore, includes a binary structure, where the compounding constituents have a kind of grammatical relationship or link that may be marked or unmarked. Here the syntactic and semantic relativity between the compounding constituents in compound structures is acknowledged. According to Booij (2005:75), this link involves one lexeme or word modifying the meaning of the other. This link is interpreted by the native speaker of the language who cognitively encodes the usage in context. The acknowledgment of a modifying element within compound units by Booij (2005) underscores the existence of a super-ordinate relationship between the compounding constituents. This simply means that in the compounding process, therefore, some lexemes are semantically more salient than others. This semantic inequality informs our M-V and V-M compound structures which will be discussed further in chapter three of this study.

2.2.1 The Concept of Lexemes and Compounding Lexemes

In his account and definition of a lexeme, Aranoff (1994:10) assumes the lexeme to be 'an abstract vocabulary word' which is a set of linguistic signs incorporating form, syntax, and meaning. He further explained that the semantic integrity of a lexeme and its identification is a function of its morpho-phonological realization. This explanation according to Agbo (2014:133), means that "a lexeme is a potential member of a major lexical category". This definition implies that when an abstract lexeme appears in a syntactic context with interpretable morpho-syntactic properties it can be analyzed as a word. In his definition of the interaction between a word and a lexeme, Aranoff (1994) posits that "grammatical words are the members of the paradigm of a particular lexeme". In this case, the terms lexeme and word are interchangeable depending on the linguistic context. The assumption by Aranoff (1994) is that lexemes lack overt semantic specification outside their identifiable syntactic environment. The description of the lexeme as an abstract phenomenon does not mean to identify the lexeme as a meaningless variable, rather it shows that its semantic interpretation is largely context dependent. The fundamental notion is that their contextual syntactic appearances give a clearer view and understanding of their semantic identity. Aranoff (1994:39-41) went on to establish a distinction between lexemes, roots, stems, and bases. He defines a root as "what is left when all morphological structure has been wrung out of a form", while he adopts the classical designation of a stem "as the part of a complete word form that remains when an affix is removed". The base of a word is then defined according to him as "a complete lexeme or syntactic-semantically identifiable set of lexemes". In a related development, Matthews (1991) and Anderson (1992) believe that compound formations result from composite structures that occur at the level below the word. This assumption according to Agbo (2014:133-134) implies that compounds are made up of lexical stems or bases that combine to form new structures.

In Igbo as we will observe later, inherent semantic features of the lexical stems, bases, or words involved in the compounding process are not completely compromised during the compounding process; rather they contribute to the conceptual integrity of the new compound structures. This presents Igbo verb roots as linguistic elements with semantic contents.

The concept of compounds and compounding in general appears to be a productive word-formation strategy in some languages. However, its study seems to have attracted less attention

in linguistics literature, especially the aspect of compounding that deals with compound verbs (CVs). The reason for this may be attributed to its non-conventionality across language phylum. In their view of this development Guevara and Scalise (2009: 116), stated that "compound verbs do not make a favorite topic in the mainstream of linguistic literature (be it word formation, compounding proper, cognitive linguistics, construction grammar, typology and universals, etc.). This can hardly be attributed to the scarcity of such compounds in languages rather it is a case of an aspect of compounding preferred by researchers. This was collaborated by Guevara and Scalise (2009:125) when they stated that "it is remarkable that literature has dedicated a great deal of attention to just one case in compounding that is: endocentric subordinate right headed [N+N]N compounds. While this pattern is certainly the canonical instance of compounding in the world's languages, it is by no means the only one. Future work on the typology and the theory of compounding will necessarily have to shift the tendency shown until now by concentrating on the analysis of the many remaining compound types". On the other hand, Cappa and Perani (2002), and Laudanna (2002), corroborated the concern of Guevara and Scalise (2009) by expressing their worry over the less attention studies on compound verbs have attracted. They opined that the considerably less attention paid to CVs (compound verbs) in general may be a function of the unrealistic assumption that what applies to synthetic endocentric nominal compounds applies by implication to compound verbs. They argue that "such an assumption is however if not wrong-footed, at least unwarranted as it can be seen from psycholinguistic research on the processing and representation of compounds, the neurolinguistic evidence indicating strict dissociations between nouns and verbs, and research within cognitive linguistics which points towards a basic conceptual distinction between the profiling capacities of symbolic complexes surfacing as nouns and those surfacing as verbs". However, Finocchiaro (2000: 226) noted that studies of compounding are not the only area of linguistic investigations that do not grant verbs their due center stage in linguistic research. Psycholinguistic research on compounds is focused exclusively on nominal compounds; Neurolinguistic research is also focused predominantly on the processing of other categories. He noted that "the absence of Neuro-linguistic studies specifically concerning verb semantics can be due, at least in part, to the 'puzzling' nature of verbs". All these observations speak volumes of the significance of compound verb investigations and documentation in the mainstream of linguistic literature.

Despite the less attention attracted by Compound verbs in the linguistics literature, some scholars have devoted undivided attention to investigating compound verb formations across languages. In their diverse efforts to achieve this, a lot of approaches have been expounded and adopted by different researchers. Aikhenvald (2007:32), adopts a morphological approach in the analysis and description of compound verbs. He describes Verbal Compounds in the context of word-formation discussions. He defined CVs as root serialization objects comprising of sequences of verb roots which result in the creation of a single verb with shared arguments. He argues that such definitions have led to conclusions considering the correlation between verbal compounds and head-marking typology of languages. In that study which focuses on the internal headedness hypothesis identifiable with Compound verbs, Aikhenvald (2007) claims that the notion of verbal compounds has been instrumental in typological classification of languages using headedness classificatory criterion. The fundamental argument posited by Aikhenvald (2007) is that internal headedness attributes of compound verb formations should serve as a typological factor considering its functional and semantic significance in the understanding of universal language structure and behavior.

However, the classificatory feature attributed to CVs was of great concern to some scholars. This was stimulated by the intricate internal structure that characterizes compound verb formations. According to Bagasheva, (2012a), Compound verbs (CVs) raise several puzzling questions concerning their classification, word formation properties, basic onomasiological function, as well as their transitory status between 'relations' and 'conceptual cores'. These factors appear to have constituted residual issues in the analysis of compound verb formation. These residual issues, however, according to Guevara and Scalise (2009: 102) are associated with semantic decomposition and determinacy of verbal compounds. To proffer solutions to the semantic complexity associated with compound verbs, they identify the following set of concepts to project conventional properties in verb compounding. These features include (a) output categories, (b) input categories, (c) the relation between the constituents, (d) headedness, and (e) a combination of categories. The claim is that absolute adherence and attention to the identified linguistic features and criteria will nevertheless give a clearer view and understanding of

compound verb classifications and conceptualization across languages. In addition to the identified features, Booij (2009: 83) proposed the Lexical Integrity Hypothesis, which consists of non-interruptability and non-accessibility of word-internal structure as a formal universal that can be exploited in word-formation typology. He admits that "it is hard to find uncontested substantive morphological universals of an absolute nature, certainly not in the domain of word formation".

In another approach, Langacker (2008) and Libben (2006) adopted a cognitive approach in their analysis and perception of the compound verb phenomenon. They observed that CVs occupy a special place in the lexicon because "they are linguistic cues that explicitly manipulate frames and are responsible for patterns of conceptual modification and integration. The general language-independent motivational drive behind CVs is an onomasiological need instigated by the situational salience of a conceptual complex worthy of a name". Their analysis was motivated by the linguistic evidence in which they claim that CVs are products of formal and conceptual components and associations of linguistic units, which are usually co-activated with the representation of the whole, even with the semantic indeterminacy that so often characterized the internal relationship between the compounding components.

Hong and Huang (2004) are concerned about the internal arrangement and ordering of the individual constituents of the compound verb units. They observe that the ordering of the two verb components in a compound verb structure is determined by their eventive relations which can be inferred through the conceptual reading of each verb. Here, Hong and Huang (2004) take into consideration the inherent semantic features of the compounding element in isolation as the determinant factor for the perception and conceptualization of the compound structures.

2.2.2 Structural Decomposition of Compound Verbs.

As we have identified above, the semantic decomposition and interpretation of compound verb structures have posed a little challenge to scholars. This has been attributed to the diverse

perceptions and approaches to the analysis of compound units. Some linguists view compounds as a product of morphological formation, while others see it as a syntactic reality. In another development, other scholars argue that determinacy and interpretation of compound structures can only be successful if researchers can employ semantic methodology. As a linguistic phenomenon, Compounds and Compounding (compound verbs inclusive) have their inherent grammatical challenges, which over the years constitute the center of debates across language typologies. Highlighting these challenges, Bisetto and Scalise (1999); Neeleman and Ackema (2004), are of the collective view that among the problems of compounds and compounding are the interpretation of compounds as syntactic or morphological objects. Gaeta and Ricca (2009) are concerned with the grammatical status of compounding components. They proposed that the decomposition of compound verb structures should focus on finding whether the internal properties of the compound verb structures are lexicalized objects or mere morphological objects. Lieber (2004), Scalise and Guevara (2006), and Scalise et al.(2009,), identify issues over their headedness conditions. They are concerned if the CVs structures should be decomposed as a unified concept or as a parameterized phenomenon. Libben and Jarema(2006), are worried about the nature of their basic onomasiological function, naming or descriptive, and the nature of their processing as on situ computation online or as retrieval of stored ready-made lexical units. Benzces (2006), Bundgaard, Ostergaard, and Stjernfelt (2006, 2007); respectively identify one of the challenges as the nature of their internal semantics in terms of compositionality. Trask (1999), and Bauer (2005); stated that the analysis of the exponents of the compound verb structures as independent words or roots/stems or something entirely distinct posed a great challenge of indeterminacy and semantic interpretation.

Lieber (2004) is specifically concerned with the interpretation of compound verb structures. He emphatically stated that "no less problematic is the analysis of the word formation processes involved in the creation of Compound Verbs". Wald and Besserman (2002) questioned if compound verb structures are to be considered "coinages resulting from conversion interpreted as re-listing, interpretable only as diachronically accountable backformations or as productive analogical compositions proper, in which it is possible to accommodate VVs whose diachronic establishment has evolved from back formations to a fully productive synchronic VV pattern".

Having seen all the challenges associated with the semantic indeterminacy of compound verbs in general, the present study does not span as wide as to cover all the questions and problems that characterize the interpretation of compound verb formations as identified above. It focuses on the structural semantic decomposition of CVs in Igbo with a focus on the semantic relativity between the compounding lexemes with their compound forms as well as their independent semantic readings in isolation.

2.3 Classifications of Compound Verb Structures

The little attention attracted by compound verbs as a linguistic concept has led to diverse classificatory approaches. Scholars believe such classifications are necessary as the compound verb phenomenon is gradually becoming a cross-linguistic phenomenon. As noted by Bisetto and Scalise (2007), classifications of compounds present a range of different problems, namely: terminological problems, problems of neglected lexical categories, and problems of consistency of the used criteria. The following scholars Bloomfield (1933), Bally (1950), Marchand (1969), Shibatani (1990), Spencer (1991), Fabb (1998), Olsen (2001) Haspelmath (2002), Bouer (2001) Booij (2005) Bisetto and Scalise (2005) have made attempts in classifying compounds across linguistics using different classificatory criteria. Even though there has not been linguistic evidence of the universality of identified classes across languages, these classificatory templates nevertheless seem to capture the true manifestations of compound configurations cross-linguistically. Despite the diversity of the classificatory framework, one criterion that is common to all the classifications is the presence and absence of a head compounding lexeme. The identification of the compound head can be syntactically or semantically motivated. Shibatani (1990) and Spencer (1991), Fabb (1998), Olsen (2001) Haspelmath (2002), Bouer (2001) Booij (2005) Bisetto and Scalise (2005) adopted semantic approach in their respective classifications of compound verbs. They examined the internal semantic interaction between the compound lexemes and their semantic correlation to the semantic readings of the entire compound unit.

The respective compound verb classifications by Shibatani (1990) and Fabb (1998) were adopted in this study. The choice of their classificatory framework was stimulated by their extensional

analysis of CVs that capture the morphosemantic dispositions of V-V compound formations in Igbo.

Fabb (1998) classified compound verbs into three categories, namely: endocentric, exocentric, and coordinate compound verbs. His classification was in line with that of Shibatani (1990) who also emphasized semantic headedness of V-V compound structures.

Shibatani (1990) suggests the following classification mechanism for V-V compound verb formations:

(i) Modifier-V (M-V) – where the modifier names the manner of the activity named by the second verb.

(ii) V-Modifier (V-M) – where the second constituent identifies the manner or the direction of the verb.

(iii) V-V – where both verbs have an equal semantic contribution to the semantics of the whole, naming a complex event.

While Shibatani's (1990) M-V, V-M, and V-V compound structures agree with the endocentric and co-ordinate compound verb structures of Fabb (1998), it did not consider the exocentric compound verb formations as accounted for in Fabb (1998). This necessitates our inclusion of Fabb (1998) and its subsequent merging with Shibatani (1990) in this study.

However, Shibatani (1990) investigated the morpho-semantic disposition of the compounding lexemes within the exocentric, endocentric, and co-ordinate compound verbs. His classification looked into the morphosemantic properties of the compounding lexemes within the endocentric and coordinate compound verbs. He maintained that endocentric compounds are characterized by two sets of verbal lexemes with distinct semantic functions; Modifier-Head and Head-Modifier structures respectively, where the identification of the Head of a compound structure or its modifier is strictly based on the semantic specifications of each of the compounding constituents.

To ensure adequate account and proper representation of the canonical V-V compound structures in Igbo, this study intends to collapse the compound verb classificatory models of Shibatani (1990) and Fabb (1998) within a single schematic to capture the typical V-V compound structures in Igbo.

2.4   The Igbo Verbs

The verb generally can be defined traditionally as a word that indicates an action or state of affairs. Chafe (1970: 95) rightly observes that grammatical units with verbal reading are semantically present in all but some marginal utterances of every language. He posited that in certain circumstances, the verb may appear to be elided at surface structure but "the semantic influence of the verb is relatively dominant, extending itself over other elements in the sentence". The Igbo verb is one of the two productive word classes in the Igbo language. Nwachukwu (1987) referred to Igbo as a verboid language. He claims that Igbo is very much verb-centered, and any accurate and comprehensive description of the Igbo verb system amounts to an adequate description of the language in general. This assertion shows that the verb constitutes the centrality of the grammar of the Igbo language. Mba (2006:21) cited in Obiamalu and Mbagwu (2014) also aligns with the idea of the centrality of the Igbo verb in the Igbo language. They supported their position by arguing that while the Igbo verb contributes largely to the morphological formation of other word classes in the Igbo language, there seems to be no evidence of any lexical category that contributes to the derivation of verbs in the Igbo. By this labeling, they reaffirm that the knowledge of the morpho-semantic properties of Igbo verbs amounts to the knowledge and understanding of the entire grammatical inventory of the Igbo language. However, the morphological significance of the Igbo verb in Igbo grammar has made it the cynosure of Igbo linguistic studies.

According to Emenanjo (1975), "the semantic content of every Igbo verb describes a certain action, state, process or another phenomenon, which by its very nature implies the co-existence of a certain nominal (phrase) concept". According to him, it is this nominal or conceptual phrase that forms the syntactic complement of the verb. Therefore, the nominal complement of every Igbo verb encodes the meaning of the verb. The nominal can, therefore, be used to define the semantic classes of verbs.

Given the position above, Emenanjo (1975, 1978, 2005, and 2012) has consistently argued that the internal structural disposition of the Igbo verb is made up of three mutually obligatory and complementary elements. These obligatory elements comprise the verb itself, the complement, and the bound cognate noun (BCN). However, the validity of his assertions has been substantiated by notable Igbo scholars such as (Nwachukwu 1987, Uwalaka 1988, and Mba

2005). The consensus held by these scholars is that every Igbo verb co-occurs with a nominal element as part of its internal predication. Emenanjo (1978) referred to these nominal elements as complementizers. Studies have proved that all Igbo verbs can co-occur with bound cognate nouns, which occur bound to the verb. The example below illustrates the tripartite structural properties that characterize Igbo verbs:

3. (a) Ézè   rì-rì   ńrì
       Eze   eat-PST   food
       Eze ate food

The construction in 3(a) above shows the verb *ri* 'eat' co-occurring with *nri* 'food' as its obligatory nominal complement.

(b) Ézè   rì-rì   ńrí   èrí
    Eze   eat-PST   food   EMPH
    Eze ate the food indeed.

The illustration in 3(b) above shows *èrí* as a structural reduplicate of *ri* in the construction. It is a bound cognate noun. It is unavoidably bound to the verb *rí*. It serves as an emphasizer showing that agent *Eze* ate the food as conceptualized.

The compound verbs in (c) and (d) below also show the manifestation of the argument above.

(c) Ńgọ́zí fọ̀-chà-rà   òlúgbù
    Ngozi squeeze bright-PST   bitter-leaf
    Ngozi washed bitterleaf.

From the illustration in 3(c), the compound verb *focha* 'wash clean' is composed of two independent lexemes *fọ̀* 'squeeze' and *chá* 'bright'. When the compounding unit *fòchá* occurs in a syntactic situation, it is conceptualized as a single indivisible concept, thereby depicting a single lexical event. The construction also has *òlúgbù* as the obligatory nominal complement of the verb *fòchá* which it co-occurs with.

The concept of Bound Cognate Noun (BCN) can be demonstrated below:

(d)   Ńgọ́zí fọ̀-chà-rà   òluǵbù   áfọ́chá
       Ngozi squeeze bright-PST   bitter-leaf   EMPH
       Ngozi has indeed washed the bitter leaf

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From the illustration in 3(d) above, *àfóchá* is a partial reduplication of the verb *fòchàrà* and it serves as an emphasizer morpheme. In the literature on Igbo grammar, this is known as the Bound Cognate Noun (BCN) (Emenanjo 1987), as we have mentioned earlier. All Igbo verbs have the BCN, which is always morphologically derived from the verb. Again, the BCN always follows the verb in the syntactic construction as shown in 3(b) and 3(d) above.

2.5 Empirical Studies in Igbo Compound Verbs

In Igbo literature, linguistic evidence has shown that sufficient studies have not been carried out on Igbo V-V compound structures. As observed by Uchechukwu (2004a; 2004b), "the examination of some 'Igbo verb roots' has led to a realization of their cognitive motivation in the form of phono-semantic antecedents and the specific gestalts or patterns that emerge from them and are fully realized in the image schemata of the verb roots". This assertion shows that every Igbo verb root has inherent multi-dimensional semantic specifications, and this can only be effectively and semantically interpreted from the native speakers' cognitive cum cultural sense. This assertion explains the diverse interest of Igbo scholars in verb-related studies in Igbo.

Intellectual submissions by some scholars of Igbo such as Green and Igwe (1963), Welmers (1970), (1973), Oluikpe (1979), Nwachukwu (1983), Ogwueleka (1987), Uwalaka (1995) and Mbah (1999), Obiamalu and Mbagwu (2014) and Agbo (2014) have proven that there is indeed manifestation of compounds in Igbo grammar. The above Igbo scholars in their separate investigations have discussed the process of compounding in Igbo and therefore, they are of the general view that Igbo have compounding as a morphological tool for word formation. In his analysis of Igbo compound verbs, Mbah (2005) defines a compound verb as a verb, which has a minimum of two verbs that may act as independent verbs. He argues that "in its citation form, it may mean or refer to any verbal construct, which is not accessible to the vowel harmony rule". In other words, though the affixes attached to them copy vowel harmony from them, they cannot alter their forms to reflect this harmony. Using the compound verbs *gbábà* and *gònyé*, he justifies his claims with the following examples:

9. (a) Íjè gbá-bàrà n`úló ákwúkwó
         Ije run enter in to PST in house school
         Ije ran into a school

    (b) Òkéké gò-nyèrè yá únèrè
         Okeke buy-give PST him/her/it banana
         Okeke bought a banana and gave it to him/her/it.

According to Mbah (2005), the compound verbs *gbábà* and *gònyé* in examples 9(a) and (b) are typical examples of Igbo compound verbs for the reasons stated in 2.1.1 The tense markers affixed to them according to him have not influenced their forms; rather, they have determined the class of vowels that will form the tense marker. This singular characteristic is a major distinguishing factor between the compound verb and complex verb structures available in Igbo.

2.5.1 Classifications of Igbo Compound Verbs

Notable Igbo scholars such as Lord (1975), Emenanjo (1978), Uwalaka (1988), etc, have had various studies on Igbo verbs which could stand as proper yardsticks for the classification of compound verbs in Igbo. Nevertheless, as much as Igbo verbs have attracted a lot of attention, which however led to diverse verbal classification, there has been negligible literature on the classification of an aspect of Igbo verbs called compound verbs. Oha (2010) developed a semantic approach to the analysis and classification of Igbo compound verbs. Referring to Uwalaka (1988) classification of Igbo verbs, Oha (2010) identifies eleven classes of Igbo compound verbs. These classes according to him include the following: Causative Compound Verbs, Multi-event Compound Verbs, Motion Compound Verbs, Change-of-Ownership Compound Verbs, Compound Verbs of Occurrence, Surface-Contact Compound Verbs, Compound Verbs of Placement, Experiencer Compound Verbs, Compound Verbs of Mental Exertion, Compound Verbs of Communication, Compound Verbs of Emission. The identification and classification of these Igbo compound verbs according to Oha (2010) was based on his assumption that "compound verb components have common essential properties which ensure the unification of the verbs into the classified compound". Similarly, Oha (2011)

examines the eleven compound verb classes identified in Oha (2010) in terms of the combinatorial patterns of the verb components. Three headings of Verb classes, Co-occurrence restriction, and Positional constraints form the evaluative yardstick in Oha (2011). Though he referred to the headedness hypothesis, his analysis of compound heads was motivated by the morpho-syntactic relationships that underlie the compounding lexemes. However, both studies (Oha 2010 and 2011) fall short of the orientation of this work as they fail to give an adequate account of the semantic input of the compounding constituents or lexemes and their morph-semantic significance to the overall conceptualization of the entire compound units.

Agbo (2010) examines verb classification and Aktionsart in Igbo. Aktionsart is one of the tenets of RRG expounded by Van Valin and La Polla (2007). Aktionsart is a system of verbal classification based on the temporal properties of such verbs. Agbo (2010) develops six syntactic tests for determining verb classes and *Aktionsart* in Igbo, following Van Valin (2005) and Van Valin and La Polla (1997). Four of these tests include the co-occurrence of the various members of the verb classes with Igbo words that have adverbial notions. One of the tests has to do with the co-occurrence of the '*nà'* progressive marker, while the others test for causative verbs. In his account of tests for determining the *Aktionsart* class of Igbo verbs, Agbo (2010) argues that the fifth test is used to determine Causative verbs. To pass the Causative test, the verb should be a compound verb, it should also be paraphrased with the causative marker, *mè*, 'do', and should have at least two arguments. In a related development, Agbo (2014) gave a classificatory account of Igbo compound verbs from Role and Reference Grammar perspectives. He stated that "the meaning of the verb is determined by the inherent temporal properties (*Aktionsart*) of the resultant verb". According to him "the *Aktionsart* depicts the conceptual boundaries of the event represented by the verb which brings about their semantic classification". With reference to the inherent temporal properties of the compounding lexemes, and following the RRG analysis, Agbo (2014) identifies and classifies Igbo compound verbs into five classes. These classes are State, Achievement, Accomplishment, Active accomplishment, and semelfactive compound verbs respectively. However, despite the semantic approaches of Oha (2010, 2011) and Agbo (2014) compound verb classifications in Igbo, they did not account for the semantic headedness of canonical Igbo V-V compound. This study however intends to account for the semantic

headedness that characterizes Igbo V-V compounds using the compound verb classificatory system Shibatani (1990) and Fabb (1998)

2.5.2 Approaches to Igbo Compound Verb Studies

2.5.2.1 Syntactic Approaches to Igbo Compound Verbs

One of the notable attempts to study and analysis of compound verb formations in Igbo was Lord (1975). In her analysis of compound verbs in Igbo, Lord (1975) adapts the phenomenon of Igbo compounds to Mandarin Chinese. She claims that the two compounding elements may be interpreted through the action-result meaning of Igbo verb forms. She argues that the first component of the Igbo compound verb can be any action verb, while the second component may be static or action verb. The constructions in (10) below were typical of Lord (1975) Igbo compound verb structures:

10. (a) Ó tù-fù-rù ákwúkwó
3s throw-lose-PST paper
'He threw away the paper'

(b) Ó tù-rù ákwúkwó
3s throw-PST paper
He threw paper

(c) Ákwúkwó fùrù
Paper lose-PST
Paper lost (Lord 1975:25)

From the illustrations above, Lord (1975) claims that the constructions 10(b) and (c) are derived forms of the construction in 10(a) through a transformational process. She claims that syntactic conditions such as agreement feature (tense) serve as a bridge between 10(b) and (c) so that compounding becomes possible in 10(a). This implies that the application of syntactic rules in 10(b) and (c) constructions leads to the derivation of 10(a). She claims that the compound structure *tùfùrù* 'lost' in 10(a) is a composite of two events where *fù* is a resultant effect of the action *tù* 'throw'.

Perhaps to Lord (1975), the class of Igbo verbs is just limited to action and state verbs if the only limiting constraint to the formation of Igbo compound verbs is on the speaker's intellectual

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capacity and cultural experience. However, Lord's acknowledgment of the bi-componential nature of compound verbs in Igbo is commendable, but her limitation of manifestation of compound verbs in Igbo to merely action-result formations may not be the ideal morpho-semantic antecedent that characterized Igbo compound verbs.

Uwalaka (1995, 1997) ascribes the term complex predicate to Lord's notion of verb compound. This follows his earlier classification of Igbo verbs into simple, compound, and complex verbs respectively. The construction below from (Uwalaka 1995:157) is a typical example of compound verb structures in Igbo:

> 11 (a) Ònyé Ézè mé-bì-rì ókwú ahụ̀
> Person chief do-end-PST talk/case that
> 'The chief put an end to the case'

From illustration 11(a) above, the compound verb *mé-bì*, which includes a causative reading with metaphorical understanding, "belongs to this subset of Igbo complex predicates" as expounded by (Uwalaka 1995:157). She adopted the Government and Binding Theoretical framework in the analysis of her Igbo complex predicates as exemplified in 11 above. Her analysis did not account for the inherent semantic properties of the compounding lexemes nor establish the semantic relationships that exist between the compounding elements and their compound units which informs our semantic headedness orientation.

Mbah (1999, 2005), account of compound verb structures in Igbo was based on the transformational process. His account was a huge departure from the works of Lord (1975), even though there is consensus among them on the dual lexeme structure of Igbo compound verbs. Mbah (2005) criticizes Lord (1975) for her inability to adequately account for the thematic structure of verbal compounds in the language. Using the sentential construct below, he argues that compound verbs are a product of syntactic interaction among compounding constituents rather than a mere morphological formation.

> 12. (a) N̍gọ́zị́ dú-pú-rù Íjè
> Ngozi lead-exit-PST Ije
> 'Ngozi led Ije out'

Adopting the notion of the transformational process, Mbah (2005) explains that such structures in 12(a) above are surface structure properties. He argued that the structure does not reflect the structural disposition at the deep structure. According to him, the structures in the (12) illustration are made possible as a result of transformation, and being that transformation is meaning preserving; the fundamental semantic readings of the D-structure and S-structure were not in contradiction. Mbah's analysis of Igbo compound verbs outside the cognition and intuition of native speakers again falls short of the orientation of this research. We argue here that Igbo compound verbs are not syntactically stimulation nor born out of a transformational process, but a property of native speakers' cognition. Its formation and interpretation are the linguistic prerogatives of the competent native speakers of the Igbo Language. Due to the syntactic methodology adopted by Mbah (2005) in his account of Igbo compound verbs, the semantic relationship that underlies the compounding lexemes was unaccounted for. This study deems this a significant gap as such omission will be a great impediment to the semantic conceptualization of Igbo compound verbs.

Anyanwu (2005, 2007) follows Mbah (2005) syntactic approach to Igbo compound verbs analysis. He gives an account of Igbo compound verbs on the premises of Principles and Parameters (PP). The constructions in (15) below are attributed to him:

13.　　(a)　　Ézè mmé-dhà-rà óché nà
　　　　　　　Eze make-fall-PST chair one
　　　　　　　'Eze made this chair to fall'

(Anyanwu 2005:615)

From the illustrations above, Anyanwu (2005), evaluates the compound verb *mmé-dhà* 'make-fall' in example (13) as stated earlier within the Principle and Parameters framework and concludes that the causative reading of the verb *mé-dhà* 'make-fall' is the result of syntactic derivations from a dual-clausal structure.

However, the claims in examples (10)-(13) by (Lord 1975), Uwalaka (1995, 1997) Mbah (1999, 2005), and Anyanwu (2005, 2007) that the meaning of compound verbs is syntactically and structurally motivated do not tally with our cognitive orientation and approach to semantic

decomposition of Compound verb formations, especially in Igbo. This study believes that the study and account of compound verbs in Igbo cannot be successful without absolute reference to the cognitive sense, conceptualization, and intuitive interpretation of the native speakers. This study intends to demonstrate all these through the systematic exposition of the semantic headedness that underlies Igbo V-V compound structures.

2.5.2.2 Semantic Approaches to Igbo Compound Verbs.

Previous studies on Igbo compound verbs have largely adopted a syntactic approach to the analysis of Igbo compound verbs. They have focused greatly on the transformational-generative processes from which these compounds are derived. The meaning of these verb compounds is usually construed from these syntactic derivations.

Nevertheless, Obiamalu and Mbagwu (2014) noted that the category of the output of compounding may be identical with the category of each of the constituents or one of them or a different category altogether. This assertion credited to Obiamalu and Mbagwu (2014) validates our conceptualization of the notions of endocentricity, exocentricity, and coordination in Igbo compound verbs. In their analysis of Semantax of V+nyé compound structure which is a productive aspect of compound verbs in Igbo, Obiamalu and Mbagwu (2014) argue that the V+nyé verbal structures represent typical compound verb structures in Igbo. Their assertion was stimulated by the wrong notion prevalent in Igbo literature that the verbal element *nyé* has a dual morphological function where in one instance it is considered a content verbal element and in another an extensional suffix. Obiamalu and Mbagwu (2014) refute this claim stating categorically that "*nyé* which has semantic specification of the verb 'give' remains 'give' irrespective of its morpho-syntactic position". They opine that *nyé* is a verb; hence have been formalized as a V-V compound verb in all contexts in Igbo. Although they acknowledge the fact that in some linguistic situations, *nyé* may express illativity, which according to them specified preposition or goal. This prepositional specification or value has been the premise for some Igbo linguists to designate it as one of the examples of a category-incorporated preposition or a grammaticalized verb. Some of these Igbo linguists believe that hence a verb is grammaticalized; it loses its semantic verbal interpretation. But Obiamalu and Mbagwu (2014) refute this

assumption, arguing that the illativity notion expressed by *nyé* is a metaphorical extension of its meaning as 'give'. They further explain that "the verb 'give' in English takes three arguments and assigns the roles: Agent, Theme, and Goal to them. The same trivalent feature of *nyé* as an independent verb is carried into its existence as part of a compound verb structure. When the Goal argument is [+human], it appears as the indirect object of the verb, but when it is [-Human], the illativity notion becomes prominent and the [-Human] Goal appears as an object of a preposition, denoting location. More interesting is that *nyé* imposes its trivalent feature on any sentence where it occurs". Obiamalu and Mbagwu (2014) use the following constructions to justify their assertions about V+nye compound verb formations in Igbo:

14   (a)   Àda zù-nyè-rè nne yā unènè
                Ada buy-give-PST mother her banana
                'Ada bought some bananas for her mother'

           (b)   Àdá tì-nyè-rè òròma n'àkpà
                Ada put-give-PST orange in bag.
                'Ada put an orange into a bag.'

                                           Obiamalu and Mbagwu (2014)

One of the claims made by Obiamalu and Mbagwu (2014) is that the verb *nyé* is characterized by its ability to assign the GOAL role to an argument in all linguistic situations. From the illustrations in (14) above, Obiamalu and Mbagwu (2014) posit that *nyé* assigns the thematic roles of Theme and Goal to its double objects and therefore can be classified as a verb in all contexts and its occurrence in V+nyé structure can be certified a V-V compound verb unit.

However, the orientation of this study agrees with Obiamalu and Mbagwu's (2014) account of V+nyé compound structures. Their claim that the verbal lexeme *nyé* in all V-V compound verb formations functions as a compounding element rather than an extensional suffix is a clear justification of the verbal status of *nyé* which this study stands for. However, this study observed that Obiamalu and Mbagwu (2014) concentrated on only the V2 *nyé* compounding verbal lexeme with no reference to the semantic relevance of its V1 compounding constituent. We argue that the kind of semantic relationship that exists between the verb *nyé* and its V1 compounding lexeme as demonstrated in examples (14) is significantly necessary, as it will give a clearer view and understanding of the idiosyncratic semantic features of each of the compounding element in

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V+nyé compound verb configurations. As we will demonstrate in this study, the semantic relationship that characterized V+nyé compound verb structures in Igbo can be endocentric or coordinate in nature. The identification and establishment of this relationship type is strictly a function of the inherent semantic properties of the compounding lexemes rather than morpho-syntactic dispositions.

Agbo (2014) gave a detailed account of compound verb structures in Igbo from Role and Reference Grammar's (RRG) perspective. In his account, he adopts the view that the Igbo verb compound is formed from the composition of two lexemes, whose meaning is determined by the native speaker's cognitive and cultural orientation on the verbal unit resulting from the compounding verbal exponents. Agbo (2014) account was a remarkable departure from the initial prevailing propositions held in Igbo literature concerning compound verb formation which claim that the meaning of a compound verb structure can only be ascertained through its morpho-syntactic configurations. This understanding is devoid of the native speaker's interpretive ability and knowledge. However, Agbo (2014) debunks this assertion, claiming that the semantic interpretation of a compound verb in Igbo is a function of the native speakers' intuitions and cognitive conceptualization of the compound structural unit rather than the syntactic disposition of compound verbs. In his application of the RRG framework, Agbo (2014) identifies five classes of Igbo compound verbs. These classes include State, Achievement, Accomplishment, Active-accomplishment, and Semelfactive compound verbs respectively. The examples below contain contextual manifestations of this class of verbs:

15.   (a)   Óbì má-pụ̀-rụ̀ ḿ
            Heart leap-exit-PST 1s
            'I'm disconcerted'

      (b)   Ó tì-wà-rà éféré
            3sg hit-split-PST plate
            'S/he broke the plate'

      (c)   Ésú áhụ̀ rị́-bà-rà n'ímé òḥíá
            Millipede DEM crawl-enter-PST inside bush.
            'That millipede crept into the bush'

      (d)   Há bú-gà-rà égó há n'ụ́lọ̀ àkụ̀

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3pl carry-go money 3pl to house wealth
'They took their money to the bank'

(e)   Érírí áhụ̀ tí-bì-rì ètíbì
        Rope DEM beat-cut-PST EMPH
        'That rope cut into two'

Agbo (2014)

According to Agbo (2014), Verb compounds partly composed of the lexeme *pụ̀* as contained in 15(a) represent state verbs. Achievement verbs partially consist of the lexeme *wá* as demonstrated in 15(b). Accomplishment verbs comprise partly of the lexemes *bà* as we have in 15(c). The lexeme *gá* usually constitutes part of the active achievement class of verbs as demonstrated in 15(d), while the lexeme *bì* is the basis of the composition of semelfactive verb compounds as illustrated in 15(e)**.**

Despite the expansive nature of compound verb accounts in Agbo (2014), the internal semantic relationship that exists between the compounding verbal lexemes seems to be properly unaccounted for. This study is motivated by these intellectual gabs as we will prove later that there are varieties of semantic headedness that characterize compound verb structures in Igbo. This study believes that the identification of such heads of compound verb structures is semantically motivated and as such is a product of the internal semantic relationship between the compounding verbal lexemes.

In our account of the inherent semantic properties that underlie compounding lexemes in Igbo compound verbs, this work takes into account the notions of endocentricity, exocentricity, and coordination as they refer to the compound verb units. The first two notions of endocentricity and exocentricity investigate the inherent semantic value and specification of the compounding lexemes and define compound verbs based on the presence versus absence of a semantic head constituent. The notion of coordination in compound verbs also examines the inherent semantic properties of the compounding lexemes and classifies compound verbs in this category based on equal semantic values, readings, and specifications.

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2.6 Theoretical |Framework

This study is undertaken within the framework of Shibatani (1990) and Fabb (1998) compound verb classificatory systems. This framework classifies compound verb formations on the parameters of semantic headedness.

2.6.1 Shibatani (1990) and Fabb (1998) Theoretical Model

This is a system of compound verb classification based on the semantic headedness in compound verb structures. The ideology behind this framework is that a compounding verb is made up of two discrete compounding lexemes with idiosyncratic semantic values. It assumes that the compounding lexemes may or may not have equal semantic value in the interpretation of the compound forms. This semantic equality and inequality are the basis for the identification of compound heads and their corresponding modifiers. Under this theoretical model, the identification of compound heads is based on the degree of semantic relatedness between the compound verb structures and their compounding constituents. This theoretical model classifies compound verbs into three semantic classes. These include:

i)   Endocentric compound verbs
ii)   Exocentric compound verbs
iii)   Coordinate compound verbs.

2.6.1.1 Endocentric Compound Verb

This is a kind of compound verb formation where one of the compounding lexemes exhibits a high degree of semantic relativity with the compound form in comparison to the other, and such identifies as the compound head. However, the less semantically related compounding element within the same compound verb structure is called the modifier. Under this classificatory model, two structural types of endocentric compound configuration have been identified, namely, Modifier-Verb (M-V) and Verb-Modifier (V-M) compound structures respectively.

2.6.1.2 Exocentric Compound Verb

This is a class of compound verb formation that lacks an overt semantic head. The attribution of semantic non-head to this category of compound verb structures is because the semantic specifications of the compounding constituents are not in any way related to the semantic reading of their compound form. This implies that the semantic interpretation and understanding of an exocentric compound verb is independent of the individual meaning of the compounding

lexemes. This semantic disparity between the compound units and the compounding lexemes has made exocentric compound verb structures analyzed as headless compound verb formations.

2.6.1.3 Coordinate Compound Verb

This is a class of compound verb formations that exhibit dual semantic heads. The compounding lexemes within this compound structure exhibit equal semantic value. Under the coordinate compound verb formations, the idiosyncratic semantic specifications of the compounding constituents are equal to the semantic readings of the compound verb structure.

The choice of this classificatory framework was motivated by the fact that it will adequately classify and account for the semantic headedness that characterized canonical V-V compound structures in Igbo. To ensure adequate account and proper representation of canonical V-V compound structures in Igbo, this study collapsed the compound verb classification models of Shibatani (1990) and Fabb (1998) within a single schematic to capture the typical V-V compound structures in Igbo. This can be diagrammatically represented below:

Fig. 1

Shibatani (1990) Compound Verb Classification
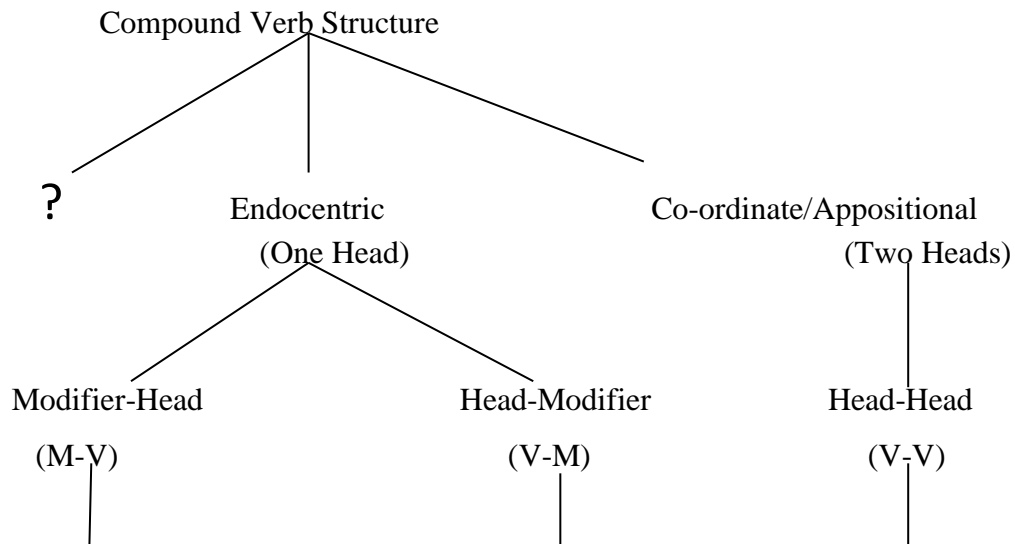
(V-V)   (V-V)   (V-V)

The structure in Fig 1 above illustrates the compound verb classification by Shibatani (1990) showing the conspicuous absence of the Exocentric class of compound verbs.

Fig. 2

Fabb (1998) Compound Verb Classification

Compound Verb Structure

Exocentric   Endocentric   Co-ordinate/Appositional
(No Head)   (One Head)   (Two Heads)

?   ?   (V-V)

(V-V)   (V-V)   (V-V)   (V-V)
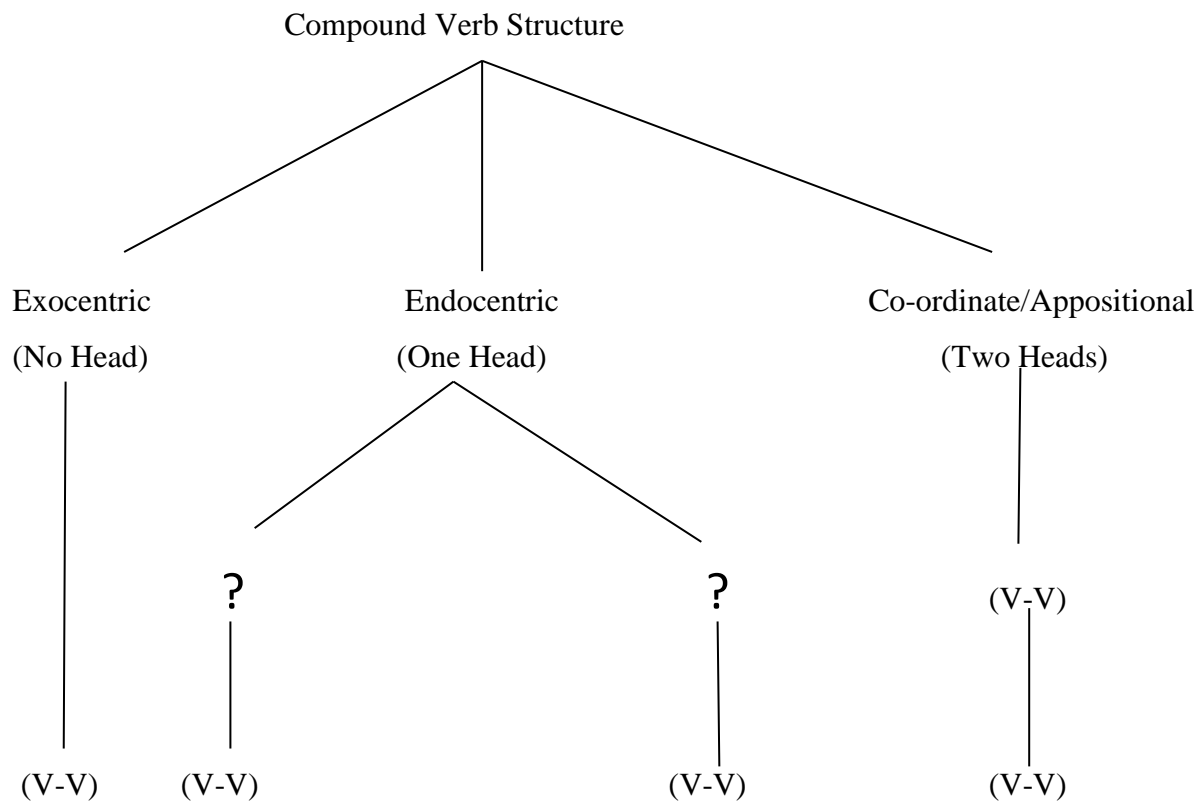
The structure in Fig 2 above illustrates the compound verb classification by Fabb (1998) showing the conspicuous absence of the internal structure of the Endocentric class of compound verbs.

Fig. 3

Shibatani (1990) and Fabb (1998) compound verb classification

Igbo Compound Verb Structure

Exocentric (No Head) — (V-V)

Endocentric (One Head)
- Modifier-Head (M-V) — (V-V)
- Head-Modifier (V-M) — (V-V)

Co-ordinate/Appositional (Two Heads)
- Head-Head (V-V) — (V-V)
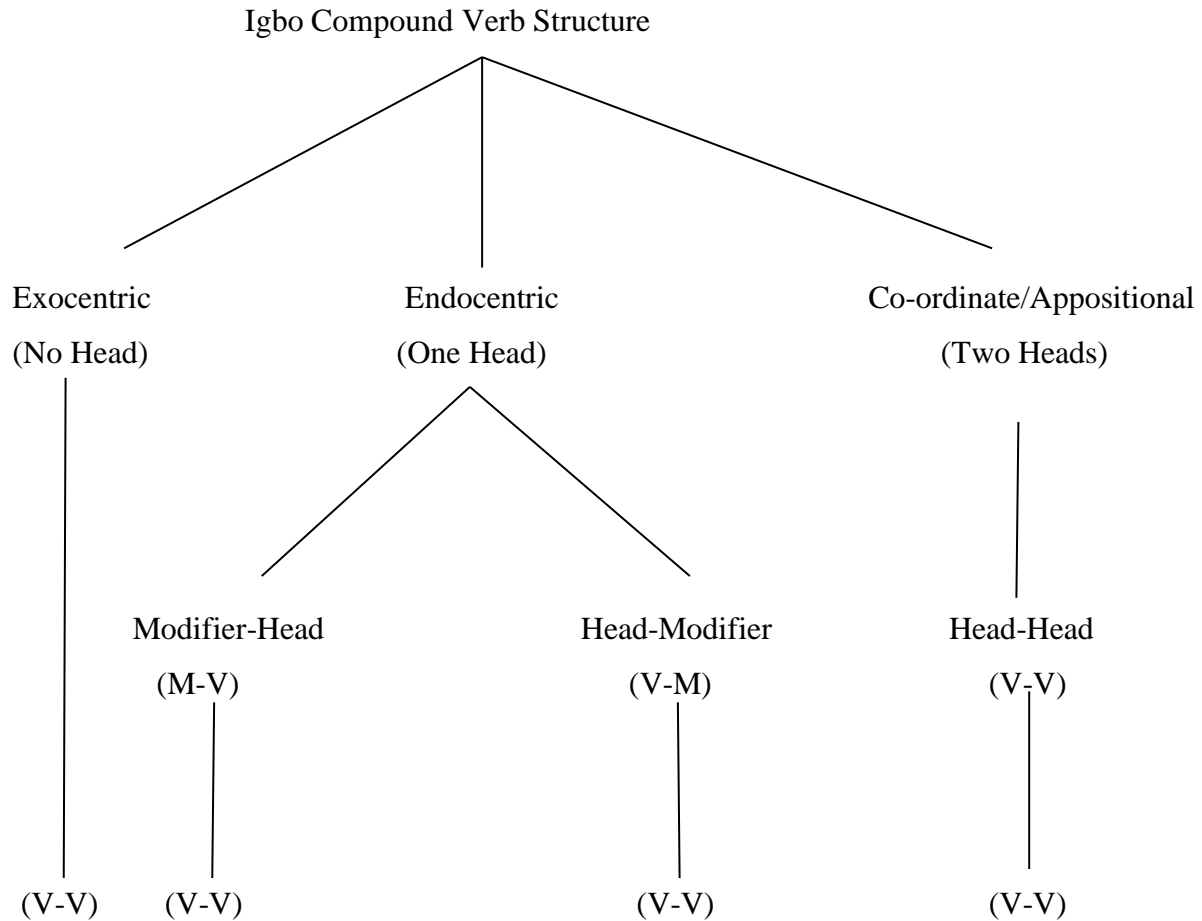
Fig. 3 above shows the collapsing of the respective compound verb classifications of Shibatani (1999) and Fabb (1998), to capture the holistic view of the structural distribution of compounds and compounding components within the V-V compound system in Igbo.

2.7 Summary

This chapter has successfully reviewed relevant pieces of literature as they affect and relate to the concept of universal compound and compounding, compound verbs and their manifestation in Igbo. Theoretical and empirical appraisals have successfully examined an appreciable number of works on universal and Igbo Compound verbs respectively. We observed generally that compound verbs as a linguistic reality have been studied in Igbo, but not with their semantic headedness. On the theoretical dimension, it is evident from our literature review that no existing studies in Igbo have classified Igbo compound verbs using semantic headedness as a classificatory parameter as expounded by Shibatani (1990) and Fabb (1998). In another development, only Agbo (2014) has explored and adopted the tenets of RRG in the analysis and classification of Igbo compound verbs. A comprehensive assessment of the review reveals that no scholar has attempted to classify Igbo compound verbs using the semantic specifications of the compounding lexemes. This further speaks volumes of the relevance of this present research to Igbo literature and grammar in general.

CHAPTER THREE

METHODOLOGY

This chapter represents the research design, sources of data, sample techniques, instrumentation, and method of data collection. It also represents systematic methods of data presentation and analysis for easy conceptualization. Outstanding characteristics of good research include explicitness, empirical and local approach to findings as well as the research's disposition to proffer solutions to problems as identified and bridge gaps where necessary. This research explores the tenets of morpho-semantic realities of Igbo V-V compound configurations. The descriptive research method explored by the researcher during this investigation is fundamentally concerned with the description and interpretation of extracted data or information which often form the foundation for the development of novel conceptual ideas, theories, and frameworks.

3.1 Research Design

This research sets out to investigate and analyze the semantic relationship that characterize Verb-Verb Compounds in Igbo. It seeks to establish the semantic integrity of the compounding verbal lexemes and their compound units. The degree of semantic relationship between the compound verb structures and their compounding constituents constitute the basis for the classifications of the V-V compound formations in Igbo.

3.2 Sources of Data

Since this research is set to investigate and classify Igbo V-V compound formations using a semantic template, primary and secondary sources of data were explored. The data for this study were mainly drawn from the standard variation of Igbo. However, there are dialectal infiltrations from other dialects of Igbo such as Orlu, Ideato, and Owerri. The data were drawn from several discourses in which Igbo is used extensively by its competent native speakers. Two methods of data collection were adopted: the primary and secondary methods. The primary data were collected from randomly selected competent native speakers of the Igbo language through personal interactions and intuitive knowledge and understanding of the language. Data from Ideato Igbo were generated by introspection since the researcher is a competent native speaker of the Ideato dialect of Igbo. Also, naturally occurring conversations were carefully observed and recorded in informal settings such as family gatherings, marriage ceremonies, funerals, and other social gatherings where the Igbo language is solely used as the conversational code.

The secondary method comprises library sources which include published and unpublished materials on verbs and compound verbs. Some selected Igbo novels and drama books were also explored. Other secondary sources include programs on radio and television, other documented informal communicational situations in which Igbo language serves as a communicational code.

The researcher's motivation for exploring library sources for data was based on the expository nature of the study where canonical examples of Igbo compounds as contained in these secondary sources call for reanalysis to portray and demonstrate the researcher's views and perceptions of the concept of headedness in Igbo V-V compound structures.

3.3 Sample Techniques and Size

As we stated in 3.2, the primary data for this research were elucidated from randomly but carefully selected native speakers of Igbo. The population is made up of 30 speakers of Igbo, comprising 13 male and 12 female adults. The remaining population comprises young males and females between the ages of 18-25. The researcher engaged them in extensive recorded discussions. Other primary sources of data also included recordings and observations from

family gatherings, Umunna meetings, marriage negotiation ceremonies, etc. After this, statements that contain compound verb formations were extracted. The extracted data were subjected to strict grammatical scrutiny correctness by 3 lecturers at the University of Benin who are native speakers of the Igbo language. The three (3) lecturers are comprised of one (1) female and two (2) males.

3.4 Instrumentation and Data Collection

The researcher relies solely on a digital Canon X3 audio and video recorder. In the course of data collection, all conversations were recorded. Data from secondary sources such as Igbo dictionaries, articles in journals, commentaries, informal personal observations, etc were carefully extracted from the sources and compiled for grammatical checks and conformity.

3.5 Method of Data Analysis

The methods of data analysis used in this work are strictly morpho-semantic structures illustrating canonical V-V compound formations in Igbo. The compound verb units were subjected to contextual usage for proper semantic interpretation and to ensure conformity to the grammatical tenets of Igbo. The compound verbs are classified into endocentric, exocentric, and coordinate compound verbs respectively. There are also subclasses of Compound verb formations within the three broad classes identified above. The classification of the compound verb formations is strictly based on the internal semantic relationships that exist between the compounding lexemes and the compound verb structures. The analysis of the canonical instances of V-V compounds as contained in the data has two levels of representation: morphological exposition of the canonical V-V compound formations, and their contextual manifestation on the other hand. The essence of the latter level was to ensure that the native speakers' cognition,

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intuition, and cultural knowledge of the V-V compound formation and interpretation in Igbo are fully portrayed.

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CHAPTER FOUR

SEMANTIC CLASSIFICATION OF IGBO V-V COMPOUNDS

This chapter presents a semantic classification of Igbo compound verbs based on the internal semantic relationship that underlies the compounding constituents, as well as the degree of semantic relativity between the compound units and their compounding exponents. The classification of compound verbs is based on the presence versus absence of a compound head as contained in the Shibatani (1990) and Fabb (1998) compound verb classificatory model.

4.1 Endocentric V-V Compounds in Igbo

The concept of Endocentricity in Igbo compound verbs is an investigation into the semantic relationship that exists between the two compounding lexemes in a given Igbo compound verb. It tries to establish the individual semantic specifications of the compounding lexemes as well as the degree of their relatedness to the semantic readings of their compound forms. The notion of headedness is the principle that underlies endocentricity. In endocentric compound verbs, one compounding lexeme is conceived to be the head while the other lexeme is conceived to be the modifier of the compound head. Endocentric compound verbs in Igbo manifest in two structural forms; Head-First [HF] compound structures where the compound head occupies the left-side syntactic position, and Head-Last [HL] compound structures where the head of the compound unit occupies the right-side syntactic position of the compound formations respectively.

4.1.1 Verb-Modifier (V-M) Compound Structures in Igbo

Endocentric compound verb formations with V-M compound structures are referred to as Head-First (H-F) compound verb formations in Igbo. They manifest a V-M structural configuration, where the V1 (V) is the compound head and the V2 (M) is the modifier of the compound head. A typical example of Head-First compound verbs in Igbo, are Igbo compound verbs with attributive readings.

Attributive compound verbs in Igbo are often referred to as state verbs. They are kinds of endocentric compound verb formations with V-M structural dispositions. They are types of compound verb structures that demonstrate non-happening events. They distinguish events that are non-static or happening events. The examples in 16(a)-(g) below contain morpho-semantic instances of this class of compound verb:

16   (a)   chá-ké   'shine-glit'
                V1-V2   V1 - V2
                V - M   V - M

    (b)   dọ-ká   'drag-tear'
                V1- V2   V1- V2
                V - M   V - M

    (c)   sá-chú   'ripe-soil'
                V1-V2   V1- V2
                V - M   V - M

    (d)   tụ-chú   'throw-soil'
                V1-V2   V1- V2
                V - M   V - M

    (e)   chá-zù   'ripe-complete'
                V1- V2   V1 - V2
                V - M   V - M

    (f)   má-jí   'run-black'
                V1- V2   V1 - V2
                V - M   V - M

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The compound verbal configurations represented in 16(a)-(f) above are morphological manifestation of V-V compounds with attributive readings in Igbo. They are typical of state compound verbs identified in Agbo (2014). The illustrations in 17(a)-(f) below represent contextual utilization of the attributive compound verbs identified in 16(a)-(f) above:

17 (a) Íhú Àmáká chà-kè -reˋ àcháké
Face Amaka shine-glit-PST EMPH
Amaka's face is bright.

(b) Ákwà àhụ̀ dọ̀ -kà -rà àdọ́ká
Cloth DEM drag -tear PST EMPH
The cloth is torn.

(c) Ọ́ sá -chú -rú àsáchú
3sg ripe-darken-PST EMPH
It ripped prematurely.

(d) Ákwà àhụ́ tù-chú-rù átụ́chu
Cloth that throw- darken-PST EMPH
That cloth is soiled.

(e) Únùnè àhụ̀ sá-zù-rù àsázù
Plaintain DEM shine-complete-PST EMPH
That plantain is well-ripped.

(f) Àmáká má-jí-rí ámají
Amaka run-black-PST EMPH
Amaka is dark in complexion.

The sentences 17(a)-(f) contain constructs with attributive compound verb structures in Igbo. In example 17(a), the V1 verbal lexeme *chà* 'shine' combines with the V2 lexeme *kè* 'glit' to form the compound formation *chàkè* which has the semantic reading of 'brightness'. *Cháké* is contextually conceived as an attributive disposition of the argument *Àmáká* in the construction. The compounding lexemes *chá* and *ké* are characterized by internal semantic relationships and this accounted for endocentricity. The compound verb *cháké* is analyzed as an endocentric compound verb formation as it accounted for semantic headedness. The lexeme *cha* is conceived to be the head of compound formation *cháké* while *ké* is identified as the modifier. The identification of *cha* as the compound head is based on its high degree of semantic relativity to the compound verb structure *cháké*

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In 17(b), the V1 lexeme *dọ̀* 'drag' compounds with the V2 lexeme *ká* 'draw' to give the compound verbal structure *dọ̀ká* which semantically specifies 'torn', a conceivable feature of the argument *Ákwà* 'cloth' in the sentence. The internal semantic relationship that underlies the compounding lexemes of the compound verb *cháké* shows that the compound verb accounted for semantic headedness and as a result identified as endocentric compound verb. The V1 lexeme *dọ́* is conceived to be the semantic head of the compound structure *dọ́ká* while V2 *ká* is conceived to be the modifier lexeme. The identification of *dọ́* as the compound head is also based on its high degree of semantic relativity to the semantic reading of the compound structure *dọ́ká.*

In 17(c), the V1 lexeme *sá* 'ripe' combines with the V2 lexeme *chú* 'soil' to form the endocentric compound verb *sáchú* which encodes 'premature 'ripe'.   The compound verb is said to be endocentric because the internal semantic correlations between the compounding lexemes are characterized by the headedness condition. The compounding lexeme *sá* is analyzed as the semantic compound head while the V2 compounding lexeme *chú* is identified as the semantic modifier. Also in 17(d), the V1 lexeme *tù* combines with the V2 lexeme *chú* to form the state compound verb *tụ́chú* which has the semantic reading of 'fade' (a cloth fading in color). The V1 compounding lexeme *tú* is conceived to be the semantic compound head while the V2 lexeme *chú* is identified as the modifier lexeme. In 17(e), the compounding process involves the V1 *sá* 'ripe' and the V2 *zù* 'complete' to form the compound verb *sázù* which contextually encodes 'well ripped'. In 17(f), the compounding process involves the V1 lexeme *mà* 'throw' and V2 lexeme *jì* 'darken' combining to form the compound verb *màjì,* which has the semantic reading of 'darken' (fading in complexion). In examples, 17(e) and (f), the V1 compounding lexemes of *sá* and ma are identified as semantic compound heads, while the V2 compounding lexemes *zú* and *jí* are analyzed as modifiers. The identification of semantic compound heads and their corresponding modifiers follows our initial analysis in examples 17(a)-(d).

The attributive endocentric compound verbs in Igbo as we have demonstrated above translate events with no conceivable temporal boundary and they are devoid of activity. They are motionless events that describe attributive tendencies of their external and internal arguments.

However, having accounted for and established the compound status of the compound events highlighted in 16 and 17 above, the state compound verbs exhibit elements of an endocentric relationship. Endocentricity takes into account the internal semantic relationship between the compounding lexemes or constituents. As we have stated, the endocentric state compound verbs in 17(a)-(g) examples have a V-M compound structural pattern, where the first compounding lexemes (V1) are heads in their respective compound units, while the V2 serve as modifiers of the V1 in their respective syntactic situations. The V1 in all the compound verbs analyzed above (*chá, dò, sá, tù, má, and kà*) encode meanings more related to the semantic reading of their compound forms. On the other hand, the V2 lexemes (*kè, kà, chù, zù, jì, and chì*) are identified as modifiers as they overtly describe the manner, nature, and attributive content of V1 in their respective compound configurations.

4.1.2 V-M Composition with *ƒè* lexeme

The V-M composition with fe lexeme is an example of endocentric compound verb formations in Igbo. They also belong to the class of Head-First (HF) compound verbs in Igbo. Compound verb structures with fe lexeme often denote events with the semantic readings of transfer, movement, cross-over, or excess. Agbo (2014) also identifies this kind of lexeme in his classification of Igbo compound verbs from RRG perspectives. The examples in 18(a)-(e) below are morpho-semantic realizations of this class of compound verb formations outside of context:

18	(a)	kwá-fè	pack-fly
		V1-V2	V1-V2
		V - M	V - M
	(b)	nyé-fè	give-fly
		V1-V2	V1-V2
		V - M	V - M
	(c)	kwṹ-fè	grind-fly
		V1-V2	V1-V2
		V - M	V - M

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<table>
<tr><td>(d)</td><td>gbá-fè</td><td>run-fly</td></tr>
<tr><td></td><td>V1-V2</td><td>V1-V2</td></tr>
<tr><td></td><td>V - M</td><td>V - M</td></tr>
<tr><td>(e)</td><td>si-fè</td><td>cook-fly</td></tr>
<tr><td></td><td>V1-V2</td><td>V1-V2</td></tr>
<tr><td></td><td>V - M</td><td>V - M</td></tr>
</table>

The contextual uses of the compound verb forms identified in 18(a)-(e) above can be illustrated below:

19　(a)　Há kwá-fèrè n' ébé ọ̀zọ́
　　　　3pl pack-fly-PST in place another
　　　　They have moved out to another place.

　　(b)　Òbí nyé-fè-rè àdá égó
　　　　Obi give-fly-PST Ada money
　　　　Obi gave money to Ada in excess

(Agbo 2014:142)

　　(c)　Ézè kwú-fè-rè Ùjú ụ́gwọ́
　　　　Eze paid-fly-PST Uju dept
　　　　Eze overpaid Uju

　　(d)　Àdá gbá-fè-rè ḿmíri ́n'ńrí
　　　　Ada pour-fly PST water in food
　　　　Ada added water excess water to the food.

　　(e)　Àmáká si-fè-rè ánụ́ áhụ̀ ófè
　　　　Amaka cook-fly-PST meat DEM over
　　　　Amaka overcooked the meat

The sentences in examples 19(a)-(e) above comprise endocentric compound verbs with *fe* lexeme. In example 19(a), the V1 of *kwá* 'pack' combines with the V2 *fè* 'fly' to form the compound structures *kwáfè* which semantically encodes packing to another location. In 19(b), the V1 lexeme *nyè* 'give' combines with the V2 *fè* 'fly' to constitute the compound verb *nyefe* which semantically denotes give money in excess. In example 19(c) the V1 compounding lexeme *kwú* 'pay' co-occurs with the V2 *fè* 'fly' to form the compound verb unit *kwụ́fè* which

means overpayment. In example 19(d), the V1lexeme *gbá* 'fetch' combines with the V2 lexeme *fè* 'fly' to form the compound verb *gbáfè* which idiosyncratically specifies the addition of excess water. In the 19(e) example, the V1 verbal lexeme *sí* 'cook' combines with the compounding V2 verbal lexeme *fè* 'fly' to constitute the compound verb unit *sífèrè* which semantically encodes the conceptual idea of overcooking.

However, the V1 and V2 compounding lexemes identified in 19(a)-(e) above are semantically characterized by some kind of endocentric internal relationship. The endocentric relationship that underlies the class of compound configurations takes the V-modifier structure where the V is the V1 and the modifier is the V2. From the compound verbs exemplified in 19(a)-(e) the V1 in all the illustrations is identified as the heads of the compound formations, while the V2 fé modifiers the V1. The identification of V1 as the semantic heads of compound formations is stimulated by the fact that the semantic readings of the compound verbs in 19(a)-(e) are strategically centered and more related to the V1 lexemes rather than the V2 lexeme. For instance, in sentences 19(a)-(c), the modifier lexeme *fé* describes the directionality of the V1 lexemes *kwá, nyé and kwú* respectively while in 19(d)-(e), the modifier lexeme *fè* gives the description of manner and degree of the verbal lexemes *gbá and sí* respectively. The identification of the V2 *fè* as the verbal modifier in the compound units of 19(a)-(e) is specifically based on its extensional and descriptive function in its respective morpho-semantic contexts.

4.1.3 V-M Composition with *dà* lexeme

The V-M compound compositions with *dà* lexeme are another class of endocentric compound verbs in Igbo with Head-First compound structural dispositions. They demonstrate events that encode fall, diminutive, exhaustive, and reductive attributes. Examples of such compound verb formations outside of context are represented in examples 20(a)-(e) below:

20   (a)   kwá-dà   'push-fall'
            V1-V2   V1-V2
            V - M   V - M

      (b)   kú-dà   'knack-fall'

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	V1-V2	V1-V2
	V - M	V - M
(c)	rí-dà	'eat-fall'
	V1-V2	V1-V2
	V - M	V - M
(d)	ré-dà	'sell-fall'
	V1-V2	V1-V2
	V - M	V - M
(e)	gụ́-dà	'read-fall'
	V1-V2	V1-V2
	V - M	V – M

The compound verbs identified in 20(a)-(e) above are examples of endocentric V-M compound verbs in Igbo in isolation. The contextual uses of these compound verbs are represented in examples 21(a)-(e) below:

21 (a) Ézè kwà-dà-rà óché
Eze push-fall-PST chair
Eze pushed down the chair

(b) Há kụ́-dà-rà ụ́lọ̀ yá
3pl knack-fall-PST house his
They pulled down his house

(c) Èméká rí-dà-rà ọ̀gá yá
Emeka eat-fall-PST master 3s
Emeka renders his master bankrupt

(Agbo 2014:142)

(d) Ó ré-dà-rà áhị́á yá
3sg sell-fall-PST market 3s
He had a bumper sale

(e) Òbí gụ́-dà-rà ákwụ́kwọ́ áhụ̀
Obi read-fall-PST book DEM
Obi perused that book

(Agbo 2014:142)

Sentences 21(a)-(e) demonstrate compound events dà lexeme. In example 21(a), the compounding process involves the V1 lexeme *kwá* 'push' combining with the V2 lexeme dà

'fall' to form the compound unit kwádà which semantically means to push an object down. In 21(b) the V1 lexeme *kụ́* 'knack' combines with the V2 *dà* 'fall' to form the compound unit *kụ́dà* which semantically encodes to pull down or demolish. In example 21(c) the V1 compounding lexeme *rí* 'eat' co-occurs with the V2 *dà* 'fall' to constitute the compound unit rídà which means squander wealth. In example 21(d) and (e) the V1 *ré* 'sell' and *gụ́* 'read' combined with the V2 *da* 'fall' to form the compounding units of *rédà* and *gụ́dà* respectively.

The internal semantic relationship that underlies the compounding constituents of these compound verb structures is that of an endocentric relationship. The semantic readings of the compound forms seem to be more semantically related to one of the compounding lexemes than the other in the sentences above. From the native speakers' intuition and cognition, the semantic specification of the compound structures is more related to the V1 activity verbal lexemes of *(kwá, kụ́, rí, ré, śụ and gụ́)* of sentences 21 and as a result they are classified as the semantic heads of the compound structures. On the other hand, the V2 compounding lexeme '*dà'* has been identified as the modifier of the V1 compounding lexemes in 21(a)-(e) respectively. The identification of the V2 *dà* 'fall' as a modifier verbal lexeme in the compound formations in 21 illustrations was further affirmed by the fact that the lexeme describes the manner or the state of affairs of V1 compounding lexemes in their respective morpho-syntactic dispositions.

4.1.4. Durative V-M Compound Compositions

In Igbo, V-M compound compositions with durativity are characterized by situations, activities, and events with cyclic phases. In Igbo, compound verbs with identifiable durative readings manifest successive phases in relation to time. However, endocentric durative V-V compounds are distinct from other non-durative compound verbs, especially in terms of their internal temporal grammatical properties. While non-durative compound verbs account for the immediate and instantaneous nature of events, durative compound verbs capture the durative extended nature of events in relation to time. This class of compound verbs seems to take protracted process to complete than the short period that characterized non duratives. The examples in

22(a)-(g) below represent morpho-semantic manifestations of durative V-M compound structures:

22   (a)   zṹ+tọ̀   train+lay
              V1-V2   V-M
              V - M   V - M

       (b)   nyà+gbú   drive+kill
              V1-V2   V-M
              V - M   V - M

       (c)   rị́+bà   -   crawl+enter
              V1-V2   -   V-M
              V - M   -   V - M

       (d)   rú+chí   -   grow+fill
              V1-V2   -   V-M
              V - M   -   V - M

       (f)   rú+jú   -   grow+full
              V1-V2   -   V-M
              V - M   -   V - M

       (g)   tá+kpọ́   -   dry+shrink
              V1-V2   -   V-M
              V - M   -   V – M

The contextual realizations of the durative compound formations identified in (21) above are represented in example 23(a)-(g) below:

23   (a)   Há zṹ-tọ̀-rọ̀ ụ́mụ́ há
              3pl train-lay-PST children 3pl
              They spoilt their children

       (b)   Ọ́ nyà-gbù-rù ụ́gbọ́ àlà hà
              3sg drive-kill-PST car land them
              He wrecked their car

       (c)   Ésú áhụ̣ rị́-bà-rà n'ímé ọ̣hị́á

Millipede DEM crawl-enter-PST inside bush
That millipede crept into the bush

(Agbo 2014:144)

(d)   Áhị́hị́á rù-chì-rì áhị́á áhụ́
        Grass grow-fill-PST market
        The market is filled with grass

(e)   Ńtùtù rùjùrù yà ísí
         Hair grow-fill-PST 3s head
        His hair is bushy

(f)   Ḿmírí áhụ́ tàkpọ́rọ́ àtákpọ́
        Water Dem shrink-dry-PST EMPH
        That river has dried up

(g)   Àdá mị̀kpọ̀rọ̀ ázụ̀
        Ada smoke-dry-PST fish
        Ada smoked the fish very well.

The illustrations in examples 23(a)-(g) demonstrate the manifestation of V-M durative compound verbs in Igbo. In 23(a), the V1 lexeme *zụ́* 'train' combines with the V2 lexeme *tọ̀* 'lay' and the resultant state of the compounding process is a durative compound formation *zụ́tọ̀*. In 23(b), the V1 activity verb *nyà* 'drive' co-occur with theV2 *gbú* 'kill' to form the compound verb *nyàgbù*. In 23(c), the verbal lexeme *bà* 'inter' is combined with the activity verbal lexeme *rị́* 'crawl' to form the compound verb unit *rị́bà.*

In 23(d), the verbal lexeme *rú* 'grow' compounds with the V2 element *chị́* 'fill' to form the durative compound verb *rúchị́*. In 23(e), the activity verb *rú* 'grow' co-occurs with the verbal lexeme *jú* 'fill' to form the compound verb structure *rújú*. The same pattern and order of analysis are also applicable in 23(f) and (g) where the activity verbal lexemes *tá* 'chew' combines with the attributive verbal lexeme *kpọ́* to form the durative compound verb *tákpọ́* 'dried up'.

The systematic illustrations and analyses of the compound structures in 23(a)-(g) above follow our earlier postulations about the inherent internal combinatory tendencies of the compounding constituents that characterized various classes of compound verb formations in Igbo. As we can deduce from our analyses, the compound verbs contained in example 23(a)-(g) are all durative compound verbs. Their identification and classification as durative compound verbs is stimulated

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by their inherent temporal properties which are evident in their conceivable onset and endpoint, and this speaks volumes of their extended time frame in accomplishment. These conceivable temporal features lack punctuality as they are devoid of promptness as evidenced in non-durative compound structures. As demonstrated in 23(a), the activities that characterize spoiling a child as a result of improper training cannot be said to be prompt nor have an immediate endpoint. It is a durative event whose vivid endpoint justifies the meaning of the event. However, in 23(b) also, the inherent temporal property of the durative compound verb *nyàgbùrù* which semantically specifies 'running a car down or wrecking a car' takes a protracted time to accomplish. Therefore 23(b) is a durative compound verb as the temporal idea it represents lacks instantaneous readings. Similarly, the same order of analysis is applicable in 23(c)-(g). The timeframe captured in these events is extensional and protracted and they enjoy more durativity than other non-durative, instantaneous compound verbs in Igbo. However, the durative compound verbs in 23(a)-(g) are identified as endocentric compound verbs respectively. On the other hand, the illustrations in (22) above show the endocentric structural pattern of the durative compound verbs contextually used in (23) examples. From the illustrations, the verbal lexemes *zụ́* 'train', *nyà* 'drive', *rị́* 'crawl', *rú* 'grow', and *tá* 'shrink' are all V1 and heads of compound formations in their respective compound configurations. In the same vein, the corresponding compounding verbal lexemes *tọ̀* 'lay' *gbú* 'kill', *bá* 'enter', *chí* 'fill', *jú* 'full' and *kpọ́* 'dry' are V2 respectively and also modifiers of the compound heads in their various morpho-semantic dispositions. The identification of the compound head and its corresponding modifier is semantically sensitive. This process is based on the idiosyncratic semantic specification of the compound head in relation to the semantic specification of the compound unit. The data shows that the overall semantic readings of the entire compound units revolved around the semantic specification of the compound heads. The semantic verbal modifiers give more information about the compound heads thereby creating a minute semantic gap between their meanings and the semantics of the compound formations. The modifiers specify the kinds, manners, directionality, and state of affairs of the compound head in their respective compound configurations. With reference to the structural positions of the compound heads and their modifier verbal lexemes, the endocentric compound verbs of duration illustrated in examples (22) and (23) above can also be called Head-First endocentric compound verbs. Their identification and certification as Head-First

endocentric compound verbs follow the syntactic position of the compound heads in the compound structure where the head of the compound verb precedes the modifier verbal lexeme. The endocentric relationship that characterized these family compound verbs took the V-M compound structure where the V is the V1, and head of compound formations and M is the V2 and the modifiers of the compound head. This morph-syntactic cum semantic dispositions project the compound verbs in (23) as Head-First V-V compound configurations.

4.1.5. Semelfactive V-M Compound Compositions

The V-M semelfactive compound verb formation is a class of Igbo compound verbs that exhibit a high degree of promptness and punctuality in accomplishment. The term semelfactive was originally introduced into the mainstream of linguistic literature by Smith (1997) as an inherent property of a class of verbs. It was widely expanded later by Van Valin (2005:47) in his Aktionsart classificatory system of Verbs. Van Valin describes semelfactive verbs as verbs that denote events without much temporal duration. This implies that events with semelfactive readings are more prompt, immediate, and instantaneous than other verbs with or little degree of durativity. He further describes this class of events as atelic events.

However, certain compound verb structures in Igbo have shown elements of semelfactive readings in their semantic specifications. Semelfactive compound verbs in Igbo do not have an overt conceivable temporal boundary. The margin between the onset and endpoint of semelfactive compound events cannot be overtly established. They are as good as the end as soon as they start. Examples of semelfactive V-M compound structures in Igbo outside of context can be illustrated in example 24(a)-(f) below:

24	a)	kpọ́-bì	-	strike-end
		V1-V2	-	V1-V2
		V - M	-	V - M
	b)	gbá-bì	-	run-end
		V1-V2	-	V1-V2
		V - M	-	V - M

c)	kwá-pụ̀	-	cough-exist
	V1-V2	-	V1-V2
	V - M	-	V - M

d)	nyị-pụ̀	-	excrete-exist
	V1-V2	-	V1-V2
	V - M	-	V - M

e)	gbá-bì	-	run-end
	V1-V2	-	V1-V2
	V - M	-	V - M

f)	gbá-pụ̀	-	run-exist
	V1-V2	-	V1-V2
	V - M	-	V - M

The contextual manifestations of the morpho-semantic structures of the V-M semelfactive compound verbs are illustrated in 25)(a)-(f) examples below:

25. (a) Èméká kpò-bì-rì úkwú
Emeka strike-end-PST leg
Emeka stubbed his foot

(b) Èrírí áhụ́ gbá-bì-rì àgbábì
Rope DEM run-end-PST EMPH
The rope cut

(c) Ọ̀ kwá-pụ́-rụ̀ ụ́kwárà
3sg cough-exist-PST cough
Ḧe coughed

(d) Ádá nyị-pụ̀-rụ̀ áhụ̀rụ̀
Ada excrete-exist-PST fart
Ada farted

(e) Àmáká gbá-bì-rì ányá
Amaka run-end-PST eye
Amaka blinked

(f)   Ó gbá-pù-rù n'áká
       3sg run-exist-PST in hand
       He snapped fingers

The sentential construction in 25(a)-(f) are practical manifestation of V-M semelfactive compound verbs in Igbo. The compounding process that gave rise to semelfactive compound verbs in Igbo involves activity verbal lexemes as V1 and non-durative verbal lexemes as V2.

In 25(a), the activity verbal lexeme *kpọ́* 'strike' compounds with the V2 lexeme *bi* 'end' to form the semelfactive compound verb *kpọ́bì* 'stub'. With reference to the native speakers' understanding, intuition, and conceptualization of the compound verb *kpọ́bì* in relation to time, the verb lacks durativity as it is characterized by a high degree of promptness and punctuality. It ends as soon as it starts. The durativity that characterizes semelfactive events is so short that it appears practically unattainable to be considered an event process in real-time. This implies that there is no marginal time frame that can accurately account for its duration. In 25(b) the compounding process involves the activity V1 lexeme *gbá* combining with the V2 compounding constituents *bi* 'end' to form the semelfactive compound verb *gbábì*. The compound verb *gbábìrì* is analyzed as a semelfactive event because it has no conceivable inherent endpoint. As a result, it lacks durativity. In 25(c) the activity V1 lexeme *kwá* combined with the V2 compounding element *pu* 'exit' to form the semelfactive compound verb structure *kwápụ́*. Under Emenanjo (1978) classification of Igbo verbs, the compound verb *kwápụ́* falls within the class of inherent complement verbs which must co-occur with a nominal element as its obligatory complement. This is evidenced as *kwápụ́* 'cough-exist' obligatorily takes *ụ́kwárà* 'cough' as its obligatory nominal complement to constitute conceptual integrity. The conceptualization of the event represented in the compound verb formation *kwápụ́* indicates an event with semelfactive readings. Cough as an event in Igbo is conceived as an involuntary act that lacks premeditation and durativity. As a semelfactive compound event the conceptualization of the verb *kwápụ́* in relation to time is greatly rapid as it has no conceivable onset and endpoint. Just like every other semelfactive event, it ends as soon as it starts. The same order of analysis in 25(a)-(c) above is also applicable to the examples in 25(d), (e) and (f) respectively.

However, the process that characterizes semelfactive compound verb formations in Igbo cannot be overtly conceived in relation to time. The inconceivability of the temporal features of semelfactive compound verbs in Igbo is stimulated by the fact that they do not exhibit endpoints. They are considered to be one-off events. As events that lack endpoints, they are classified as atelic [-telic] events.

Semelfactive compound verb structures are not productive in Igbo. They are relatively restricted. This generalization only affects the compound verb system in Igbo as it does not expand to non-compound verbal elements. Linguistic evidence has shown that the unproductive proposition of the compound verb structures does not affect Igbo alone but some other languages that manifest compound and compounding as morphological reality.

In another development, the compounding lexemes in the compound verb configuration illustrated in 25(a)-(f) exhibit a V-M compound structure and this speaks volumes of the endocentric relationship that characterized them. The V1 in the entire compound formations are analyzed as the compound heads while the V2 corresponding compounding lexemes are analyzed as modifiers of the compound head respectively. The structural dispositions of the semelfactive compound verbs in endocentric relationships are illustrated 26(a)-(f) below:

26   (a)   kpọ́+bì   -   strike-end
             V1+V2   -   V-M

        (b)   gbá+bì   -   run-end
             V1+V2   -   V-M

        (c)   kwá+pù̀   -   cough-exist
             V1+V2   -   V-M

        (d)   nyú+pụ́   -   excrete-exist
             V1+V2   -   V-M

        (e)   gbá+bì   -   run-end
             V1+V2   -   V-M

        (f)   gbá+pụ́   -   run-exist
             V1+V2   -   V-M

The illustrations in 26(a)-(f) above demonstrate the structural disposition of the endocentric compound relationship that exists among the compounding verbal lexemes as contained in

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examples (24)-(26). The compound verb structures manifest Head-First (HF) compound verb formation where the V1 is the head of the compound verb unit and the V2 the modifier of the compound head. This by implication gives a V-M compound verb structure, which is a disposition for the internal semantic relationship between the compounding lexemes respectively.

4.1.6. Active Accomplishment V-M Compound Compositions

The V-M active accomplishment compound compositions in Igbo contain a class of Igbo compound verbs that denote durative events that exhibit motion which has an identifiable culminating point. The term 'Active accomplishment' was adopted from the works of Van Valin (2005) which tries to classify verbal categories in relation to their inherent temporal properties. According to Van Valin (2005), these classes of verbs are characterized by durativity and as a result do not exhibit punctuality. They are inherently non-instantaneous events with identifiable culminating points. With reference to their conceivable terminal, they are classified as telic events.

Morphosemantic manifestations of some classes of Igbo compound verbs have shown features of active accomplishment and this speaks volumes of the reality of active accomplishment compound verb formations in Igbo. The examples in 27(a)-(g) below presents V-M active accomplishment verbs outside of context:

27   (a)   gá -rú   -   go - reach
                 V1-V2   -   V1 – V2
                 V - M   -   V - M

          (b)   zí - gá   -   send + go
                 V1-V2   -   V1 – V2
                 V - M   -   V – M

          (c)   bù - lá   -   carry - go
                 V1- V2   -   V1 - V2
                 V - M   -   V - M

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(d)	gbá - rú	-	run - reach		
	V1- V2	-	V1-V2		
	V - M	-	V – M		
(e)	dú - gá	-	lead - go		
	V1- V2	-	V1-V2		
	V - M	-	V – M		
(f)	bú – gá	-	carry - go		
	V1- V2	-	V1-V2		
	V - M	-	V – M		
(g)	dé - ga′	-	write - go		
	V1- V2	-	V1-V2		
	V - M	-	V - M		

The contextual utilization of the compound forms represented in 27 above are contained in example 28 constructions below:

28 (a) Há gà-rù-rù na ḿmírí
3PL go-reach-PST in water
They got to the river

(b) Èméká zì-gà-rà ńné yá égó
Emeka message-go-PST mother him money
Emeka sent money to his mother

(c) Há bù-là-rà íbú há ụ́lọ̀
3pl carry-go-PST load them house
They sent their properties home

(d) Àdá gbà-rù-rù ụ́lọ̀
Ada run-reach-PST house
Ada travelled home

(e) Ó dù-gà-rà ńdị̣́ ághá Énúgú
3sg lead-go-PST DEM war Enugu
He led the soldiers to Enugu

(f) Ó bù-gà-rà há ńrí n`úgbó

3sgcarry-go-PST 3pl food PRE farm
She took food to them in the far

(g)   Òbí dè-gà-rà Ézè ákwụ́kwọ́
Obi write-go-PST Eze book
Obi wrote a letter to Eze

Sentences 28(a)-(g) above contain compound verb formations in Igbo with V-M compound structure as well as active accomplishment readings. The inherent temporal features of the compound events represented in the constructions show a high degree of activity with conceptualized temporal boundaries. The compounding constituents are made of activity verbal lexemes *gá, zí, bú, gbá, dú*, and *dé* as V1, co-occurring with durative verbal lexemes *rú, gá, lá* as V2 to form the active accomplishment compound verb structures contained in example 28 above. In example 28(a), the V1 *gá 'go'* combines with the V2 *rú* 'reach' to form the compound verb *gárú* which semantically specifies arriving at a destination. The V1 gá indicates the motion attribute of the compound verb, while the V2 *rú* indicates the temporal boundary of the activity of 'going'. In example 28(b), the V1 compounding constituent *zí,* 'send' combines with the V2 element to form the active accomplishment compound unit *zígá* which has the semantic interpretation of sending something to an identifiable location. In 28(c) illustration, the V1 lexemes *bú* 'carry' co-occur with the V2 compounding lexeme *lá* 'go' to produce the compound verb *búlá* which has the semantic reading of carrying some load or property to a designated location. The compounding configurations of 28(e)-(g) also follow the same pattern of compounding processes highlighted in examples 28(a)-(c).

With reference to the semantic interactions of the compounding lexemes, V-M active accomplishment compound verbs in Igbo can said to be events with logical and conceivable endpoints.

However, the V-M active accomplishment compound structures in 28(a)-(g) above accounted for the endocentric relationship. The V1 which are activity verbal elements are categorized as the head of their compound formations respectively, and the V2 which inherently have durative readings in isolation are modifiers. They are called modifiers because of their directive functions

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towards their compound heads the V1. The V2 verbal modifiers give a description and a sense of direction to their compound heads. The endocentric compound structure that characterized the compound structure is that of V-M endocentric compound formation where the V is the compounding verbal head, and the M is the compounding verbal modifier.

The diverse constructs represented in examples (16)-(28) so far are instances of Endocentric Verb-modifier compound formations, where the V1 is the compound head and the V2 functions as a modifier. These classes of compound verbs are syntactically referred to as Head-First compound verb structures. It must be interesting to note that identification of the compound heads and their corresponding modifiers are not syntactically stimulated as such identifications are not position-sensitive. However, the identification of compound heads and modifiers is semantically motivated. The process of categorization and identification is strictly based on the inherent semantic specifications of the compounding verbal lexemes in relation to the semantic reading and cognition of their compound forms.

4.1.7 Modifier-Verb (M-V) Compound Structures in Igbo

Endocentric compound verb formations with M-V compound structures are referred to as Head-Last (H-L) compound verb formations in Igbo. The Head-last compound verb formations in Igbo have the M-V structural configuration where the V1 (M) is the modifier of the compound head, and the V2 is the head of the compound unit. The following Endocentric compound verb formations illustrate canonical M-V compound compositions in Igbo:

4.1.7.1. M-V Composition with the lexeme gbú (V+gbu)

The M-V compound compositions with the *gbu* 'kill' lexeme are a class of Igbo compound verb that semantically encodes the termination of life. They also belong to the Head-Last family of compound structures. the examples in 29(a)-(f) below contains morpho-semantic instances of V+gbu compound configuration outside context:

29	(a)	kù̀-gbù	-	beat-kill
		V1-V2	-	V1 - V2

	M - V	-	M - V

(b)	zọ̀-gbù	-	stamp-kill
	V1-V2	-	V1-V2
	M - V	-	M - V

(c)	gbà-gbù	-	shoot-kill
	V1-V2	-	V1-V2
	M - V	-	M - V

(d)	tà-gbù	-	bite-kill
	V1-V2	-	V1-V2
	M - V	-	M - V

(e)	sù-gbù	-	stab-kill
	V1-V2	-	V1-V2
	M - V	-	M - V

(f)	kpọ̀-gbù	-	stub-kill
	V1-V2	-	V1-V2
	M - V	-	M - V

The structures in 29(a)-(f) contain a morpho-semantic exposition of compound verb formations outside context. The sentential constructs in 30(a)-(f) below illustrate contextual uses of the compound verbs identified in (29) above:

30　(a)　Èméká kụ̀-gbù-rù ágwọ́
　　　　Emeka beat-kill-PST snake
　　　　Emeka killed a snake.

　　(b)　Àdá zọ̀-gbù-rù áhụ̀hụ́
　　　　Ada stamp-kill-PST ant
　　　　Ada kills an Ant.

　　(c)　Díńtá gbà-gbù-rù ánụ́ ọ́hị́á
　　　　Hunter shot-kill-PST meat bush
　　　　The Hunter killed a bush animal.

　　(d)　Ńkítá tà-gbù-rù ọ̀kụ́kọ̀
　　　　Dog bit-kill-PST fowl
　　　　A dog bites the fowl to death.

　　(e)　Ézè sù-gbù-rù ényi ̀yá

Eze stab-kill-PST friend him
Eze stabbed his friend to death.

(f)   Há   kpọ̀-gbù-rù yá
        3pl stub-kill-PST his
        They crucified him

The constructions in 30(a)-(f) above contain compound verb structures with diverse semantic readings. They are prototypes of endocentric compound verbs in Igbo. Their analysis as endocentric V-V compound configuration is based on their exhibition of an identifiable semantic compound head.

In example 30(a) the V1lexeme *kụ́* 'beat' combines with the V2 lexeme *gbú* 'kill' to form the compound verb *kụ̀gbùrù* 'hit to dead'. The V1 *kụ̀* is analyzed as the modifier of the V2 gbú 'kill' which is the head of the compound formation.

In example 30(b), the compounding V1 element *zọ̀* 'stamp' combines with the V2 compounding lexeme *gbú* 'kill' to form the compound unit *zọ̀gbùrù* which semantically specifies 'killing by stamping'. The endocentric relationship between *zọ̀* and *gbú* also follows our initial analysis in 30(a) where the V1 is the modifier of the V2 compound head.

In example 30(c), the compounding process comprises of V1 *gbá* 'shoot' combining with the V2 verbal lexeme *gbú* 'kill' to form the compound structure *gbàgbùrù* which encodes the semantic reading of 'shot to dead'. Also, as a kind of Igbo compound verb characterized by an endocentric relationship, the V2 *gbú* 'kill' is analyzed as the compound head, while the V1 *gbà* 'shoot' is the modifier of the V2 compound head.

However, the same order of analysis in 30(a)-(c) follows in examples 30(d)-(f), where the V1 compounding lexemes *tà* 'bite', *sụ̀* 'stab' and *kpọ̀* 'stub' combined with V2 *gbú* 'kill' to form compound units *tàgbùrù* 'bite to dead' *sụ̀gbùrù* 'stab to dead' and *kpọ̀gbùrù* 'stub/crucify to dead', in their respective morpho-semantic realizations. The endocentric relationships between

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the compounding lexemes also follow accordingly as the V1 is identified as the modifier lexemes, while the V2 *gbú* 'kill' sustains its compound head status.

However, the illustrations in examples 30(a)-(f) are called endocentric compound verb structures because of the internal semantic relationship that characterizes the V1 compounding element and the V2 compounding lexeme *gbú*. The internally stimulated relationship took the M-V endocentric structural dispositions.

The 'M' stands for the V1 modifier while the 'V' represents the V2 verbal head. The verbal lexemes kú 'hit', *zọ̀* 'stamp', *gbà* 'shoot', *tà* 'bite', *sụ̀* 'stab', and *kpọ̀* 'stub', as demonstrated above are modifiers in their respective compound formations, while the lexeme *gbú* 'kill' is identified as the head. The modifier lexemes modify their compound head *gbú*. The certification of V2 *gbú* as the head of compound formations in 30(a)-(f) is based on the conceptual semantic properties of the verb *gbú* in relation to other compounding constituents in the compound units. The verbal lexeme *gbú* bears the central information conveyed by the entire sentences. The modifier verbs in the constructions have a lesser semantic contribution as they specify kinds, means, nature, or types of the V2 *gbú* 'kill'. For instance, in 30(a) *kụ̀gbùrù* specifies a type of killing by beating. In 30(b) *zọ̀gbùrù* means killing by stamping upon. In 30(c) *gbàgbùrù* reads killing by shooting. In 30(d) *tàgbùrù* specifies killing by biting. In 30(e) *sụ̀gbùrù* semantically specifies killing by stabbing, while in 30(f) *kpọ̀gbùrù* specifies a type of killing by crucifixion. Nevertheless, the entire compound configuration in 30(a)-(f) has a fundamental semantic notion of life being taken out, and this was overtly specified by the V2 lexeme *gbú*. As a result, the lexeme *gbú* is the head of the compound structures in sentences 30(a)-(f).

It is pertinent to note that the conceptual idea represented by the lexeme *gbú* 'kill' in example (30) constructions is quite distinct from the semantic import of the lexeme *gbú* 'kill' in example 23(b). The compound structures illustrated in examples 30(a)-(f) which also have the verb *gbú* 'kill' as the V2 have the semantic specification of extinction of life. The *gbú* compound composition in 30 illustrations exhibits non-durative readings and also specifies extinction of life while the *gbú* compound composition in 23(b) has durative readings and is semantically unconnected with termination of life. It shows the degree of affectedness and bad state of the internal argument *ụ́gbọ́ àlà* 'car' in the construction.

4.1.7.2. M-V Compositions with the lexeme wá

The V+wa compound structure is also a typical example of an Igbo endocentric compound verb with the semantic reading of splitting, breaking, or shattering of an object. Examples 31(a)-(e) below represent V+wa endocentric compound verb structures in Igbo outside context:

31	(a)	kù-wà	-	'hit-break'
		V1-V2	-	V1-V2
		M - V	-	M - V
	(b)	pị́-wà -	'squeeze-break'	
		V1-V2	-	V1-V2
		M - V	-	M – V
	(c)	zọ́-wà	-	'stamp-break'
		V1-V2	-	V1-V2
		M - V	-	M – V
	(d)	mà-wà	-	'sling-break'
		V1-V2	-	V1-V2
		M - V	-	M - V
	(e)	dọ̀-wà	-	'draw-break'
		V1-V2	-	V1-V2
		M - V	-	M - V

The sentential constructs in 32(a)-(e) below demonstrate contextual uses of the V+wa compound compositions identified in 31 examples:

32 (a) Ézè kù-wàrà éféré
Eze hit-break-PST plate
Eze broke a plate

(b) Àdá pị̀-wà-raˋ ụ̀dárá
Ada squeeze-break-PST cherry
Ada crack/break the cherry

(c) Èméká zọ̀-wà-rà éféré áhụ̀
Emeka march-break-PST plate that

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Emeka broke that plate

(d)   Hà mà-wà-rà ụ́zọ̀ há
3pl throw-break-PST door 3pl
They broke their door by slinging

(e)   Ọ́   dọ̀-wà-rà ákwá yá
3sg draw-break-PST cloth 3sg
She tore her clothes.

The sentential illustrations in 32(a)-(e) above represents compound events with modifier-Verb structural configurations in Igbo. The compounding processes comprise of V1 compounding constituents of *kụ̀* 'hit', *pị̀* 'squeeze/press', *zọ̀* 'stamp', *má* 'sling', and *dọ́* 'draw', occurring with the lexeme *wá* 'break' and the resultant effect of the compounding processes are the formation of the compound units of *kụ̀wàrà* which has the semantic readings of 'hit to break', *pịwàrà* which specifies the conceptual idea of 'squeeze to crack/break', *zọ̀wàrà* which semantically encodes 'break by stamping', *màwàrà* which has the semantic reading of 'break by slinging' and *dọ̀wárà* which semantically encodes 'break by over-stretching'. These compound verbs are canonical examples of Igbo endocentric compound verbs. They are endocentric because they exhibit verifiable semantic heads respectively.

The endocentric relationships between the compounding lexemes take the form of the M-V compound structure where the V1 (M) identified above are the modifier lexemes and the V2 (V) is the head of the compound configurations. As a result, the V2 of the compound units *wá* 'break' in the examples represented in 32(a)-(e) is the head of the compound structures respectively. The V1 lexemes as illustrated in the same 32 examples are modifiers of the V2 compound head.

4.1.7.3. M-V compositions with the lexeme nyụ́

The M-V compound composition with the *nyụ́* verbal lexeme belongs to the class of Igbo compound verbs that semantically specifies extinction and the act of putting off something. The analysis of the compound verb structure with the verbal lexeme *nyú* follows our initial analysis

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in 4.1.7.1 and 4.1.7.2 above. The illustrations in 33(a)-(f) below contain morpho-semantic manifestations of endocentric M-V compound structures with *V+nyu* composition in Igbo:

33   (a)   gbà-nyù   -   'switch-extinguish.'
                  V1-V2   -   V1-V2
                  M - V   -   M - V

       (b)   fè-nyù   -   'fan-extinguish'
                  V1-V2   -   V1-V2
                  M - V   -   M - V

       (c)   pì-nyù   -   'squeeze/press-extinguish'
                  V1-V2   -   V1-V2
                  M - V   -   M - V

       (d)   zò-nyù   -   'stamp-extinguish'
                  V1-V2   -   V1-V2
                  M - V   -   M - V

       (e)   fù-nyù   -   'blow-extinguish'
                  V1-V2   -   V1-V2
                  M - V   -   M - V

       (f)   mà-nyù   -   'rain-extinguish'
                  V1-V2   -   V1-V2
                  M - V   -   M - V

Having identified and represented endocentric M-V compound verbs in Igbo with *V+nyú* compound formations in 33(a)-(f), the examples in 34(a)-(f) below demonstrate contextual applications of these compound verbs:

34   (a)   Ó gbà-nyù-rù ókú
                  He switch-extinguish-PST fire
                  He switched off the light

       (b)   Ó fè-nyù-rù ókú
                  3sg fan-extinguish-PST fire
                  She put off the fire by fanning

       (c)   Àdá pì-nyù-rù ókú
                  Ada squeeze-extinguish-PST fire

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Ada put out the flames/light with her fingers

    (d)   Há zọ̀-nyὺ-rὺ- ọ́kụ́ áhὺ
             3pl stamp-extinguish-PST fire that
             They stamped out the fire.

    (e)   Ọ́ fὺ-nyὺ-rὺ ọ́kụ́
             3sg blow-extinguish-PST fire
             He put out/extinguished the fire by blowing it with his mouth.

    (f)   Ḿmírí má-nyὺ-rὺ
             Water throw-extinguish-PST fire
             Rainfall extinguished the fire.

The sentences in 34(a)-(f) above contain canonical sentential constructs with Igbo M-V morpho-semantic structures. The compounding processes comprise V1 verbal lexemes occurring with V2 verbal elements to form a *single* compound unit. In example 34(a) the V1 lexeme *gbá* 'switch' combines with the V2 lexeme *nyụ́* 'extinguish' to form the compound unit *gbànyὺrὺ* which semantically encodes putting of light/fire. In example 34(b) the V1 *fé* 'fan' co-occur with the V2 *nyụ́* 'extinguish' to form the compound verb *fènyὺrὺ* which semantically specifies putting off fire by fanning. In example 34(c), the V1 *pi* 'squeeze' combines with the V2 *nyὺ* 'extinguish' to form the compound structure *pìnyὺrὺ* which has the semantic reading of putting off light/fire by squeezing with fingers. In example 34(d), the compounding process comprises the V1 *zọ̀* combining with the V2 *nyὺ* to form the compound unit *zọ̀nyὺrὺ* which encodes putting off light/fire by stamping. In example 34(e) the compounding process involves the V1 *fὺ* 'blow air' combining with the V2 *nyὺ* 'extinguish' to form the compound structure *fὺnyὺrὺ* which means putting off fire by blowing air through the mouth. The same order of analysis follows in example 34(f) where the V1 *má* 'throw' co-occur with the V2 *nyὺ* 'extinguish' to constitute the compound formation *mànyὺrụ́* which has the semantic reading of light/fire been put off by rainfall.

As we stated earlier, the analysis of *V+nyụ́* M-V compound structures also follows the same pattern of description in *V+gbú* and *V+wá* compound formations discussed in sections 3.1.7.1 and 3.1.7.2 respectively. This simply implies that the V2 compounding lexeme *nyὺ* appears as the semantic head of the compound formations in 34(a)-(f). The V1 compounding constituents of

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gbà, *fè*, *pì*, *zọ̀, fù,* and *mà* are analyzed as modifier lexemes specifically modifying the compound head *nyụ́*. Their semantic significance is quite minimal in juxtaposition with their V2 counterpart. As semantic verbal modifiers, they semantically describe some kind, means, and nature of light/fire extinguishing. However, the compounding lexeme *nyụ́* appears to inhabit the central information conveyed by the compound units, and this semantic attribute *nyụ́* justifies its identification and analysis as the semantic compound head.

4.1.7.4. M-V Compositions with the lexeme chí

The M-V compound compositions are a class of Igbo V-V compounds with the semantic readings of close, obstruction, or logical end of an event. The illustrations in 35(a)-(f) below contain morpho-semantic manifestations of endocentric M-V compound structures with *V+chí* structural composition in Igbo:

35   (a)   gbá-chí   -   'run-close'
                 V1-V2   -   V1-V2
                 M - V   -   M - V

         (b)   kwú-chí   -   do-close
                 V1-V2   -   V1-V2
                 M - V   -   M - V

         (c)   mé-chí   -   do-close
                 V1-V2   -   V1-V2
                 M - V   -   M - V

         (d)   sù-chí   -   stab-close
                 V1-V2   -   V1-V2
                 M - V   -   M - V

         (e)   gù-chí   -   count-close
                 V1-V2   -   V1-V2
                 M - V   -   M - V

The examples in 35(a)-(e) above represent morphological dispositions of *V+chí* compound verb structures outside context. They show morpho-syntactic and semantic functional distributions of

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the compounding verbal lexemes.   The contextual utilization of the compound verbs identified in examples 35(a)-(e) above are represented in examples 36(a)-(e) below:

36   (a)   Ọ́ gbà-chì-rì ụ́zọ̀
                     3sg run-closed-PST road
                     He locked the door

            (b)   Ọ́ kwù-chì-rì ìtè
                     3sg do-close-PST pot
                     She covered the pot

            (c)   Há mè-chì-rì ọ́nụ́
                     3pl do-close-PST mouth
                     They kept mute

            (d)   Ọ́ sù-chì-rì ọ́nụ́ òké
                     3sg pound-close-PST mouth rat
                     He blocked the rat's hole

            (e)   Ézè gù-chì-rì ụ́zọ̀
                     Eze count-close-PST road
                     Eze closed the door

The illustrations in 36(a)-(e) above contain a set of canonical endocentric M-V compound formations in Igbo. The compounding processes involved the V2 compounding lexeme *chí* 'close' occurring with V1 compounding lexemes of *gbá, kwú, ḿe, sụ́, and gụ́* and the resultant effect of the compounding configuration led to the formation of the following compound units; *gbáchí* in example 36(a) which contextually specifies closing a door by locking. 36(b) contains the compound verb structure *kwụ́chí* which encodes closing a pot with a cover. The compound formation *mèchí* 36(c) has the semantic reading of shutting the mouth to maintain mute. Example 36(d) represents the compound formation *sụ̀chì* which contextually encodes an event of closing a hole with an object. The compound configuration *gụ̀chí* in example 36(e) semantically specifies an activity of closing a door by pulling.

However, the compound verb formations described above in 36(a)-(e) are endocentric compound verbs. The endocentric relationship that characterized these compound verb units takes the form

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of an M-V structure where the 'M' is the V1 and the modifier of the compound head and V is the V2 and the head of the compound unit. The verbal lexeme *chì* 'close' is identified as the head of the compound formations. The identification of the compound head is based on the semantic readings of the compounding lexemes (V1&V2) in relation to the semantic value of their compound form. In examples 36(a)-(e), the V2 lexeme *chi* is more related to the meaning of the compound units respectively. The V1 lexemes *gbà, kwù, mè, sù,* and *gù* are identified as the modifiers of the compound head *chí.* The unequal semantic value of the compounding lexemes in relation to the semantic readings of the compound verbs satisfies the condition(s) for the endocentric relationship in Igbo compound verbs.

The data presented in examples (29)-(36) demonstrate instantaneous evidence of endocentric M-V compound formations in Igbo. These M-V compound units are syntactically called Head-Last compound verb structures. As stated earlier the identification of compound heads and their corresponding modifiers in endocentric compound configurations are not arbitrary nor introspective but semantically stimulated. And this semantic stimulation is overtly based on the internal semantic properties of the compounding lexemes, and the degree of semantic correlation between the compound units and their compounding constituents.

4.2 Exocentric V-V Compounds in Igbo

The notion of exocentricity is another morphosemantic reality that seeks to account for an internal semantic relationship that exists between compounding constituents during compound formations. Exocentric compound structures are compound formations that do not have compounding elements that function as semantic heads and corresponding modifiers as obtainable in endocentric compound structures. The semantic interpretation of exocentric compound verb structure is practically inconceivable from the individual semantic specifications of the compounding constituents. This implies that the meanings of exocentric compound verbs are explicitly independent of the individual semantic specification of the compounding verbal lexemes. As a result of their translucent semantic nature, the meaning of exocentric compound verb structure is said to be opaque (Katamba 1993:321).

In English and some other related languages, there have been a marginal number of exocentric compound structures. This is contrary to the productive nature of endocentric compound formations in these languages. The examples below demonstrate typical exocentric compound formation in English:

(a)   daredevil   -   dare + devil

(b)   blockhead   -   block + head

(c)   butterfingers   -   butter + fingers

(d)   turncoat   -   turn + coat

The morpho-semantic analysis of the above exocentric compound structures in English as shown in examples (a)-(d) shows that *dare-devil* does not encode a kind of devil but a reckless or foolhardy personality. *Block-head* also does not encode a kind of block or head but a stupid person or someone who does not comprehend. The same order of analysis is also applicable to *butter-fingers* and *turn-coat*, where the former does not refer to fingers nor butter but to an individual who drops almost everything he or she picks and the latter is neither a kind of coat nor a kind of turn but a traitor.

In Igbo, exocentric compound verbs lack a conceivable semantic head. This follows our earlier definition where the meaning of an Igbo exocentric compound verb cannot be conceived nor interpreted with reference to the semantic readings of any of the compounding verbal lexemes. With regards to meaning and interpretation, exocentric compound verbs in Igbo exhibit the same semantic nature as idiomatic expressions, where the semantic interpretation of an idiom cannot be conceptualized from its overt morphosemantic dispositions. Exocentric compound formations manifest in three dimensions in Igbo. These include attributive, achievement, and durative exocentric compound verbs.

4.2.1 Exocentric Attributive V-V Compounds in Igbo

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Attributive compound verb structures with exocentric relationships describe compound events that lack an overt semantic head. The examples in 37(a)-(b) below contain morpho-semantic realization of this class of compound verb in Igbo:

37	(a)	gbá-wá	-	run-break
		V1-V2	-	V1-V2
	(b)	má-pù	-	throw-exist
		V1-V2	-	V1-V2
	(c)	kụ́-jà	-	hit-rumble
		V1-V2	-	V1-V2

The compound verb formations in 37(a)-(c) above demonstrate isolated exocentric compound structures with attributive readings. The contextual uses of these exocentric compounds are represented in example 38 below:

38   (a)   Òbí gbà-wà rà Èméká
            Heart crack-break-IND Emeka
            Emeka is heartless.

      (b)   Óbì má-pụ́-rụ̀ Ùjú
            Heart throw-exist-IND Uju
            Uju was disconcerted.

      (c)   Ọ́ kụ́-jà-rà àkụ́jà
            3sg hit-rumble-IND EMPH
            He was shocked

Examples 38(a)-(c) above contain sentential constructs with exocentric state compound verbs in Igbo. In 38(a), the verbal lexeme *gbá 'crack'* combines with *wá* 'break' to form the compound unit *gbáwá* 'crack-break', which can be interpreted to mean a state of heartlessness. The compounding process involves the V1 and activity verbal lexeme *(gbá)* and the V2 lexeme *(wá)* respectively and the resultant effect of the compounding is a state compound verb. The semantic reading of the compound verb *gbàwàrà* in the construction is attributive as it describes a state of affair of *Èméká*. As an attributive compound verb, it describes an inherent feature of its external argument.

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However, the morpho-semantic relationship that exists between the compounding constituents *gbá* and *wá* in 38(a) compound unit above is exocentric. The identification and categorization of *gbáwá* as an exocentric compound verb is stimulated by the idiosyncratic semantic readings of the compounding constituents where their meanings have no relativity with the semantic specification of the compound structure. This implies that compound meaning is independent of the compounding constituents' meanings. As a result of this semantic independence, the compound verb structure *gbáwá* lacks a conceivable semantic head. Where there is no head, there will be no modifier. This is an overt feature of exocentric compound verb formation.

In 38(b) above the lexeme *má* 'throw' which is an activity verb combines with the verbal lexeme *pú* 'exist' to form the state compound verb *mápụ́* 'throw-exist' which has the semantic reading of '*disconcerted* under context. The semantic features that characterized the compounding lexemes follow the same analysis in 38(a).

The compound verb *mápụ̀rụ̀* has shown some level of semantic readings independent of the individual meanings of the compounding constituents. As a result, the internal relationship that exists between the compounding lexemes is said to be exocentric. The idiosyncratic meaning of the V1 *má* 'throw' and the corresponding compounding counterpart V2 *pụ́* 'exist' has no semantic correlation with the semantic interpretation of the compound verb structure *mápụ̀rụ̀* 'disconcerted' as evidenced under the context of usage. This demonstrates evidence of exocentric interaction between the compounding lexemes and their compound form.

In example 38(c), the same order of analysis in 38(a) and 38(b) is also applicable. The compounding process of the compound structure *kụ́jàrà* 'shocked' comprises of activity verb *kú* 'hit' combined with the compounding verbal lexeme *jà* 'rumble' and the resultant effect of the morphological process is a state compound verb *kụ́jàrà*. The morphosemantic relationship that characterized the compounding constituents has been identified as an exocentric relationship. The identification is based on the semantic behavior of the compounding verbal lexemes where the individual semantic specification of the compounding elements has no relativity with the semantic interpretation associated with their compound structure. As a result of this non-semantic resemblance between the compound unit and the compounding lexemes, an exocentric

relationship is accounted for. However, the compound structures in 38(a)-(c) lack a conceivable semantic head. As a result, they are identified as exocentric state compound verbs in Igbo.

4.2.2. Exocentric Achievement V-V Compounds

The term Achievement is a semantic notion deployed in Van Valin (2005) classification of verbs. It describes events that lack protracted durativity. In Igbo, exocentric achievement compound compositions seek to account for those exocentric compound verb formations that lack durativity, and whose semantic import does not correlate with the semantic specification of their compounding verbal lexemes. Our adoption of the notion of achievement is to account for those exocentric compound verbs in Igbo that exhibit logical endpoints but lack durativity. The examples in (39) below demonstrate morpho-semantic instances of this category of compound verb in Igbo outside context:

39	(a)	kpọ́-chú	-	stub-gloom
		V1-V2	-	V1-V2
	(b)	má-pụ́	-	throw-exit
		V1-V2	-	V1-V2
	(c)	gbá-nyé	-	run-give
		V1-V2	-	V1-V2
	(d)	ghọ́-tá	-	pluck-chew
		V1-V2	-	V1-V2
	(e)	sé-kpú	-	draw-enter
		V1-V2	-	V1-V2

The contextual uses of the compound verbs identified in 39(a)-(e) above are represented in example 40 below:

40.	(a)	Ó kpọ̀-chù-rù ánụ́
		3sg stub-gloam-PST meat
		S/he parboiled meat

(b)   Èméká má-pụ̣-rụ́ ágwọ̣́ ísí
       Emeka throw-exist-PST snake head
       Emeka severed the snake's head

(c)   Ọ́ gbà-nyè-rè ọ̣kụ́
       3sg run-give-PST fire
       He switched on the light

(d)   Ọ́ ghọ̀-tà-rà ànyị́
       3sg pluck-chew-PST we
       He understood us

(e)   Há sé-kpú-rú àlà
       3pl draw-enter-PST land
       They kneeled down

The sentences in 40(a)-(e) above demonstrate features of exocentric achievement compound verbs in Igbo. The exocentric identity of the compound units is made manifest as the semantic decomposition of the compound verb formations shows that the individual meanings of the compounding lexemes have no semantic correlation with the semantic readings of their compound structures.

The inherent temporal properties of the compound verb structures exhibit a conceivable logical end. In 40(a) the lexeme *kpọ̣́* 'stub' combined with the lexeme *chú* 'gloam' to form the exocentric achievement compound verb *kpọ̣́chú* 'parboil'. It is called an achievement compound verb because the events conceptualized in the compound formation show an identifiable endpoint. The act of parboiling has a conceivable onset and endpoint. This undoubtedly accounted for telicity. The semantic relationship that exists between the compounding constituents is exocentric. The exocentric relationship is accounted for as the idiosyncratic semantic readings of *kpọ̣́* and *chú* are distinct from the semantic specification of the compound formation *kpọ̣̀chú*.

In sentence 40(b), the compounding lexemes ma 'throw' and pu 'exist' combine to form the compound structure *mápụ̣́* 'severe' (cut off). The compound structure has achievement readings as the event captured by the verbal compound *mápụ̣́* has a temporal logical onset and terminal

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and this tells the nature of achievement compound verbs. The duration of the event is said to be prompt and instantaneous and this demonstrates punctuality that characterizes achievement compound verbs. As we can observe from the semantic interpretations, the semantics of the compounding constituents have no relativity with a semantic interpretation of the compound structure. As a result, the exocentric relationship is accounted for. A similar analysis in 40(a)-(b) is also applicable to the analysis of the compound verb formation in 40(c), (d) and (e) respectively.

However, the internal relationship that underlies the compounding constituents of the compound verbs in 40(a)-(e) is exocentric. They are identified as exocentric compound verb formation because the compound verbs lack an overt semantic head. Following our earlier orientation of semantics of compound verbs, they are semantically headless. The headless condition of the compound verbs is stimulated by the grammatical situation where the individual semantic readings of the compounding lexemes have no relativity with the semantic specification of the compound structure as a unit.

4.2.3. Exocentric Durative Compound Verb

Just like endocentric durative compound verbs in Igbo discussed in 3.1.4 above, Exocentric durative compound verbs account for some classes of Igbo exocentric compound verbs that exhibit durative readings. The durativity or extended time frame that characterizes exocentric compound verbs makes them distinct from the exocentric achievement compound compositions in Igbo discussed in 3.2.1. As exocentric compound formations, they lack an overt semantic head. The idiosyncratic semantic readings of the compounding elements are semantically unconnected to the semantic interpretation of their compound structures. The examples in (41) demonstrate canonical morpho-semantic structures of the Exocentric durative compound verbs in Igbo:

41 (a) ghò-gbú   -   puck-kill
         V1-V2   -   V1-V2

    (b) gbà-dó   -   run-thrust
         V1-V2   -   V1-V2

(c)	rù-wé	-	grow-take
	V1-V2	-	V1-V2
(d)	dò-chí	-	place-close
	V1-V2	-	V1-V2
(e)	mè-nyụ́	-	do-extinguish
	V1-V2	-	V1-V2

The sentential construct in example (42) below represents contextual utilization of the exocentric durative compound structures morphologically demonstrated in 41(a)-(e) examples:

42	(a)	Àdá ghọ̀-gbù-rù há
		Ada pluck-kill-PST they
		Ada deceived them
	(b)	Èméká gbà-dò-rò Újú
		Emeka run-thrust-PST Uju
		Emeka woe Uju for friendship
	(c)	Ńnéká rù-wè-rè dí yá ísí
		Nneka grow-take-PST husband her head
		Nneka was obedient to the husband
	(d)	Ó dò-chì-rì àhụ́
		3sg place-close-PST body
		He recuperated
	(e)	Há mè-nyụ̀-rụ̀ ànyị́ ányá
		3ppl do-extinguish-PST we eye
		They dealt with us

The analysis of the illustrations in example 42(a)-(e) above also follows our initial description and analysis of endocentric durative compound verb formations in 3.1.4. The compound verbs in 42(a)-(f) represent events that exhibit inherent temporal properties common to durative compound verbs. The analysis of the compound structures as durative compound verbs follows our order of description where durative compound verb formations demonstrate conceivable temporal boundaries with extended time frames.

In 42(a)-(e) illustrations, the act of deceiving '*ghọ̀gbú'*, wooing *'gbàdó'*, obedient '*rúwé'*, recuperate *'dòchì'* in their respective contexts are durative. This simply means they are neither instantaneous nor prompt events even as they have verifiable culminating points. This analysis is also applicable to *mènyụ̀* 'dealt with' in 42(f). Exocentric durative compound verbs in Igbo share similar inherent semantic features with achievement compound verbs but are only distinct in their punctuality. While durative exocentric events are non-punctual events, exocentric achievement compound events are characterized by punctuality. However, despite the distinctiveness of the two classes of exocentric compound verbs in the area of punctuality, the two exocentric compound-type structures exhibit logical events in their event structure.

Nevertheless, the internal semantic interaction between the compounding lexemes in 42(a)-(e) is characterized by exocentricity. The exocentric relationship is accounted for as the individual semantic specifications of the compounding lexemes have no relativity with the semantic readings of the compound units. As a result of this semantic incompatibility, the compound structures lack a conceivable semantic head. Compound verbs are said to be exocentric when the idiosyncratic semantic properties/features of the compounding constituents cannot in any way be attributed to the semantic specification of the compound forms. This was practically demonstrated in 42(a) where the compounding V1 lexeme *ghọ̀* 'pluck' and the corresponding compounding V2 lexeme *gbú* 'kill' have no semantic similarity nor expression related to the compound verb structure *ghọ̀gbù* 'deceive' as contained in the sentential construct. Similarly, in 42(b) and (c) the semantic interpretation of the V1 compounding lexemes *gbà* 'run' and *rú* 'grow' and the corresponding V2 compounding lexemes *dò* 'thrust' and *wé* 'take' has no semantic correlation with the semantic readings of their compound forms *gbádó* 'woe' and *rùwé* 'obedient' respectively. This pattern of exocentric description and analysis in 42(a)-(c) is also applicable to the compound verb formation in 42(d)-(e).

The concept of an exocentric relationship has proven with no doubt to be a morphosemantic reality in Igbo grammar. However, unlike endocentric compound formations, exocentric compound structures are less productive in Igbo. The reason may not be unconnected with the

opaque semantic relationship amongst the compounding lexemes within exocentric compound verb configurations.

4.3 Coordinate V-V Compounds in Igbo

Coordinate relationship in Igbo compound verb structures is an aspect of Igbo compound verb compositions that seeks to account for the inherent semantic relationship that underlies compound verb units and their compounding constituents. The concept of coordinate compound is understood as one in which the compounding constituents share the same contextual semantic status and value. This equivalent semantic relationship among the compounding lexemes contrasts within the kind of relationship identifiable with compounding lexemes of endocentric compounds, which are characterized by asymmetric relationships. Coordinate compound verb is the type of compound verb structure where there is equal semantic value among the compounding constituents. There is attainment of semantic equilibrium by the compounding lexemes. However, the semantic readings of the compounding lexemes are related to the meaning or idea portrayed by the entire coordinate compound formation.

Coordinate compound structures are characterized by semantic complementarity. This implies that each of the compounding constituents has a semantic specification related to the other. Also by being in a complementary semantic relationship, each of the compounding lexemes in coordinate compound structures can be represented as a substitute to the other in a given morpho-syntactic construct without affecting the fundamental meaning of the construction. In a related development, the meaning specified by the individual compounding lexemes can also be a substitute for the compound unit.

In Igbo, coordinate compound verbs are relatively scarce compared with the degree of productivity that characterizes endocentric compound verb formations. *V+nyé* compound structure has been identified as the only compound verb formation that manifests a coordinate relationship among the compounding lexemes.

4.3.1. Coordinate *V+Nyé* Compounds

The *V+nyé* coordinate compound formations belong to the class of endocentric and exocentric compound verbs in Igbo that seeks to account for the internal semantic correlation between compound verbs and their compound elements. It was one of the classificatory criteria expounded in Shibatani (1990) and Fabb (1998) compound verb classificatory model which this work adopted. As we have noted above, the *V+nyé* compound composition has shown to be the only class of Igbo compound verb characterized by a coordinate relationship. By exhibiting a coordinate relationship, the V2 *nyé* 'give' shares the same semantic value with its V1 counterpart, thereby making them semantically equal. The examples in (43) are morphological instances of coordinate compound verbs with *V+nyé* structural composition.

43   (a)   bì+nye᷄   -   'loan+give'
               V1+V2   -   V+V
               V – V   -   V - V

       (b)   zù+nyé   -   'buy+give'
               V1+V2   -   V+V
               V – V   -   V - V

       (c)   bù+nyé   -   'carry+give'
               V1+V2   -   V+V
               V – V   -   V - V

       (d)   chì+nyé   -   'carry+give'
               V1+V2   -   V+V
               V – V   -   V - V

       (e)   kù+nyé   -   'fetch+give'
               V1+V2   -   V+V
               V – V   -   V - V

       (f)   bè+nyé   -   'cut+give'
               V1+V2   V+V
               V – V   -   V – V

The illustrations in example 43(a)-(f) above demonstrate the skeletal internal structure of *V+nyé* compound compositions in Igbo. The V-V as we have demonstrated above indicates equal

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semantic value between the V1 and V2. This contrasts with the V-M and M-V which indicate unequal semantic value of V1 and V2 elements obtainable in endocentric compound compositions. The contextual uses of the *V+nyé* coordinate compounds identified in 43(a)-(f) and represented in example 44 below:

44   (a)   Èméká bì-nyè-rè há égó
                Emeka loan-give-PST 3pl money
                Emeka lends money to them

           (b)   Ọ́ zụ̀-nyè-rè m àkpà
                3sg buy-give-PST 1sg bag
                He bought a bag for me

           (c)   Ó bù-nyè-rè m ụ̀gbọ́ àlà
                3sg carry-give-PST 1sg motor land
                He gave me a car

           (d)   Ọ́ chì-nyè-rè m ákwà
                3sg carry-give-PST 1sg clothe
                He gave me some clothes

           (e)   Há kù-nyè-rè ànyị́ ḿmírí
                3pl fetch-give-PST 1pl water
                They gave us some water

           (f)   Ó bè-nyè-rè m ánụ́
                3sg cut-give-PST me meat
                He cut some meant for me

The sentential constructs in 44(a)-(f) above contain compound verbs with coordinate relationships. The compound configuration comprises activity verbal lexemes of *bí, zụ́, bú, chí, kú* and *be* as V1 occurring with the V2 lexeme *nyé* in all the morpho-syntactic positions to form the coordinate compound verbs. However, the compounding lexemes in the compound verb structures are in a coordinate relationship with one another. This implies that the constituents have equal semantic value as each of the compounding lexemes has some features of its corresponding compounding lexeme. By this, they can exist in isolation and still retain the semantic readings of their compound units.

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In example 44(a) the compounding process comprises V1 *bí* 'loan' and V2 *nyé* 'give' to form the compound unit *bínyé* 'lend'. From the native speaker's intuition, the V1 and the V2 are semantically complementary. They can be substituted for each other without any form of semantic compromise of the semantic readings of their compound unit. The examples below illustrate the contextual utilization of V1.

45   (a)   Èméká bì-rì há égó
                Emeka loan-PST 3pl money
                Emeka lends money to them

        (b)   Ọ́ zù-rù̀ m àkpà
                3sg buy-PST 1sg bag
                He bought a bag for me

        (c)   Ọ́ chì-rì m ákwà
                3sg carry-PST 1sg cloth
                He gave me some clothes

        (d)   Ó bù-rì m úgbó àlà
                3sg carry-PST 1sg motor land
                He gave me a car

        (e)   Há kù-rì ànyị́ ḿmírí
                3pl fetch-PST 3pl water
                They fetched water for us

        (f)   Ó bè-rì m ánụ́
                3sg cut-PST 1sg meat
                He cut some meat for me

The examples in sentences 45(a)-(f) show the idiosyncratic semantic value of the V1 of the compound structures in examples 44(a)-(f). This also demonstrates their semantic equality with the semantic readings of the compound units as contained in 43(a)-(f) illustrations. However, the examples below show the contextual utilization the V2 *nyé* of the 44(a)-(f) constructs:

46   (a)   Èméká nyè-rè há égó
                Emeka give-PST 3pl money
                Emeka gave them (some) money

        (b)   Ó nyè-rè m àkpà
                3sg give-PST 1sg bag

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He gave a bag to me

(c)   Ó nyè-rè m ákwà
         3sg give-PST 1sg cloth
         He gave me clothes

(d)   Ó nyè-rè m ụ́gbọ́ àlà
         3sg give-PST 1sg motor land
         He gave me a car

(e)   Há nyè-rè ànyí ḿmírí
         3pl give-PST 1pl water
         They gave us some water

(f)   Ó nyè-rè m ánụ́
         3sg give-PST 1sg meat
         He gave me some meat

The sentences in 46(a)-(f) above practically demonstrate the semantic significance of the V2 *nyé* in the compound verb units contained in example 44(a)-(f). The illustrations show that the V2 *nyé* has the same semantic specification as the compound verb formations contained in 44(a)-(f). This semantic equivalency between the V1 and V2 and their compound forms accounted for the coordinate relationship. However, the contextual manifestation of the V1 and the V2 of the compound verbs in isolation as illustrated in 45(a)-(f) and 46(a)-(f) respectively, suggest that the compounding lexemes (V1 and V2) are semantic substitutes of the compound verbs of 44(a)-(f) in any syntactic position.

4.3.2 Non-Coordinate V+nye Compounds

In Igbo, coordinate compound verbs as demonstrated earlier show an element of semantic concurrence between the compounding lexemes. However, they take the form of a *V+nyé* compound structure. And this is evidenced in the sentences exemplified in 44(a)-(f). Nevertheless, there are compound verb structures with *V+nyé* compound configuration in Igbo that do not exhibit a coordinate relationship. This implies that not all *V+nyé* compound structures can be conceived as a prototype of coordinate compound verbs. Therefore, a coordinate compound relationship becomes inconceivable in any compound situation involving *V+nyé*

structural composition, where semantic equivalent could not be attained by the compounding constituents. The morphological examples in (47) below illustrate *V+nyé* non-coordinate compound verbs in Igbo:

47   (a)   tì+nyé   -   put-give
                    V1-V2   -   V -V
                    V - M   -   V - M

          (b)   gwù+nyé   -   dig-nye
                    V1-V2   -   V - V
                    V - M   -   V – M

          (c)   bà+nyé   -   soak-give
                    V1-V2   -   V - V
                    V - M   -   V – M

          (d)   gbà+nyé   -   pour-give
                    V1-V2   -   V - V
                    V - M   -   V - M

          (e)   tù+nyé   -   throw-give
                    V1-V2   -   V – V
                    V - M   -   V - M

          (f)   sì+nyé   -   cook-give
                    V1-V2   -   V - V
                    V - M   -   V - M

The examples in 47(a)-(f) above illustrate *V+nyé* compound verb formations without coordinate relationship. The contextual utilization of the non-coordinate compound verbs identified in (47) above is demonstrated in example (48) below:

48   (a)   Ó tì-nyè-rè ńnú n'ófé
                    3sg put-give-PST salt in soup
                    She added salt to the soup

          (b)   Ó gwù-nyè-rè yá áká n'ányá
                    3sg dig-give-PST 3sg hand PREP eye
                    He thrust hands into his eyes

          (c)   Àdá bà-nyè-rè ákwà yá nà ḿmírí

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Ada soak-give -PST cloth PREP water
Ada soaked her in the water

(d)   Ézè gbà-nyè-rè mmírí n'íkó
Eze pour-give-PST water into cup
Eze poured water into the cup

(e)   Ọ́ tụ́-nyè-rè òkwúté ná m̀mírí
3sg throw-give-PST   stone in water
He threw a stone into the water

(f)   Àmáká sì-nyè-rè ńrí n'ọ́kụ́
Amaka cook-give-PST food in fire
Amaka is cooking food

The sentential constructions in examples 48(a)-(f) contain compound verb formations with *V+nyé* compound configurations. The *V+nyé* compound verb structures 48(a)-(f) are devoid of coordinate relationships. The compounding process involves activity verbs of *tì 'put', gwù 'dig', bà 'soak', gbá 'pour', tụ̀ 'throw' and sì 'cook'*, occurring with the verbal lexeme *nyé* 'give' to form the compound verbs of *tínyé, gwúnyé, bányé, gbányé, tụ́nyé* and *sínyé* respectively.

The internal semantic relationship between the V1 lexemes and the V2 lexeme *'nyé'* in all the morpho-syntactic positions identified in 48(a)-(f) are non-coordinate. They are described as non-coordinate as the individual semantic interpretation of the compounding lexemes cannot be substituted with the compound units in their respective contextual usage. By implication, the V1 compounding constituents are not complementary to the V2 verbal lexeme *nyé*. Also, the semantic readings of the compounding lexemes lack absolute semantic relativity with the semantic specification of the compound forms.

In another development, the V2 verbal lexeme *nyé* in 48(a)-(f) does not exhibit benefactive readings, which is an obligatory feature of *nyé* in all coordinate compound verb structures in Igbo, rather it semantically demonstrates prepositionality. Obiamalu and Mbagwu (20014) use the term illativity to express this situation. However, whereas Obiamalu and Mbagwu (20014) focus on the semantic significance of the V2 compounding lexeme *nyé*, without adequate account of the morpho-semantic disposition of the V1 compounding constituents, this work

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considers the morpho-semantic properties of the V1 lexemes and its corresponding V2 compounding counterpart, to establish their internal semantic interaction. This approach to the *V+nyé* compound verb composition has significantly established in this work that not all *V+nyé* compound formations are indeed coordinate compound verbs. In (48) illustrations, they (V1 and V2) are said to be in a non-coordinate relationship because the V2 *nyé* in those constructions modified the V1 lexemes rather than complement them as obtainable in 44(a)-(f) sentential constructs. The V-M compound structure of non-coordinate *V+nyé* compounds demonstrated in example (47) shows that non-coordinate *V+nyé* compound formations are inherently endocentric.

4.4 Summary

In this chapter, we have been able to demonstrate different semantic classifications of Igbo compound verbs with strict adherence to the classificatory model of Shibatani (1990) and Fabb (1998). Our analysis in this chapter also demonstrates the concept of endocentricity, with its V-M and M-V compound compositions in Igbo. Also discussed was the notion of exocentricity and its diverse manifestations in Igbo morphological reality. We concluded in this chapter the discussions on coordinate and non-coordinate compound verb formations. Here it was demonstrated through our data expositions that not all V+nye compound formations can be held accountable for coordinate relationships.

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CHAPTER FIVE

SUMMARY, FINDINGS AND CONCLUSION

5.1 Summary

This work examined some aspects of morphosemantic properties of the V-V compound in Igbo and used same as classificatory parameters. Some of these aspects include the internal semantic relationships that exist amongst the compounding verbal lexemes. The V-V compound semantic correlations were established through the systematic exposition of the idiosyncratic semantic features that characterized individual compounding constituents with the semantic readings of their compound structures. The degree of semantic relativity between the compounding lexemes and their compound formations informs our classification of V-V compound formations in Igbo into three semantic categories of Endocentric, Exocentric, and Coordinate compound verbs. These semantic classifications are modeled after Shibatani (1990), and Fabb (1998) compound verb classificatory framework.

Chapter One of this research serves as an introduction to the study. It establishes the bedrock upon which the comprehension and understanding of the concept and manifestation of compounds and compounding in Igbo can be made. The chapter provides comprehensive information on the background of the study, statement of problem, the fundamental purpose of the study, research questions, significance of the study, scope of the study, as well as the limitations of the study.

In Chapter Two, a systematic exposition of relevant literature on general principles of compounding, compound verbs, and V-V compound formations was carried out. Also explored in this chapter were empirical studies of Igbo compound verbs. Chapter two also introduces the theoretical framework upon which this study is based. The Theoretical framework adopted in this

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research was Shibatani (1990) and Fabb (1998) compound verb classificatory model. The combination of these distinct classificatory models into a single theoretical framework significantly enhances our analysis and categorization of Igbo V-V compound compositions into endocentric, exocentric, and coordinate compound verbs respectively.

Chapter Three of this work contains the research methodology. Here the method of data collection and analysis was discussed. Also in this chapter was a systematic exposition of sources of data used in analysis. The principles that guide our method of data analysis were also expounded.

Chapter four of this work contains a semantic classification of Igbo V-V compound formations. Following the classificatory template adopted in this work, V-V compound compositions in Igbo were classified into three broad classes: endocentric, exocentric, and coordinate compound structures. Under endocentric compound verbs, subclasses such as Verb-Modifier and Modifier-Verb compound structures were also discussed. Under exocentric compound formations, subclasses such as attributive, durative, and other compound structures were investigated. The subclasses of coordinate and non-coordinate *V+nyé* compound formations form the pivotal point of discussion under coordinate compound verbs.

However, in examining these classes of V-V compounds, the data analyses focus largely on the idiosyncratic semantic specifications of the compounding verbal lexemes, the internal semantic correlation between the compounding verbal constituents as well as the degree of their semantic relativity to the semantic integrity of the compound structures. However, with reference to the semantic relationship that underlies compounding lexemes and their compound structure in Igbo, our analysis in chapter four shows that this relationship can manifest in three dimensions: endocentric, exocentric, and coordinate relationships respectively. However, the identification and classification of V-V compound formations under these classes of verbs (endocentric, exocentric, and coordinate) were based on the Shibatani (1990) and Fabb (1998) classificatory framework.

5.2 Findings

Based on the evaluation and analysis of the data therein, the following findings were made:

1. V-V compounds in Igbo fall within the three classificatory models of Shibatani (1990) and Fabb (1998) and they are characterized by semantic headedness.

2. In line with the classificatory framework, this study revealed that the compounding units of Igbo V-V compounds manifest three types of internal grammatical relationships. These include endocentric, exocentric, and coordinate relationships.

3. The Endocentric compound verbs are characterized by one semantic head, coordinate compound verbs by two semantic heads while exocentric compound structures are semantically headless.

4. Formations and interpretations of compound verbs in Igbo are the exclusive prerogative of the native speakers' cognition and intuitive knowledge of the language.

5. The semantic readings of exocentric compound verbs in Igbo are not attributed to the individual semantic readings of the compounding constituents.

6. In terms of productivity, our data analyses show that endocentric compound verbs are more productive in Igbo than exocentric and coordinate compound verbs.

7. The *V+nyé* compound verb formation with benefactive readings is the only compound verb structure that manifests a coordinate compound relationship in Igbo. Other classes of the V-V compounds do not show coordinate relationships.

5.4 Conclusion

This study investigated the internal semantic relationships that characterize compounding lexemes in Igbo V-V compound formations. It has contributed to the sparse literature in the study of Igbo compound verbs. The study shows evidence that the idiosyncratic relationship between compounding exponents in Igbo V-V compounds can constitute a classificatory criterion for Igbo V-V compounds. The study also proves the indispensable significance of native speakers' intuition and cognitive knowledge in the formation, interpretation, and conceptualization of compound verbs in Igbo. This study has great implications for Igbo verb studies and Igbo

grammar as it introduces a new approach and perspective to Igbo V-V compound studies as well as language typology in general.

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