

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

For over three decades, the development of a new branch of science known as cognitive psychology or cognitive science has generated a great deal of interest in linguistics in general and semantics in particular. The central concern of cognitive linguistics is the representation of conceptual structures. The conceptual approach to cognitive linguistics is concerned with the patterns in which, and the processes by which, conceptual contents are organised in language. The linguistic structuring of the basic conceptual categories such as space and time, scenes and events, entities and processes, motion and location, force and causation, are investigated. Also, the semantic structure of morphological and lexical forms as well as of syntactic pattern is interrogated.

Part of the aims of cognitive linguistics is to integrate the linguistic and the psychological perspectives on cognitive organisation into a unified understanding of human conceptual structure. In addition, it strives to account for the behaviour of conceptual phenomena within language in terms of those psychological structures themselves on the basis of the detailed understanding of how language realises them. It is the trajectory towards unifying the linguistic with the psychological. This unification motivates the term ‘cognitive’ within the name of this linguistic tradition.

The interrelationships of conceptual structures, such as those in metaphoric mapping, those within a semantic frame, those between text and context and those in the grouping of conceptual categories into larger structuring systems are addressed. To ascertain the global integrated system of conceptual structuring in language is the overall aim of cognitive linguistics.

Cognitive linguistics equally investigates the concerns of two approaches to the study of language. These approaches include: formal and psychological approaches. The focus of the formal approach is on the overt structural patterns exhibited by linguistic forms, largely abstracted from any associated meaning. The psychological approach regards language from the perspective of general cognition systems such as perception, memory, attention and reasoning. This is without adequately considering the systematic conceptual structuring. Cognitive linguistics examines the formal properties of language from its conceptual perspective. It

therefore aims to account for grammatical structure in terms of functions which this serves in the representation of conceptual structure. As one of the most distinguishing characteristics, cognitive linguistics aims to relate its findings to the cognitive structures that concern the psychological approach.

Cognitive semantics is part of the cognitive linguistics movement. Semantics is the study of meaning. Cognitive semantics holds that language is part of a more general human cognitive ability and can therefore only describe the world as it is organised within people's conceptual spaces. It is implicit that there is some difference between this conceptual world and the real world. The main tenets of cognitive semantics are that

- i grammar is a way of expressing the speaker's concept of the world.
- ii knowledge of language is acquired and is contextual.
- iii the ability to use language draws upon general cognitive resources and not a special language module.

As part of the field of cognitive linguistics, the cognitive semantic approach rejects the traditional separation of linguistics into phonology, syntax, pragmatics etc. Instead, it divides semantics into meaning construction and knowledge representation. Therefore, cognitive semantics studies much of the area traditionally devoted to pragmatics as well as semantics.

The techniques native to cognitive semantics are typically used in lexical studies such as those put forth by Leonard Talmy, George Lakoff, Dirk Geeraets and Bruce Wayne Hawkins. Some cognitive semantic frameworks such as that developed by Talmy, take into account syntactic structures. Cognitive linguistics practice can be divided into two main areas: Cognitive semantics and cognitive approaches to grammar. Although the study of cognitive semantics and the one of cognitive grammar are occasionally separate in practice, their domains of inquiry are tightly linked. The area known as cognitive semantics is concerned with investigating the relationship between experience, the conceptual system, and the semantic structure encoded by language. Specifically, scholars working in cognitive semantics investigate knowledge representation (conceptual structure), and meaning construction (conceptualisation). Cognitive semanticists have employed language as the lens through which these cognitive phenomena can be investigated. Consequently, research in cognitive semantics tends to be interested in modeling the human mind as much as it is concerned with investigating linguistic semantics. Cognitive semantics is not a single unified framework. However, Evans, Bergen and Zinken (2007) point

out that there are four guiding principles characterising cognitive semantics: (i) conceptual structure is embodied (ii) semantic structure is conceptual structure (iii) semantic representation is encyclopedic and (iv) semantic construction is conceptualisation.

The question of how many senses an Igbo verb possesses has remained a nagging issue in Igbo studies. It has remained a topical issue on the study of Igbo verbs. In answer to the above question, some scholars like Emenanjo (1975a), (1975b), (1978), and (2005); Nwachukwu (1983), (1984), Ubahakwe (1976), Uwalaka (1983) have arguments for or against the transitivity, complementation, ergativity or otherwise of Igbo verbs. While Nwachukwu (1983); (1984) and Ubahakwe (1983) see Igbo verbs as inherently transitive, Emenanjo (2005:479) regards transitivity as a “surface structure feature which does not help to classify Igbo verbs according to the complement they select.”. On the other hand, following syntactic approach, Nwachukwu (1987:83) sees “the Igbo verb root as empty”. But Emenanjo says that “...rather than transitivity, ... complementation is itself the category that allows the correct generalisation to be framed,” (2005:479). The assertion of Emenanjo (1975b); 1986; 2005) is that the Igbo verb is made up of two mutually obligatory and complementary elements which are the verbs themselves and the complement of the bound cognate noun.

Uchechukwu (2004) investigates the Igbo verb cluster, the -gba cluster, using the cognitive approach. The study is informed by the fact that the Igbo verbal clusters have been regarded as verbal dummies and idioms. This is as a result of overlooking at their cognitive organization and motivation, as well as the metaphorical extensions of their concrete meanings. Adopting the cognitive approach in the analysis of the -gba clusters and also comparing Williamson's (1972) and Igwe's (1999) presentation of -gba in their dictionaries, the study among other things, reveals that there is no systematic study of the verb and the NP/PP structures they take.

Furthermore, Uchechukwu (2011) adopts the cognitive approach also, using the image schema analysis of the Igbo verb. His argument is, that the Igbo verb is not empty, neither does it become practically meaningless as a result of an increase in the number of complexes formed

with it, (contrary to Nwachukwu 1987); instead, through an image schema approach, one could establish a cognitive motivation of its semantics in the form of its root schema.

At present, the above overview shows that there are three major schools of thought in relation to the Igbo verbs and their meaning properties. Some linguists are the major proponents of the argument that transitivity is an essential category in the verb phrase while others are of the opinion that transitivity is a “relic of pre-formal linguistics, which has resisted formalisation”, hence, their support for complementation. Other linguists support the application of the cognitive linguistic approach which shows the Igbo verb to have meanings that arise from specific image schemata and their metaphoric and metonymic extensions.

The investigations above by different scholars are all based on the area of studies in Igbo syntax. That is why Emenanjo (1991:129) asserts that “... it is a fact of history of Igbo linguistics that more has been written on the area of syntax than on any other aspect of the language”. Thus, according to Uchechukwu (2005), some other aspects including both the lexical semantics and the lexicon have hitherto received little attention. He also notes that the first major treatment of the Igbo lexicon as a linguistic problem was Lord (1975), where Lord identifies the semantic composition of the (verb + verb) compound and (verb + suffix) verbs in forming what she identifies as ‘action – result’ meaning. The insight is that in any such component, the first verb codes the initial ‘action/event’ while the second component codes the ‘result’. This was a major breakthrough which Lord (1975) achieved. But after her investigations Lord still sees the ‘action/result’ relationship of the verb compound as part of the meaning of the compound and not just an inference that is based on the speaker’s experience. In her conclusion, Lord says that the meaning component also has to form part of the combinatory rule. This aspect of the study was not explored further.

Later studies on the Igbo verb within the framework of generative theory (see Uchechukwu 2005) did not go into the lexical semantics as this was not the issue they set out to address. Rather, their focus was on the phrase structure as a projection of the lexical properties of the verb, and on the syntactic theory of argument (Emenanjo 1984; Nwachukwu 1987; Manfredi, 1991; Hale, Ihionu, & Manfredi 1995 and Mbah 1999). Another major treatment of Igbo verbs that investigates their lexical semantics to an extent is Uwalaka’s (1997) use of Fillmore’s case grammar model. Through the approach, the author was able to form semantic groups of Igbo verbs and to also highlight some of their syntactic characteristics, like the subject-object

switching of some experiential verbs. But as the study is focused on a “semantico-syntactic analysis” of the Igbo verb, the establishment of the syntactic correlations of the verb’s semantics is of paramount importance, their lexical semantics as such is not fully explored.

A different study of the Igbo verb was seen in Igbo lexicography later in the 70s and early 90s, where the Igbo verb roots were presented as list of lexical items. This approach was spear-headed by Williamson (1972), and later Igwe (1999) in their various English-Igbo dictionaries. Some of the Igbo dictionaries have developed a system of writing Igbo verbs with many English equivalents which naturally lead to the conclusion that all Igbo verbs are polysemous. Polysemy, nevertheless, involves contextualisation, which is, delimiting the various possible meanings of a lexical item by the mere fact of choosing context, (see Uchechukwu 2011). That is to say, usage limits polysemy. However, it has not been sufficiently explored how such semantic issue of polysemy of the Igbo verbs is handled in contextual utterances in Igbo. This particular issue is one of the reasons or things that inspired this desire to go into the semantic analysis of the Igbo verbs.

Therefore, from all the available literature in relation to the topic of study, this is another aspect of contribution into the cognitive linguistic analysis of Igbo verbs on the cognitive semantic analysis of the Igbo verb *gbá* ‘set forth’ using analogical mapping. It is against this backdrop that the researcher investigates the verb to find out how its linguistic meanings are abstracted from its cognitive representations. The roles the image schemata play in conceptual interaction with ‘*gba*’ in relation to metaphor will also be found out.

1.2 Statement of the problem

A lot of approaches have been adopted in the study of verbs in Igbo syntax and semantics. The structuralist and generative analyses of verbs that dominated previous studies neglected the study of individual lexical meaning in favour of the compositional-semantic structure of larger phrasal and sentential units. Again, polysemy and sense of polysemous words were not sufficiently treated in formal semantics. Other semantic theories like referential and mentalistic theories were rejected because of their vagueness and lack of empiricism in accounting for word meaning. The componential analysis (CA), later received prominent attention. The shortcomings of componential analysis in handling certain word classes (especially the verbs) according to Ndimele (1999:28) is that it “erroneously assumes that the semantic features of all lexical items can be elegantly expressed using the binary approach.

Whereas the binary analysis can work for certain lexical items whose semantic features are neatly organised, it fails in other cases”. For example, the binary analysis cannot handle the semantic features of verbs and other word classes like adverbs, prepositions, etc. In addition, “CA does not have a way of accounting for the fuzzy edges inherent in the meaning of lexical items”, (Ndimele 1999: 27).

Consequently, generative linguistic analysis that later dominated the study of verb meaning insulates itself from empirical findings. But meaning and communicative functions are primary in linguistic study according to Lakoff (1987), and grammars should attempt to explain as much as possible the parameters of form on the basis of parameters of meaning and communicative function. But generative grammar and other semantic approaches, (as pointed out above), failed to do this. This is because generative grammar and other semantic approaches are defined as independent of general cognitive capabilities in cognitive semantics, and this is at odds with the assumption of formal linguistics, thereby causing a fracture within the generative paradigm. Meanwhile, one can readily accept at a pre-theoretical level that words have meanings, and that these meanings are implicated, in some way or the other, in the meaning of the complex expressions in which the words occur. Matters even become more complex, however, when we inquire into the nature of verb meaning.

Based on the arguments by scholars on the study of Igbo verbs, and the shortcomings of the generative approach to the meanings of verbs; and also the limitations of previous semantic approaches in accounting for verb meaning; and again the de-contextualised nature of Igbo verbs in lexicographic studies, it can be stated that the Igbo verbs have not yet been sufficiently investigated from the angle of cognitive linguistics. Furthermore, not much has been done on the cognitive semantic analysis of the Igbo verb *gba* – ‘set forth’ and this study is an additional contribution to the works already done on the cognitive semantic analysis of the Igbo verb *-gba*. The problem of the study is therefore, to find out how the Igbo verb ‘*gba*’ can be described using cognitive semantic approach and image schema as theoretical framework.

1.3 Purpose of the study

The main purpose of this study is to analyse the Igbo verb *gba* – ‘set forth’. The specific objectives of the study include to

1. analyse the Igbo verb *gba* – ‘set forth’, using analogical mapping or image schema.

2. determine the image schemata that underlie the interpretation of the verb 'gba'.
3. determine what enables the mapping of the abstract on the concrete.
4. contrast the interrelationships among the 'gba' verbal complexes.

1.4 Research questions

This research seeks to answer the following questions:

1. To what extent can the Igbo verb gba – 'set forth' be analysed using analogical mapping/image schemata?
2. What are the image schemata underlying the meanings of the Igbo verb 'gba'?
3. What enables the abstract meanings of the 'gba' verbal complexes to map on the concrete?
4. What are the interrelationships among the 'gba' verbal complexes?

1.5 Scope of the study

There are varieties of verbs in Igbo. A study of this nature cannot exhaustively cover all aspects of dynamic or motion verbs. It cannot also exhaust all the verb roots in the language under study. Therefore, the researcher has restricted this research to the cognitive semantic analysis of the Igbo verb 'gba.' as they manifest in the context in Igbo constructions. The scope is mainly: to analyse the Igbo verb gba 'set forth' using analogical mapping or image schema. Furthermore, the image schemata that underlie the interpretation of the Igbo verb can equally be determined. Also, to determine what enables the mapping of the abstract 'gba' verbal complexes on the concrete. Conclusively, the study contrasts the interrelationships among the 'gba' verbal complexes. The choice of the verb over other motion verbs like 'ku', 'ga', 'fe' etc is because this class of Igbo verb is more common and features more in every day usage as far as motion is concerned. For instance 'gba' which is the motion verb of setting forth in Igbo, cuts across other motions like kick, run, dance etc as shall be seen later in the study.

1.6 Significance of the Study

The study is useful in a number of ways. Despite the fact that some Igbo linguists have described the Igbo verb as dummy or practically meaningless in their works, it is an additional contribution to the works already done on the cognitive semantic analysis of the Igbo verb 'gba'. This study is another attempt at studying Igbo verb 'gbá' – 'set forth', using analogical mapping.

Most studies done on the Igbo verbs adopted the traditional, lexicographic and generative approaches. Few have approached the study of the Igbo verb from the perspective of cognitive lexical semantics using polysemy of verbs as they manifest in the context. This study helps to fill the yawning gap and equally assist in providing a clearer picture of the nature of some Igbo dynamic verb like ‘gbá’. With this, the number of meanings of the Igbo verb root ‘gbá’ can be determined.

Furthermore, the study helps in the proper classification of the verb based on its cognitive domains. Since Igbo is a verb centered language, the study in no small measure helps scholars in the Igbo language study in classifying the verbs better and in acknowledging the pedagogical needs of lexicographers and foreign needs of the learners of Igbo as a second language. This is because they will see and understand the Igbo verb better through their contextual cognitive manifestations which, according to functional grammar and communicative method of language teaching, are the best approaches and methods of language teaching and learning.

This work helps to rediscover the significance of meaning as the basis of structure, which currently stands out as the most productive approach in lexical semantic research. It also helps to address the problem of objectivity in language study, aimed at integrating contextual, experimental and cross-disciplinary insights into the study of verb meaning. The study will be a great asset to teachers of English and Igbo for the analysis of similar verbs using image schemata. Finally, it helps researchers who may like to investigate similar verbs in Igbo to have a base.

1.7 Limitation of the study

There are some areas relevant to this topic which this work cannot cover. The study is on a motion Igbo verb of which ‘gba’ is a part. As Igbo is a verb centred language, the motion verbs are many, varied and intricate grammatically became a problem to cover, hence the delimitation of the study to cover only the ‘gba’ verbal complexes. ‘Gba’ may have a high or low tone with different semantic implications or meanings. The work does not include gbà but concentrates only on gbá to properly situate the work.

The theories on verb collocations are also many. The focus of the study is how the abstract meaning of the ‘gba’ verbal complexes are mapped unto their canonical meanings. The study therefore dropped the theories that are focused on the different aspects of the meanings of

‘gba’ and adopted the theoretical framework of analogical mapping. These delimitations made it possible for the research to overcome the limitations ordinarily posed by the scope of the study.

1.8 Tone marking convention

In this work, the researcher has adopted the tone marking convention proposed by Green and Igwe (1963). This convention leaves high tones unmarked; it marks low tones with the grave accent [`] and down stepped tones with the macron [-]. This is demonstrated hereunder:

oke	-	HH - male
oke	-	LH – rat
okè	-	HL – boundary
okè	-	LL – share
ezē	-	HS - teeth

CHAPTER TWO

LITERATURE REVIEW

Preamble

This section of study looks at the works already done that are related to the topic of study. A literature review is an evaluative report of information found in the literature related to a selected area of study. The review should describe, summarise, evaluate and clarify this literature. It should give a theoretical base for the research and help the author determine the nature of the research.

The review of the relevant and related literature for this study is therefore; presented under the following sub-headings: theoretical studies, theoretical framework, empirical studies and summary of literature review.

2.1 Theoretical studies

The central concern of some linguists such as Fauconnier (1995, 2002), Fillmore (1975, 1976), Lakoff (1987, 1992), Langacker (1975, 1991) and Talmy (2000a, 2000b) as well as Geeraerts and Cuyckens (2007) for about two to three decades now has come to be known generally as ‘cognitive linguistics’. Its concern is the linguistic representation of conceptual structure. Talmy (2011) says that this field can be characterised by contrasting its ‘conceptual’ approach with two other approaches, the ‘formal’ and the ‘psychological’.

The formal approach according to him focuses on the overt structural patterns exhibited by linguistic form, largely abstracted away from any associated meaning. This approach thus includes the study of syntactic and morphemic structure. The tradition of generative grammar has centred on the formal approach. But its relation to the other two approaches (the psychological and conceptual) has remained limited. It has all along referred to the importance of relating its grammatical component to a semantic component, and there has indeed been much good work on aspect of meaning, but has generally not addressed the overall conceptual organisation of language.

The psychological approach regards language from the perspective of general cognitive system such as perception, memory, attention and reasoning. Centred on this approach, the field of psychology has also addressed the other two approaches. Its conceptual concerns have in particular included semantic memory, the associativity of concepts, the structure of categories, inference generation, and contextual knowledge. But it has insufficiently considered systematic conceptual structuring of the global integrated system of schematic structures with which language organises conceptual content.

Ogden and Richards (1923) recognise two main dimensions of meaning: logical (or referential) and emotive. Ndimele (1997) categorises the component shades of meaning into three: conceptual, associative and thematic meanings of language. Lyons (1977) theorises about ‘descriptive’ and ‘expressive’ meanings. There is also the distinction between denotative and connotative levels of meaning identified by J. S. Mill (1843). These attempts and terminologies overlap in the sense that they recognise the capability of words and expressions in language to mean more than their everyday meaning.

Another scholar, Zlater (1999) uses computer modeling to give an account of how linguistic expressions are grounded in experience. He presents an approach which he calls “situated embodied semantics”, in which meaning emerges from pairing of linguistic expressions with situations. The feasibility of the approach is tested using connectionist modeling. This is for gaining insight into such issues as learning categories without necessary and sufficient condition for membership, the context dependence of meaning and the ability to utter and comprehend novel expressions.

The polysemy of lexical expressions was discussed by Sjoström (1999) like verbs, nouns and adjectives connected with vision in Swedish. In the analysis, he explores the relation between vision and cognition. He claims for instance, that ‘light’ metaphorically represents ‘knowledge’ and that accordingly, perception of light represents understanding while non-perception of light represents lack of understanding, illumination, explanation and so on.

Velasco (2001), cited in Ogbonna (2013), examines the role three image schemata (CONTAINER, PART/WHOLE and EXCESS) play in conceptual interaction, particularly in relation to metonymy. This study shows that image schemata have two basic functions: (i) they structure the relationship that exists between the source and the target domain of metonymic mapping. (ii) they provide the axiological value of an expression. His conclusion is that the

appearance of the image schemata in conceptual interaction is more ubiquitous than it may seem at first sight, and that conceptual interaction frequently invokes the activation of the three types of cognitive model (metaphor, metonymy and image schemata) he examined.

In his paper titled “Cognitive Semantics: an Overview”, Talmy (2011) claims that the field of cognitive linguistics in general and cognitive semantics in particular is seen to have its central concerns as the representation of conceptual structures in language. In his view, the field addresses properties of conceptual structure both locally and globally, both autonomous and interactive and both typological and universal. These linguistic properties, he relates more to general properties of cognition.

2.1.2 Semantic theories on lexical items

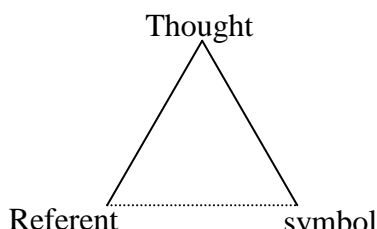
Here, we look at how different semantic theories have studied lexical items. This will help us in the study to know how to analyse lexical items as we are studying the verb ‘gba’ which is a lexical item. The different semantic theories that have studied lexical items include among others:

1. Referential theory
2. Mentalistic theory
3. Componential analysis
4. Use theory
5. Truth conditional theory
6. Generative theory
7. Prototype theory (PT)
8. Semantic/ lexical Field Theory

2.1.3 The Referential Theory

This theory was propounded by C. K. Ogden and I. A. Richards (1923) in a book titled *The Meaning of meaning*. In their propositions they maintain that the meaning of any expression is the entity or object to which such expression refers in the real world. They refer to such object as the ‘referent’. In their analysis, they argue that there is no link between expressions and the objects to which they refer. For them, the connection between a linguistic entity and its referent is only possible through thought. They demonstrated this using a semiotic triangle. The broken base in the diagram is used to illustrate the argument that there is no direct link between a linguistic unit and the object to which it refers.

Figure 1: The semiotic triangle



(Adapted from Ndimele (1999:17))

Referential theory of meaning regards the meaning of a particular word as a pointer to the designated object in the real world. The meaning of a word is what it refers to. For instance, if a word like apple is uttered, what is referred to is an actual apple or the set of all apples in reality. A referential theory intuitively, seems very appealing. The example goes on when parents want to teach their children the meaning of a word like “apple”, chances are pretty high that they will point to an actual apple or a picture of one. At first sight words indeed seem no more than references to things, (entities, actions or relations) existing in the outside world. But this theory however, has a number of problems. It is able to account for what is generally called the ‘denotation’ or ‘extension’ of words but fails to describe other semantic characteristics generally referred to as ‘connotation’ or ‘intention.’ For instance

- i) The morning star is the morning star
- ii) The morning star is the evening star

Both morning star and evening star refer to the same entity, viz, the planet Venus, which might be visible either in the morning or in the evening (depending on the relative position of Venus and earth). Sentences (i) and (ii), however significantly differ in meaning. Sentence (i) expresses a simple tautology, whereas sentence (ii) expresses a new and important astronomical truth. Sentences (i) and (ii) do not mean the same thing, but a referential theory does not account for the difference between them.

Frege’s (1925) solution to the morning/evening star paradox is to make a distinction between *sinn* (sense) and *Bedeutung* (reference). *Bedeutung* is the object that the word refers to, whereas *Sinn* is the cognitive representation of the object. Therefore by making this distinction, it is possible for words to have different senses but the same referent (as in the paradox above). Conclusively, the theory provides a parsimonious and straight-forward model of meaning but as the previous examples have shown, it is incapable of capturing all aspects of meaning. For this reason, the theoretical problems as well as the practical drawbacks make this theory rather unattractive.

2.1.4 The Mentalistic Theory

According to Nwaozuzu (2013:14), this theory tries to improve on the referential theory and is associated with S. Glucksberg and J. Danks. In their work titled *Experimental Psycholinguistics* (1925:50), they assert,

The set of possible meanings of any given word is the set of possible feelings, images, ideas, concepts, thoughts and inferences that a person might produce when that word is heard.

She goes further to say that the above scholars are of the view that the meaning of a word or expression is the mental image or idea of the word or expression that is formed in the mind of the speaker or hearer when such expression or word is heard.

This theory effectively solves the morning/evening star paradox. The morning star might be the same thing as the evening star in reality, but the ‘idea’ of the morning star and the evening star may very well differ. The question that immediately follows is what this idea actually entails. Surely it cannot be the mental representations that are present in each individual person. These mental representations differ a lot among different persons.

Glucksberg and Danks as mentioned in Nwaozuzu (2013), in their definition of meaning cleverly dodged the definition of meaning that is based on the basis of physical images because of obvious problems that is associated with the term ‘physical’. However, they ran into a different problem which has to do with the idea of basing the meaning of a word or expression on the existence of mental images as such functional words like ‘but’, ‘so’, ‘if’ etc may not be associated with any mental image.

2.1.5 Componential Analysis/Theory

Componential analysis is the hierarchical ordering of the semantic constituents of words. This theory assumes that all lexical items can be broken down into certain component parts or features and that the relationship between the component which holds across lexical items can be stated and labeled systematically. The basic idea of this theory is lexical decomposition, i.e. explaining the meanings of words in terms of simpler units of meaning. It presupposes a delexicalisation of a given word into its components; components are then reassembled into another lexically relevant unit and the content of this unit characterises the meaning and reference of the item which is being defined, while its form instantiates the use. For example, the

lexical unit represented by ‘spinster’ can be delexicalised into its relevant semantic components: ‘female’, ‘adult’, ‘never been married’. These are in turn reassembled into the lexically relevant noun phrase ‘woman who has never been married’. Furthermore, each component of meaning is expressed by a feature symbol with a + or – mark to indicate the presence or absence of a particular feature. For instance,

Man: + HUMAN + ADULT + MALE

Woman: + HUMAN + ADULT – MALE

Boy: + HUMAN - ADULT + MALE

Girl: + HUMAN - ADULT – MALE

This theory has been criticised in two ways. The first being its identification of semantic primitive which has been attacked from both philosophical and psychological angles. (see Fodor (1970), Fodor etal (1980) in Nwozuzu (2013). The studies stress that these semantic components are simply a variation of, and equivalent to the necessary and sufficient conditions approach to word meaning. The second is that it has been argued that it is impossible to apply the componential theory to the description of all types of words especially functional or grammatical words like ‘if’, ‘but’, ‘with’, ‘in’ etc. The theory cannot also be applied to sentence meaning. The theory has other short comings which cannot be handled in this study.

2.1.6 The Use or Contextual Theory

The use or contextual theory is proposed by a German analyst, L. Wittgenstein. He is not satisfied with the other theories discussed above. For this reason, his opinion is that it is wrong to regard meaning as entities. He rather posits that the meaning of any linguistic expression, either word or sentence is determined by the context in which it is used. The other aspect of the contextual theory is the one which deals with the meaning of words and sentences not as isolated entities but as related to situation of occurrence and use. The name of the theory is the “Field Theory”. This is propounded by Trier. This theory explains the vocabulary or lexicon of a language as a system of inter-related networks or semantic field. This means that words that are interrelated may belong to the same semantic field. For instance, chair, stool, table etc belong to the same field – that of furniture. Other contextual theories deal with the context of use of words and sentences by the speaker of a language. Firth (1957) opines that language is only meaningful in the context of situation. It is on this premise therefore, that linguists tried to establish the link between syntax and meaning-in-context situation.

2.1.7 The Truth-Conditional Theory

This theory stems from the belief that sentences have meaning. According to Leech (1983:73) in Syndal (2010:153).

Many semanticists today assume that the main purpose of semantics is to explain that primary, conceptual aspect of meaning called ‘conceptual’ or ‘logical’ meaning, and that in particular, we have to account for certain semantic categories and relationships which apply to sentences: synonymy, entailment, contradiction, semantic anomaly, etc. These may be taken to be intuitively ‘given’. They can be called BASIC STATEMENTS... because semantics has to explain them, by constructing theories from which they can be deduced.

It is good to understand that for the truth-conditional theory to reflect what meaning is really about, the procedure for checking the truth value of sentences one hears, must be a reliable yardstick for doing so.

According to Saeed (2007:305),

...Our procedures for checking the truth value of a sentence must reflect the compositionality of meaning. If this is done correctly, then we will have shown something of the constituents of a sentence contribute to the truth value of the whole sentence.

The author of the above uses three basic types of sentences namely, a single statement, a compound sentence with \wedge ‘and’, and sentences with the universal and existential quantifiers, \forall and \exists to illustrate what he proposed. In spite of this, linguistics has not supplied an absolute answer to what should be the truth value of a sentence.

It is believed that whatever is regarded as truth should not be liable to argument nor a shift of stand. It must be observed scientifically or else it could be faulted any time, anywhere. Moreover, if semantic truth is reality, why should we have ambiguous sentences, entailment,

inconsistency, absurdity, contradiction, synonymy etc. Pushpinder and Syndal (2010:153) as quoted in Nwaozuzu (2013:19) have this to say,

“the basic statement of a logical proposition is either TRUE or FALSE. Its truth or falsity is dependent or conditioned upon the truth or falsity of other statements”.

The statement above supports the belief that one cannot, categorically, as in other areas of linguistics, verify scientifically what a true or false sentence is. This is not to say that there is nothing like truth and falsity but one has to be very careful not to assume that the analysis of what is truth and false can be subjected to the same scholastic evidence as observed in phonology and syntax.

A native speaker of a language can infer the truth of propositions in that language from the truth of other propositions. The speaker knows a condition which a particular sentence is true. This, according to truth conditional semantics, to know the meaning of a sentence is to know the conditions under which it is true. A sentence is true if all the necessary conditions of truth are satisfied. These conditions do not refer to the real world, they are conditional within the language, that is, within the entailment relations that prevail between sentences. For example: ‘Rover is a hungry dog’ is true if ‘Rover is a dog’ and ‘Rover is hungry’ are both true. The first statement entails the other two.

The goal of truth-conditional semantics is to explain meaning by explaining all the entailment relations between sentences in the language. One of the limitations of this approach is that it takes only statements into account and does not consider other sentence types such as questions. Some semantists say that even questions have a basis in conditions of truth as they can elicit either a positive proposition (‘yes’) or a negative proposition (‘No’) in reply. Another limitation is that truth-conditional semantics is not concerned with synthetic truth, that is, factual truth about the conditions which prevail in the real world; it is concerned about analytic truth, that is, truth by the very nature of language, example, entailment relations between sentences as discussed above. For instance, the statement “All bachelors are unmarried” is true because the very definition of ‘bachelor’ is being unmarried. This relation exists within the language. But in the sentence “All bachelors are happy”, the truth does not lie in the language but in some conditions outside it, in the real world. Truth-conditional semantics therefore, explains the meaning of sentences to a limited extent, but does so in a logical and scientific manner.

2.1.8 Generative Theory

Generative theory of meaning seeks to link meaning with syntax and phonetics through a set of transformations from deep structure to surface structure. In this model, restrictions are placed at the deep structure level concerning the choice of certain grammatical items in relation to other grammatical items. An example is the rule which indicates whether a verb is transitive or intransitive. The sentence ‘Ada laughed’ can be generated but not ‘Ada loves’, unless there is another noun phrase (Nwaozuzu 2013).

Even though the generative theory of meaning achieved a lot by using both the deep structure and the surface structure to arrive at some meaning, however meaning is more than what is contained in the deep level of syntactic structures. The theory is for instance capable of arriving at the meaning of such structures as metaphors.

2.1.9 The Prototype Theory (PT)

This theory dates back to the era of Aristotle. It is based on a model called ‘necessary and sufficient conditions’ (NSC). The model tries to identify a set of necessary conditions which a category must fulfil to qualify as representing such category. For example, ‘man’ is defined by three categories of being human, male and adult. Each of these categories is necessary for the entity ‘man’ to represent exactly what it is. If any of these categories is missing according to Nwaozuzu (2013) “then the entity cannot be ‘man’”. NSC model has been used to categorise such things as colours, birds, furniture, fruits, clothings etc.

This theory faced many challenges as not every lexical category can be subjected to NSC test. Lobner (2002) mentions a few of the weaknesses, thus:

- A category may have prototypes, but they need not be reference points for categorisation.
- Graded structure is not necessarily linked with graded membership
- Category membership is not necessarily a matter of similarity to the prototype.
- Category membership may be a matter of necessary conditions as assumed in the NSC model.

Looking at the above weaknesses of the prototype theory, one finds that there is no easy way of arriving at the meaning of words and sentence. Every expression has at least one meaning while others may have more than one. One also sees that understanding a word or sentence depends on the speaker and the hearer both of which may not agree on each other’s interpretation. Therefore,

the various problems encountered by trying to pin down the meaning of linguistic units have been observed.

2.1.10 Semantic/Lexical Field Theory

This theory is an approach to the determination of meaning. The idea of semantic (lexical) fields theory is that words in any given language are grouped into fields and each field comprises a set of lexical items whose meanings have something in common. According to this theory, given set of lexical items whose meanings share appreciable similarities constitute semantic field. In other words, a lexical field is a structured group of words with related meanings that perhaps has some sort of distinctive life of its own.

According to Agbedo (2000:158), colour and kinship terms, for instance, constitute different lexical fields. Green, blue, yellow, red, black, orange, brown all constitute a lexical field given their similar semantic import, that is, colour description. Another set of lexical items: father, mother, brother, sister, son, daughter, uncle, aunt, nephew, niece, cousin etc are kinship terms that constitute a semantic field. The theory recognises the fact that lexical fields are constituted according to the structure of any given language.

The development of the lexical field theory was influenced by Saussurean structuralism. According to de Saussure's structuralist principle, a language system consisted, at every level, of sets of paradigmatic choices, arranged along the syntagmatic axis according to definite principles of combination. This principle reflects Meillet's diction that a language is a system of relational structure in which everything hangs together with everything else. For de Saussure, linguistic units do not possess inherent significance in isolation but acquired their value only by virtue of their relationships, paradigmatic and syntagmatic, with other units in the system. This principle when applied to lexical semantics, means that it does not make any sense to inquire into the meaning of 'red' for instance, without at the same time examining its relations with 'blue', 'yellow', 'brown' etc. This is because the meaning of 'red' is essentially a point in a network of contrasts. The consequence of this interdependence of word meanings is that it is impossible for a child or any language user to learn the meaning of a single item out of a structured set without at the same time mastering the other members of the set.

Driven and Lakoff in Brugman (1988:42), however, seem to ignore examples involving a combination of path and indefinite goal, as in the following examples:

21. Geoffrey lives 'over' the mountain

22. The marksman shot 'over' the target

The interpretation of example (21) can be seen in the following ways: lives at the end of the path heading to the other side of the mountain from the speaker. The second example (22) cannot be paralleled with the meaning of 'above' or 'across', but its meaning is close to that of 'beyond'.

In her own study of cognitive semantics, Gries (2005) says that recently, cognitive semantics has turned to corpus data as a source of evidence for sense distinction. For instance, Croft (1998:169) argues in favour of investigating the distinctness and conventionality of senses, corpus-linguistically. He points out how "semantically different direct objects of 'to eat' correlate with uses distinct in terms of the arguments they occur with. Furthermore, the discussion of 'to crawl' by Fillmore and Atkins (2000) is cognitive linguistic in nature.

Gries (2005) adopts the cognitive linguistic approach in her investigation of polysemy in English using the verb 'to run'. She says that one of the central areas of research within cognitive linguistics has been the investigation of polysemy of lexemes and constructions. She goes further to say that traditionally, the idea that a word is polysemous entails that the particular lexeme under investigation:

(i) has more than one distinct sense otherwise it would be considered vague and (ii) that the senses are related otherwise it would be considered homonymous. Although it is probably fair to say that cognitive linguists have focused on the analysis of how different senses of a word are related to each other, they have of course also been aware that the motivation of senses can only be discussed once the distinctness of senses has been established. She uses the cognitive oriented analysis to provide a token frequencies of the different senses of all 815 instances of 'to run' from the British component of the International Corpus of English and the Brown Corpus of American English. These senses were identified manually and mainly on the basis of match of citation to senses listed in dictionaries and in Wordnet following Fillmore and Atkin's (2000) cognitive mechanism. Gries (2005:63) gives some examples of the intransitive uses of 'to run'. According to him, the central or prototypical sense of 'to run' appears to be that of 'fast pedestrian motion as in

3. Jude had run down to the villa to get help.

In example (4) other closely related senses are shown where motion is still fast but not necessarily pedestrian and (5) where the motion even need not be fast any more. In this example (i.e 5), however, the sentence also implies that the boat makes this journey regularly.

4. Indeed they keep running from one doctor to another.

5. There are four boats that run mainland to Island.

Gries upholds in the discussion of his findings that ‘to run’ points at nearly uniformly into a different direction, namely that, as he claims above, ‘to run’s prototypical sense is instantiated by ‘fast pedestrian motion’ as in (3) because the sense ‘fast pedestrian motion’ is the most frequent sense used in early stages of acquisition. Furthermore, he says that according to etymological dictionaries, which are based on the analysis of historical texts and thus, adopt a corpus-based approach, the exact (semantic) and [phonological originations and interaction are at once complicated and obscure (Partridge 1961:SV. Run), but the diachronically primary senses are ‘fast pedestrian motion’ and ‘to flow’. Finally, Gries posits that like so many other English verbs, ‘to run’ can be zero-derived to function as a noun.

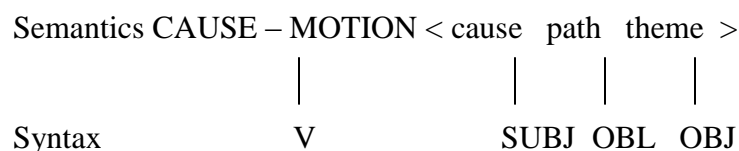
By using the constructional approach of Fillmore, Kay & O’Conor (1988), Jackendoff (1997) and Hsiao (2003) posit that construction grammar is that phrasal construction, like lexical items which can be polysemous. Precisely, a construction is typically linked with a set of related senses and should be better characterised as polysemous, like morphemes, since a strict lexical – syntactic partition is rejected. There is a classic instance of such constructional polysemy. This is formed in Goldberg’s (1995:199) caused-motion construction, where various senses are selectively reproduced in the example below.

- a) Bob shoved it into the drum
- b) Bob asked her into the room
- c) Bob let John into the room
- d) Felly locked Peter into the toilet
- e) Bob helped her into the bus.

According to Hsiao (2003), the central sense of the causes – motion specifies both causation and actual movement, as in (a) above. The second sense is shown in (b) where the motion is not rigorously entailed. A pair of antonymous senses is presented in (c) and (d) respectively: the former involves the removal of a barrier, while the latter presents one. The fifth sense is shown

in (8e) which denotes a continuing status of assistance in motion. Argument roles are associated with direct syntactic relations in those constructions. Details omitted, the argument linking the central sense in (8a) is represented structurally in fig. 2 argument profiling (simplified from Goldberg (1995:163) .

Fig 2



A study on polysemy of the lexeme ‘time’ is written by Vyvyan (2004) .Vyvyan argues that it constitutes a lexical category of distinct senses instantiated in semantic memory. He says that this array of distinct senses constitutes a motivated semantic network organised with respect to a central sense termed the “sanctioning sense’. He also goes further to say that the senses associated with ‘time’ are derived by virtue of the interaction between the sanctioning sense, conceptual processing, structuring and context. Therefore, semantic representations, cognitive mechanisms and situated language use are appealed to in accounting for the polysemy associated with ‘time’. The model which is adduced from the sanctioning sense he terms principled polysemy. Vyvyan (2004) introduces three criteria for analyzing sanctioning sense. This is done in order to adduce what constitutes a distinct sense. These criteria are: a meaning criterion, a concept elaboration criterion and a grammatical criterion.

There is argument by Brugman and Lackoff (1988:78) that “a polysemous lexical item is a radial category of sense” and posit different schemata of the English preposition ‘over’ which often differs only with respect to properties of the landmark. For example,

9a The plane flew over the hill – Schema 1

(above and across): vertical extended landmark, no contact.

b. The bird flew over the yard – schema 1

(above and across): non-vertical extended landmark, no contact.

In example (9a) the landmark (the hill) is vertical whereas in (9b), it (the yard) is not. (Brugman and Lackoff 1988:482-483). The analysis of the particle ‘over’ has been again done by some linguists like Brugman (1988), Lackoff (1987), and Radden (1991). The reason why ‘over’ has attracted so much attention might be that it reveals a complexity of schematic meanings which are not found in the case of other particles. A large number of the polysemous senses of

'over' has been analyzed by Brugman (1988). Her conclusion is that lexical items are natural categories of senses. She analyses based on two distinct parts:

- a. The determination of relations between spatial senses and
- b. Focusing on the metaphorical extensions of the spatial senses.

Apart from her classification of the sense of 'over', she has to cope with the problem of how to explain the variety of senses chained up, which actually derive from various grammatical categories like preposition, adverb, adverbial particle, prefix and others. One thing very significant in her work is that she managed to show the interrelatedness of sense even through the boundaries of grammatical categories.

It is still difficult to answer the question of exactly how many meanings should be associated with a word. Some scholars like Tuggy (1993) argue strongly for the polysemy approach. This is on the ground that a single general meaning (such as 'emerge' in the case of the Orizaba Nawati verb *kisa*) does not allow us to predict the range of specific, conventionalized uses of a word. Some others like Allwood (1999) tend to favour more abstract meanings. He notes that there is probably something wrong with the claim that the English word 'nature' has over sixty different meanings. His argument is that the general meaning approach (monosemy) is complementary to a polysemy approach.

Viberg (1999) studies the semantic structure of verbs in Swedish from cross linguistic perspective. He studies or investigates the semantic field of 'physical contact verbs' with the image schema. For instance, *Stryka* (stroke), *Smeka* (caress), *kitta* (ticket), *skara* (abrade) and *slå* (strike/hit/beat). Verbal semantic fields according to him are usually organized around one or sometimes several "nuclear verbs". The verb *slå* is such a verb for physical contact verbs. His claim is that other verbs of the field can in fact be seen as elaborations or specifications of some aspects of *slå*. Therefore, in this way, the analysis of the nuclear verb *slå* can be used to impose a structure on the field of physical contact verbs.

Doofan (2014) examines the semantics of the verb *tuur* 'push' in Tiv. The study examines the role three image schemata – CONTAINMENT, PATH and FORCE schemata play in conceptual interaction with 'tuur' especially in relation to metaphor. The paper reveals that the experience we have as we go through the maturing stage of life, as interaction takes place in the society actually motivates basic conceptual structure which makes understanding of language possible. The study also reveals that the verb 'tuur' is not semantically empty. The study

concludes in the analysis that the image schemata of 'tuur' are experientially based conceptual constructs which can be metaphorically extended across a range of domains, shifting from the external and concrete to the internal and abstract domains.

Ferando (1988) analyzes the semantic structure of three lexical units of the English language using the cognitive semantic approach. He says that the contrast between 'at', 'on' and 'in' does not lie in the Euclidean geometric distinctions relative to their complements. Rather, he argues in favour of three parameters namely, visual configuration (which includes topological considerations), force dynamic interaction (Talmy 1988) and functional configuration as the three aspects that define the relationship between trajectory and landmark.

This study focuses on cognitive semantics. Therefore it is necessary to have an overview of cognitive semantics.

2.1.11 An overview of cognitive semantics

According to Langacker (1991:295) "cognitive semantics is a branch of cognitive linguistics that deals with meaning and conceptualisation". It is a linguistic discipline which seeks to integrate various parts of linguistic structure and offers a new approach to the conceptual system of figurative language and sense relations in the lexicon. It assumes that language is compositional and regards motivatedness as a key issue in language use. It does not separate performance and competence.

Cognitive semantics in the words of Langacker (1987) is at odds with the assumption of formal semantics. Cognitive semantics therefore, emphasizes the importance of and the role of human cognition as a vital precondition for language use and communication. Therefore, cognitive semantics explores meanings and conceptualisation with a view to unifying lexicon and grammar. Due to the fact that it has interest in unifying lexicon and grammar, cognitive semantics has an aspect of its analysis known as cognitive lexical semantics.

2.1.12 Cognitive lexical semantics

This is a vibrant field of research in its own right. According to Cruse (1986) cognitive semantics became a full-fledged field of cognitive semantics research in the early eighties. This is when it was able to successfully transfer important results in cognitive psychology on the internal structure of categories onto the structure of lexical categories.

Pustejovsky (1995) defines lexical semantics as a sub-field of linguistic semantics. It is the study of how and what the words of a language denote or mean. Cruse (1986) opines that the main reason why word level semantics is especially interesting from a cognitive point of view is the study of these concepts that have names.

In his own view, Geeraets (1994) says that lexical semantics explores what individual lexical items mean, why they mean what they are, how we can represent all of this, and where the combined interpretation for an utterance comes from. Geeraets (1994) further said that units of meaning in lexical semantics are lexical units, which a speaker can continually add to throughout his/her life, learning new words and their meanings. Lexical semantics asks a question on whether the meaning of a lexical unit is established by looking at its neighbourhood in the semantic net (i.e by looking at the other words it occurs with in natural sentences) or if the meaning is already locally contained in the lexical unit.

Sheel (2002) posits that lexical semantics aims to decipher two things:

(a) How meaning can be extracted from new sentence constructions.

(b) What the nature of the meanings of the smallest meaning units is in language. This research work is in line with the view of Sheel's (2002) postulation on the objectives of lexical semantics, where the sense of linguistic expressions consist of expressing mentally instantiated items at the level of conceptual structure, then relating to the context of use.

Lexical semantics according to Croft and Cruse (2004:109-220) has many approaches. These are:

- a) Polysemy: the construal of sense boundaries
- b) A dynamic construal approach to sense relations using hyponymy and metonymy.
- c) A dynamic construal approach to sense relation using antonymy and complementarity .
- d) Metaphor.

This research has interest in exploring cognitive lexical semantics using polysemy. It therefore adopts the first approach (i.e polysemy: the construal of sense boundaries). Croft and Cruse (2004:109) opine that polysemy... "is understood in a broad sense as variation in construal of a word on different occasions of use." It will be seen in this study as a matter of isolating different parts of the whole meaning potential of a word in different situation or circumstances. Croft and Cruse (2004:109) say that the process of isolating a portion of meaning potential is

usually viewed as the creation of sense boundary delimiting an autonomous unit of sense. For instance the meaning “river bank” is as it was fenced off from the rest of the word’s potential and presented as the only functionally relevant portion. The fact that ‘bank’ can also refer to a financial institution is suppressed. Like in: John moored the boat to the bank.

The bounded sense units according to them are not a property of lexical items as such; rather, they are construal at the moment of use. Furthermore, when a word is retrieved from the mental space, it does not come with a full set of ready-made sense divisions. What we have is a purport, together with a set of conventional constraints. Based on Croft and Cruse’s (2004) postulation, it can then be portrayed that the total meaning potential of a word is a region in conceptual sense, and each individual interpretation as a point there in. Comprehended in this way, Croft and Cruse (2004:110) opine “the meaning potential of a word is typically not a uniform continuum; the interpretations tend to cluster in groups showing different degrees of salient and cohesiveness, and between the groups, there are relatively sparsely inhabited regions”. They illustrate this using ‘bank’, where the different applications of the word relates to the idea of collection and custody of money and other items.

3. Down town ‘bank’
4. The Apex ‘bank’
5. University blood ‘bank’
6. Sperm ‘bank’ etc.

‘Bank’ in the examples above form a cluster. This is because there is an intuitively clear discontinuity separating all of them from the underlisted:

7. The boat is at the ‘bank’
8. The river banks were littered with dead sea animals.
9. He moved slowly from the bank to the deep water etc.

From examples 7-9 above, there are several aspects to the partitioning of word meaning or distinguishing polysemes in polysemy. According to Croft and Cruse (2004:110) these aspects of partitioning are:

- The nature of the distinct units that appear
- The nature of the differentiating factors separating adjacent units
- The nature of the meaning boundary.

2.1.13 An overview of cognitive domain

Charles (1988) observes that the meaning of words are determined by the interpretation of the whole construction in which the words are found and the cultural contexts (domain) in which the words are interpreted. Langacker (1990) in support of the relevance of domains in the study of sense relations, says that concepts only make sense against the background of domains. He defines cognitive domain as a cluster of concepts of a more general nature required to understand the concept at hand in relation to the cultural background where the construction is produced. Domains, based on Leacock, Towel and Voorhes' (1993), play a central role in the definition of lexical categories as a mapping of conceptual structure from one domain to another especially in context. Leacock et al posit that cognitive domain can be viewed from two perspectives: lexical semantic domains and contextual semantic domains.

2.1.14 The lexical semantic domains

A lexical semantic domain, according to Langacker (1990), corresponds to what cognitive linguistics describes as a cognitive category. Based on his explanation, the minds of human beings tend to assign everything that is perceived in the world around us to categories. The categorisation process happens automatically and unconsciously without our knowledge. People only become aware of these processes in ambiguous cases when they are confused and try to pin down meaning.

Langacker says further that categories/domains are not universal but depend on the system of experiences, belief and practice of a particular social or ethnic group. He also says that different people may perceive the world around them in different ways, which will automatically reflect in different categories/domains. The following features of domains/categories are presented by Langacker (1990:34):

Each category/domain has a prototype, i.e., a mental representation, a cognitive reference point for that category/domain. For instance the category 'bird', whenever one hears the word 'bird', one conjures up an image in one's mind of a typical bird, such as a sparrow or a robin. This depends on the area and culture where one comes from.

Each category/domain has attributes, features that enable one to identify members of that category. Some attributes for 'bird' that most languages and cultures share are the following:

- i) It has two wings
- ii) It has two legs

- iii) It flies
- iv) It has a beak
- v) It has feather and
- vi) It lays eggs.

There may be some cultures, however where other attributes play a role of significance.

Every category/domain has ‘good’ (i.e typical) and bad (i.e a-typical) members, including marginal examples whose category membership is doubtful. For instance, a “robin” is a typical example of the category “bird” but an “ostrich”, “a penguin”, or a “bat” is an a-typical member. This, Langacker says is caused by the fact that the latter have less attributes in common with the more typical members of that category. The ostrich and penguin, for example do not fly. Bats can fly, but they do not lay eggs, have beak or features etc.

There are not always fixed boundaries between different categories/domains. Objects and events can be part of more than one category at the same time. It has already been seen that the bat is an a-typical member of the category “bird”. It also belongs to the category “animals”, and has a somewhat more prominent place there. Categories/domains may consist of more than one level of subcategories. Therefore, lexical semantic domains are used to describe the paradigmatic relationship between one lexical item and other items that belong to the same sub (category).

2.1.15 Contextual semantic domains

Langacker (1990) posits that contextual semantic domain corresponds to what cognitive linguistics describes as a cognitive frame or cognitive context. Whereas lexical semantic domains deal with the paradigmatic relations between a lexical item and other members of the same category, contextual semantic domains focus on the syntagmatic relationships between a lexical item and other lexical items that are used in the same context or cognitive frame. Normally, words are used in context, and a substantial part of the meaning of a particular word is derived from the context in which it is used. For example, whenever the word ‘hide’ is mentioned to an English speaker, he/she will be able to form a mental image of somebody hiding oneself or something else. That picture from Langacker’s postulation, however, is not complete. At this level, there is still a lack of information that prevents the hearer from being able to get the

full scope of the meaning of this word. As soon as one hears this word used in context, however, the mental image is complete. The following examples illustrate this:

10. The refugees hid themselves when they heard the footsteps of marching soldiers.

11. The robbers are hiding behind the trees, ready to pounce upon the passing merchant.

The above two examples are illustrations of the use of ‘hide’ in two different frames or contexts. There is no doubt that, without this contextual information, no user will be able to get the full picture of the meaning of this verb (hide).

Based on a cultural background involving image schemata, domains, whether lexical or contextual, must be investigated. Bower and Cirilo (1985) say that an aspect of research that is always relevant to the study of cognitive domains must involve the concept of schema or schemata (a data structure for representing the generic concepts of stored memory in the context of usage). For example, ‘radius’ can only make sense against the background of a ‘circle’ (which is the image schema); ‘spoke’ requires the background knowledge of a ‘wheel’ and ‘wheel’ needs the image of a ‘bike’, car, locomotive or other vehicles or piece of machinery. Therefore, cognitive domains are complex, changing, context-sensitive bundles of background knowledge that got activated and de-activated continuously during thinking and or talking.

2.1.16 Conceptualization

Based on the assertion that mental experience is real, Langacker claims that “semantic structure is conceptualization tailored to the specifications of linguistic convention” (1987:99). Conceptualisation is one of the most fundamental and essential element in cognitive grammar (CG). It is inherently dynamic in nature, and encompasses “novel conceptions, sensory and emotive experience, and apprehension of the physical, linguistic, social and cultural context” (Langacker 2000:361). In Langacker’s semantic analysis, conceptualization consists of diverse stimuli imported from cognitive intakes. CG claims that all grammatical constructs are meaningful, and that “meaning is equated with conceptualization...in terms of cognitive processing” (Langacker 1988:6).

2.1.17 Concept of metaphor

The general understanding of metaphor is derived for the rhetorical tradition concerning the tropes. The concept of metaphor dominated classical study of rhetorical tropes because it was conceived as a special use of language for special effect. Staffan Carlshamre (online) says that

metaphor is commonly accorded a sort of preeminence among the tropes – not only is it conventionally heralded as the most beautiful among them, but the word “metaphor” often takes on a generic sense and is used to cover all tropes.

Inquiries with the classical or traditional concept of metaphor are “obliged to start with the works of Aristotle”. According to Ortony (1993:3) Aristotle’s *Poetics* and *Rhetoric* have remained the most influential body of knowledge in the study of rhetorical tropes. Much of what is known today in the traditional conception of metaphor is indebted to the Aristotelian taxonomy of rhetorical tropes. In the words of Gumpel (1983:xi), “Aristotle may not have been the first proponent of metaphor, but from the contemporary vantage point, he is acknowledged as the major influence of this tradition and has thus become its indisputable progenitor”. Aristotle was interested in the relationship between metaphor and language and the role metaphor played in communication discourse. Ortony (1993:3) observed that Aristotle “believed metaphors to be implicit comparisons, based on the principles of analogy, a view that translates into what, in modern terms is generally called the comparison theory of metaphor. As to their use, he believed that it was primarily ornamental”.

The “comparison theory” seems to dominate the traditional approach to metaphor and perceives metaphor as a figure of speech in which one thing is compared to another by saying that one is the other. Kovecses (2002:vii) posits that this is a “widely shared view – the most common conception of metaphor, both in scholarly circles and in the popular mind”. He goes further to point out five of the most commonly accepted features of traditional concept of metaphor, thus:

- a) Metaphor is a property of word, it is a linguistic phenomenon;
- b) Metaphor is used for some artistic and rhetoric purpose;
- c) Metaphor is based on resemblance between the two entities that are compared and identified;
- d) Metaphor is a conscious and deliberate use of words and you must have a special talent to be able to do it and do it well; and
- e) It is also commonly held that metaphor is a figure of speech that we can do without; we use it for special effects, and it is not an inevitable part of everyday human communication, let alone everyday human thought and reasoning.

Staffan Carlshamre (online) observes that it is difficult to reach a critical consensus on the concept of metaphor because one person's prime example of metaphor is for the next person not a metaphor at all". According to Levinson (2003:148) "any discussion of metaphor, or the tropes in general, is plagued by divergent classifications and terminologies". Similarly, Carlshamre (online) contends that there is no generally accepted definitions of metaphor or a "unified concept of metaphor at all". Some scholars briefly examine the divergent views of metaphor. They include:

Perrine (1971:125) and Trail (2005:108). They see metaphor as a comparison between two essentially unlike things intended to point up certain similarities between them. Perrine opines that there are two components in every metaphor: the concept being actually discussed and the thing to which it is compared. He refers to them as the literal term and the figurative term. He observes further that grammatical analysis classifies metaphor into four, which begins by identifying the part of speech of the figurative term thus: noun metaphors, verb metaphors, adjective metaphors and occasionally adverb and even preposition metaphors. Perrine however comes up with a new form of metaphorical classification. In the first, both the literal and the figurative terms are named; in the second, only the literal term is named; in the third, only the figurative is named; in the fourth, neither the literal nor the figurative is named.

The distinction between the literal and the figurative uses of language is the major difference in the perspective of scholars on the concept of metaphor. It is also the major differences between traditional and contemporary approaches to the theory of metaphor. The second edition of Ortony's "metaphor" and "thought" (1993) is the battle ground between the constructionists and the nonconstructionists. The two views seem to have emanated from the opposing views of the "positivists" and the "relativists" that precede them. Ortony (1993:1), points out that the

basic notion of positivism was that reality could be precisely described through the medium of languages in a manner that was clear, unambiguous and in principle, testable – reality could, and should be literally describable. Other uses of language were meaningless for they violated this empirical criterion of meaning.

This period witnessed attention being paid to literal language.

For instance, Sapir (1921; Whorf, 1956), the relativists argue that “cognitive is the result of mental construction. Knowledge of reality, whether occasioned by perception, language or memory, necessitates going beyond the information given. It arises through the interaction of that information with the context in which it is presented and with the knower’s pre-existing knowledge”. They further maintain that there was no “basis of rigid differentiation between the scientific language and other kinds – language, perception and knowledge are inextricably intertwined”. (Ortony, 1993:1-2). To elaborate more, cognitivists argue that because of their presence in speaker’s minds, metaphors exert influence over a wide range of linguistic behaviours. Sweetser (1990), for example, identifies a cross-linguistic metaphor MIND – AS-BODY, as when in English we speak of ‘grasping’ an idea or ‘holding’ a thought. She identifies this metaphorical viewing of the mental in terms of the physical as an important influence in the historical development of ‘polysemy’ and of cognate words in related languages. Thus in English the verb ‘see’ has two meanings: the basic physical one of ‘perceiving with the eyes’ and the metaphorically extended one of ‘understanding’ as in “I see what you mean”.

It is those two opposing beliefs on language that shape the constructivist and the nonconstructivist perspectives on the theory of metaphor. Some constructivists take a “macroscopic” view of the role of metaphor in both language and thought. Their approach seem to undermine the distinction between the metaphorical (figurative and the literal uses of language). The constructivists maintain that:

meaning has to be constructed rather than directly perceived, the meaning of non-literal uses of language does not constitute a special problem. The use of language is an essentially creative activity, as is its comprehension. Metaphors and other figures of speech may sometimes require a little more creativity than literal language, but the difference is quantitative, not qualitative (Ortony (1993:2).

The constructivist ideology agrees with Schon’s (1993) perspective that metaphors afford different ways of perceiving the world in social contexts. The “conduit Metaphor” of Reddy is based on the argument that language is a ‘career’ of ideas, thoughts, aspirations and so on, so that all a hearer (or reader) needs to do is to “unpack” the message and “take out” what was in it. Schon and Reddy’s claims were later given the most thorough and explicit treatment by Lakoff. He presents a “detailed account of a theory of mental representation firmly rooted in the idea that

metaphor plays a central role in the way in which we think and talk about the world. Many of our most mundane concepts, such as those of time, states, change, causation, and purpose are ...represented metaphorically, that is, in terms of other concepts” (Ortony, 1993:7).

The nonconstructivists by contrast take a “microscopic” view of the role of metaphor by treating it as rather unimportant, deviant and parasitic on “normal usage”. They see metaphor in terms of violations of linguistic rules, and maintain that metaphor is characteristic of rhetoric, not scientific discourse. In the words of Ortony (1993:2), the nonconstructivists argue that metaphors “are vague, inessential frills, appropriate for the purpose of politicians and poets, but not for those of scientists because the goal of science is to furnish an accurate (i.e. literal) description of the physical reality”. The nonconstructivist presuppose that metaphor is primarily a linguistic phenomenon. They view metaphor as a “deviation” from the “normal” or “literal” uses of language. This represents the traditional approach to the study of metaphor.

In the observation of Ortony, the contemporary scholars of literature vary in their theoretical persuasions almost along the constructivist/nonconstructivist lines. For instance, the semioticians challenge the literal/figurative distinction, where as the New Critics and some structuralists accept it almost without question. Therefore, literary scholars vary in the extent to which the study of metaphors and other tropes is central to their enterprise. The constructivist approach is that all language, including scientific language, is tropological. The perspective of the constructivist seems to threaten the distinction between the language of the poet and that of the scientist by repudiating the distinction between the metaphorical and the literal on which the assumption is usually based.

The concept of metaphor has been approached from diverse ways depending on the theoretical orientation of the scholars. For example, Searle (1992) applies the pragmatic approach to metaphor, while Cohen (1993) uses the semantic approach. Glucksberg and Keysar’s (1993) theory of “categorization” seem to bestride the constructivist and the nonconstructivist perspectives to the theory of “metaphorhood” (Black, 1993). Lackoff (1993:238) condemns some of the contemporary assumptions on metaphor, like the Glucksberg and Keysar’s which states that “metaphor is simply a matter of categorization”. Lackoff (1993:239) posits that the theory “cannot account for either everyday conceptual metaphor... or really rich poetic metaphor”. He also attacks most of the assumptions that “all everyday, conventional language is literal and not metaphorical”.

Chilton (2005) opines that it is important to “distinguish the traditional sense of metaphor (which we can refer to as rhetorical metaphor) from metaphors as understood in cognitive linguistics”. He holds that metaphor, in general, is the transfer or “projection” or “mapping” of frames from one conceptual domain to another. He points out that the source domain is familiar from social or physical experience. The cognitive view of metaphor is interested in the transfer between two domains of experience. He argues that metaphorical mappings make it possible for us to reason about one world of experience (often abstract, complex, or disturbing ones) in terms of another (more familiar, safer) one. He sees metaphor as a “special form of discourse inferencing, special because they map structure from one knowledge frame or image schemata (the source domain) into a Target Domain”. Furthermore, he avers that “metaphor is a particular function (in a quasi-mathematical sense) which facilitates (or short cuts) reasoning by enabling entailments to be achieved in the source domain and then mapped back to the target domain”. So, one can think about war in terms of spirits, or disease or drugs in terms of war.

Christopher Green (online) contends that metaphor can also be realized in non-syntactic and non verbal forms. He says that pictorial metaphor are forms of non-syntactic form of metaphorical expressions or presentations. This also explains why rhetoricians now realize that metaphors pervade all forms of knowledge and propagate the use of “visual metaphor as a way of exposing knowledge. Cohen (1998:54) emphasizes that metaphor is also captured in the semiotic framework, hence all signifiers– not just words – are potential metaphors. According to Cohen, metaphor and sign involve the “transposition or displacement from signified to signifier, together with the recognition that such a transposition implies an equivalence between these two elements of the sign” (Fiske and Hartley, 1984:48), St Clair (online) similarly holds that:

Metaphors can be used to understand cultural differences. They tell us how some cultures envision space. They tell us why some cultures have stories about the stars, why some mark the land for cycles of the solstice and the equinox, and why some consider the land to be sacred.

He goes further to say that “images and symbols have different meaning and appear in different forms. They function as visual codes or emblems and evoke a sense of artistic and cultural value. Such visual metaphor require a cultural context for interpretation”. This explicates why Argaman (2008:485) perceives metaphor as a way of shaping diverse experiences. Argaman’s socio-semiotic perspective to metaphors holds that metaphor is a “medium of describing sensations and

affects of experiences, and to the fact that metaphor may disclose diverse points of view within a particular cultural environment” (484).

Carlshamre (online) asserts that “the right context” is crucial in the determination of a metaphor because a sentence may be metaphorically used on some occasion, and literally on others. Thus, whether an expression is to be interpreted metaphorically or literally “will not only depend on the semantic properties of the expression and its frame, but also on what is available in the resource situation. Carlshamre advises that since it seems plausible that there are no universal and easily formalizable rules for recognizing metaphors, one has to “rely on general interpretative strategies that cannot be applied without abundant assumptions about the speaker’s intentions and beliefs”. Argaman (2008:483) agrees with Carlshamre on the importance of context to metaphors when he opines that metaphor “reflects the different way by which people orient themselves to the context... as they relate to context, metaphors convey information on “the way things are”.

According to Cohen’s (1998:55) observation, metaphors are viewed as having reference to human experience and the physical universe. They are found across cultures and time and refer to universal experiences such as child birth, death or the sunrise. He further maintains that other than being rooted in nature or human experience in nature, metaphors actually give shape to our perceptions, conceptions and even behaviours. In his own view, William Grey (online) reinforces the above position when he states that, “Metaphor has a central role to play in the way we make sense of the world”. He holds that metaphor is not an alternative way of expressing common sense but a common way of achieving new sense. This is because the use of metaphor is a “dynamic phenomenon which enables us to generate new meanings from old... a fundamental mechanism for extending and refining language”. The thesis of metaphorical extension enables the speaker to forge, refine and reshape concepts to embrace wide and more complicated repertoire of referents and activities in order to cope with the “ever complicated world which these (verbal) resources help us to create”. Metaphorical extension activates the associated meanings that are in the secondary order of encoded signification. It is the activated secondary sense that generates a new semantic extension for the expression. William Grey argues that:

These subsidiary ideas and associations show that in addition to a primary sense and reference there is also a penumbra of additional associations and

meanings. When literal meaning is deactivated, because of the falsehood of the sentence, a switching happens and the meanings latent in the penumbra are activated As soon as we apprehend that the description is literally false, which usually happens immediately and unconsciously, the expression becomes semantically charged with secondary meaning latent in the associated semantic penumbra. Metaphors work typically by activating these subsystems of association...connotation (cf Levinson 2003:150).

William Grey is of the opinion that the whole process of thinking is based on the perception of similarities and differences, and metaphor is a fundamental tool which we use for the purpose of exploring the similarity and difference that exist between two entities or experiences. To him, metaphors play a vital role in helping us to make sense of unfamiliar situations... play an indispensable role in providing a structured framework for interpreting and understanding a domain of unfamiliar or novel phenomena... a tool of discovery, providing a way of imposing or discovering structure within novel or unfamiliar situations.’’

This explains why he describes metaphor as a basic ingredient in the “tool-kit” of poets and creative writers and a vital resource for the task of articulating novel insights into human condition or refining old ones. He further submits that metaphor is crucial in the construction of our experiences and universe and argues that “language would certainly be much duller, and would more importantly have been unable to develop its complex powerful resources of generalization and obstruction without the resources of metaphor”.

The study shows that besides the perception of metaphor from literal or figurative dimension, it is an important element of the semiotic system that enables its users to express their cultures, beliefs and attitudes in a more forceful manner.

Furthermore, the metaphoric resources enable the users to generate new meanings from old ideas, expressions and experiences. One important feature of metaphor is meaning extension. That is, metaphor can give rise to new meaning. Cognitive linguists argue that metaphor-based meaning extension can also be identified across a range of ‘distant’ linguistic phenomena, and that metaphor therefore provides further evidence in favour of generalizing across the ‘distinct’ areas of language. The analysis of the metaphorical expressions found in this study will be used for the extension of meanings in context, as Uchechukwu (2005) investigates how many

meanings the Igbo verb should have using the verb root má ‘know’. He argues that the Igbo verbs have meanings that arise from specific image schemata and their metaphoric and metonymic extensions using the cognitive linguistic approach.

2.1.18 Metonymy

Metonymy is slightly different from metaphor, however, by no means narrower. When describing a metaphor, we take one concept which we can call A and compare it in a way to a different concept – B. So we can have A is B as a definition. In Lakoff (1987), there is a proposition that a metonymy is created when one conceptual entity, known as ‘target’, is understood by means of another conceptual entity, called the ‘vehicle’. This happens in Ideal Cognitive Model (IGM). Thus according to Gunter Radden and Zoltan Koveses (1999), one word or the other can be a metonymy. Yet, because of taboo or social norms, or rather cognitive rules we choose which one.

Remond Gibbs shows that metonymy can be used in discourse to understand tautology, indirect speech acts and of better understanding of contextually determined reference. Also, Gibbs thinks that the Gricean notion of conversational implicature is also metonymically driven. (the notion of quality, quantity etc). Other scholars have also discussed metonymy. Gilles Fauconnier and Mark Turner (2002) show that Lakoff’s unidirectional model of metonymy (the one in which we choose the metonymy based on some cognitive rules) does not work in some utterances. They provide the example ‘smoke is coming out of her ears’ in which the meaning can only be recognized by means of blending of the source and the target.

Peter Koch (1999) looks for metonymy in imagery. If metonymies can change the meaning of an utterance, then the meaning becomes the ‘figure’, and the old one becomes the ‘ground’.

Metonymy is a referential strategy. It identifies a referent by something associated with it. This reflects the traditional definition in terms of ‘contiguity’. For cognitive semantists, metonymy shows many of the same features as metaphor: they are both conceptual processes; both may be conventionalized; both are used to create new lexical resources in language and both show the same dependence on real-world knowledge or cognitive frames. Metaphor is viewed as a mapping across conceptual domains while metonymy establishes a connection

within a single domain. As with metaphor, metonymy is a productive way of creating new vocabulary.

Metonymy is a cognitive phenomenon – not just a figure of speech – with a considerable role in the organization of meaning (semantics), utterance productions and interpretation (pragmatics), and even grammatical structure. The same metonymic principles that relate different senses of a word serve to create and retrieve novel meanings in actual language use. The interpretation of grammatical structure (construction meaning) seems to be sensitive to metonymic principles. Furthermore, metonymic processes play a crucial role in semantic change and in grammaticalization.

In view of the fore going, both metaphor and metonymy will be used in achieving new sense as well as extension of meanings

2.2 Theoretical framework

This section of the study looks at the theoretical framework of the work which is image schema or analogical mapping. The proponent of image schema is Mark Johnson in the year 1987. Image schema has been shown to lie at the basis of numerous metaphorical constructions. Image schemata according to Saeed (2007:353) “are an important form of conceptual structure in the cognitive semantic literature”. Cognitive linguistics therefore sees image schema as pre-conceptual topological abstraction which serve to organize much of our experience and understanding of the world (Johnson 1987; Lakoff, 1987, 1989; Turner 1987, Gibbs and Colston, 1995).

The theoretical construct of the image schema was developed by Johnson (1987) in his classical book titled: *The Body in the Mind*. He proposes that the way in which embodied experience manifests itself at the cognitive level is in terms of image schema. Since then, image schema theory has played a major role in several areas of study such as literary criticism (Turner 1987); poetics (Lakoff and Turner 1989); Psychology (Mandler, 1992); psycholinguistics (Gibbs 1994, and Gibbs and Colston, 1995); cognitive grammar (Lakoff 1987); Mathematics (Lakoff and Nunez, 2000) cognitive semantics (Uchekukwu 2011, and Edeoga 2012).

Johnson (1987:126) as cited by Ogbonna (2012:5) listed the most important image schemas as follows:

CONTAINER; BALANCE; COMPULSION; BLOCKAGE; COUNTERFORCE; RESTRAIN
REMOVAL; ENABLEMENT; ATTRACTION; MASS-COUNT; PATH; LINK; CENTRE-
PERIFERY; CYCLE; NEAR-FAR; SCALE; PART-WHOLE; MERGING; SPLITING; FULL-
EMPTY; MATCHING; SUPERIMPOSITION; ITERATION; CONTACT; PROCESS;
SURFACE; OBJECT AND COLLECTION. These are rudimentary concepts which are
meaningful because they derive from and are linked to human perceptual experience, which is
experience of the world directly mediated and structured by the human body.

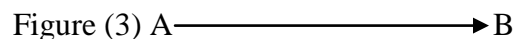
Therefore, for the analysis of conceptualisations of the verb *gbá* ‘set forth’, a combination
of image schemata will capture the complex conceptualisation of the verb.

The basic idea of image schema is that because of our physical experience of being and
acting in the world – of perceiving the environment, moving our bodies, exerting and
experiencing force, etc – we form basic conceptual structure which we then use to organize
thought across a range of more abstract domains. These image schemata Johnson (1987) opines
are proposed as a more primitive level of cognitive structure underlying metaphor and which
provide a link between bodily experience and higher cognitive domains such as language.
According to Uchechukwu (2011), image schema has been explained as condensed but abstract
and dynamic re-description of perceptual interactions or experiences of human beings. They help
in forming human experiences and organizing structures which can be modified by concrete
human experiences. This is in line with Hampe’s (2005:3) assertion, “there is no mutually
compatible definition of image schema in cognitive linguistics; rather human experience
modifies it”. According to Johnson (2003), divergences in the definition of the concept could be
as a result of interactional experiences, the broadness of the content of image schema and degree
of specificity (Grady 2005), the connection of image schemas with the neural circuits of the
brain (Rohrer, 2005; Dodgy & Lackoff (2005), their importance in learning (Mandler 2005) or
the value of cultural settings as part of their embedded concrete usage (Kimmel 2005). All these
differences in the definition of image schema notwithstanding; the fact still remains that image
schema involves definite recurrent profile of path (source – path - goal). In addition to Path
schema, the verb ‘*gba*’ set forth itself requires some forces, hence Counterforce and Enablement
type of force schema and containment schema are used for our analysis. An image schema
therefore, is considered an embedded pre-linguistic structure of experiences that motivate
conceptual metaphorical mappings. In this study, the image schema of the Igbo verb ‘*gba*’ is

discussed under a combination of image schemata which Uchechukwu (2011) calls schema matrix. For instance setting forth an object from point 'A' to 'B' fits the image schema profile of path (source-path-goal). These image schemata include path which constitutes Source – Path – Goal; Containment and Force schemata.

Path Schema

Johnson (1987); Lackoff and Johnson (1999) claim that this schema reflects our everyday experience of moving round the world and experiencing the movements of other entities. Our journeys typically have a beginning and an end, a sequence of places on the way and direction. In other words, the path schema is an 'imaginative trajectory that is conceptualised as a line – like 'trail' left by an object as it moves and projects forward in the direction of the motion", (Saeed 2007:356). The contexts of the path schema varies, ranging from moving vehicle, the speed of motion, obstacles of motion (blockage/restraints) as well as forces that move along a trajectory, like the trail or actual movement of any 'thrown' or 'pushed' 'object', which can be physical or conceptual. Based on such experiences, the path schema contains a starting point (source) marked by A, an end point (Goal) marked by B and a sequence of contiguous locations connecting them marked by the arrow thus:



Path

Adapted from Saeed (2007:356)

Path schema is associated with the following implications according to Saeed (2007:356).

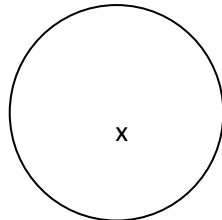
- a. Since A and B are connected by a series of contiguous locations, getting from A to B implies passing through the intermediate point.
- b. Paths tend to be associated with directional movement along them, say from A to B.
- c. There is an association with time. Since a person-traversing a path takes time to do so, points on the path are readily associated with temporal sequences. Therefore the implication is that the further along the path an entity is the more time has elapsed.

Containment Schema

The example of containment schema has been given by Johnson (1987:21). According to him, the containment schema derives from our experience of the human body itself as a container from experience of being physically locating us within bounded locations like rooms, beds etc

and also putting object into containers. The result is an abstract schema of physical containment, which can be represented by a very simple image representing an entity within a bounded location thus:

Figure 4: Containment



He said that such a schema has certain experientially based characteristics. It has a kind of natural logic including for instance the rules below:

- a. Containers are a kind of disjunction: elements are either inside or outside the container.
- b. Containment is typically transitive: “If the container is placed in another container, the entity is within both as Johnson says: “if I am in bed, and my bed is in my room, then I am in my room”. The schema is also associated with a group of implications, which can be seen as natural inferences about containment. Johnson calls these ‘entailments’ and gives examples like the following (adopted from Johnson 1987:22).
 - i. Experience of containment typically involves protection from outside forces.
 - ii. Containment limits forces, such as movement within the container.
 - iii. The contained entity experiences relative fixity of location.
 - iv. The containment affects an observer’s view of the contained entity, either improving such view or blocking it (container may hide or display).

Force Schema

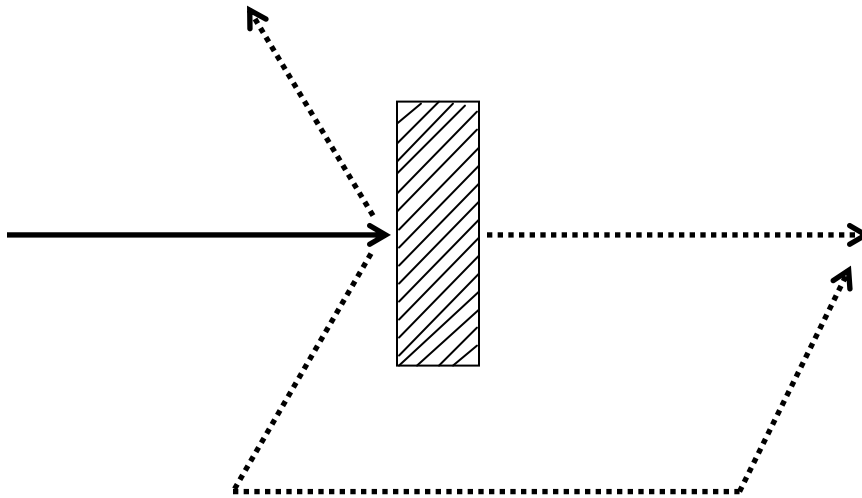
Like other image schemata, force schema according to Saeed (2007:357), are held to rise from our everyday experiences as we grew as children, of moving around our environment and interacting with animate and inanimate entities. As with other image schemata, they are held to be pre-linguistic and to shape the form of our linguistic categories. The force schemata include the basic force schema of compulsion, blockage, counterforce, removal of restraint and enablement.

Figure 5: Compulsion



In figure 5, we see a force schema of compulsion where a force vector F acts on an entity U . The essential element in this diagram is movement along a trajectory, the dotted line represents the fact that the force may be blocked or may continue.

Figure 6: Blockage



In figure (6), we see the specific schema of blockage; where a force meets an obstruction and acts in various ways being diverted, continuing on by moving the obstacle or passing through it.

Figure 7: Removal of Restraint

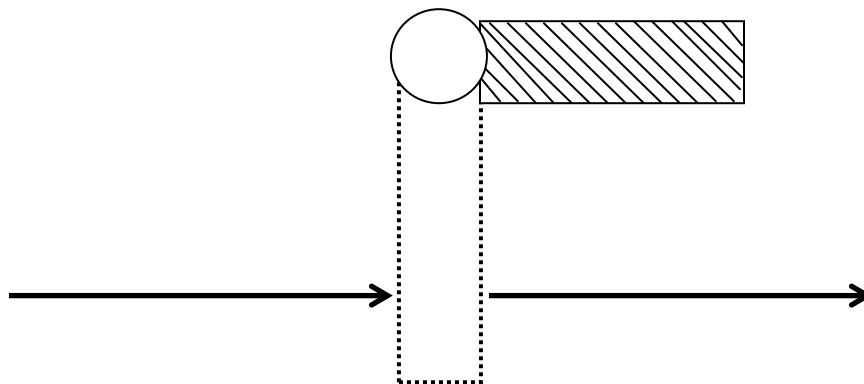


Figure (7) shows the related schema of removal of restraint, where the removal (by another cause) of blockage allows an exertion of force to continue along a trajectory.

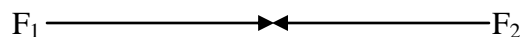
Enablement Schema

This is a force schema that “involves the physical or metaphorical power to perform some act, or a potential force and the absence of blockage or counterforce”, (Johnson 1987:47). In other words, ‘enablement’ takes place when people become aware that they have some power to carry out some actions because there exist no obstacle or counterforce. This image schema derives from our sense of potential energy, or lack of it in relation to the performance of a specific task, (Evans and Green 2006:188-189). While most people who are fit and well to pick up a bag of grocery shopping, for example, few people feel able to lift up a car. It is pertinent to note that while this image schema does not involve an actual force vector, it does involve a potential force vector. According to Johnson (1987), it is this property that marks the Enablement schema as a distinct image schema.

Counterforce Schema

Counterforce schema is defined by Johnson (1987:46) as “two equally strong, nasty and determined force centre that collide face-to-face, with the result that neither can go anywhere”. In other words, it is a force schema that involves the active meeting of physical or metaphorical opposing forces. Here, there are two force vectors which move along a path and they collide face-to-face because both of them want to control the situation. This is represented schematically in figure 8 below:

Figure 8:



The counterforce image schema

Evans and Green (2006:188)

Figure (8) shows where two force vectors F_1 and F_2 meet with equal force like when we bump into someone in the street.

Some of the image schemata discussed above are implicated in the examples of our analysis of ‘gba’ verb complexes in this study.

2.3 Empirical studies

Empirical studies look at the works already done in relation to a topic of study. Empirical studies in this work focus mainly on definite researches carried out on the semantics of Igbo verbs. Therefore, in this section, we review different works carried out by scholars in this field of study.

2.2.1 The semantics of verbs in Igbo

Different approaches have been adopted in the study of verbs in Igbo right from the time the Church Missionary Society (CMS) developed interest in the study of Igbo language. Therefore, one can say that the study of Igbo verb roots is as old as the study of Igbo language itself. Uchechukwu (2011) in line with this view said that the learners of the Igbo language are always faced with the peculiar characteristics of the Igbo verb which could be described as structural and semantic. Different findings and conclusions have been arrived at regarding the syntax and semantics of the Igbo verbs. This depends on the scholar's perspective in the study. Some Igbo verbs are simple in form while some are complex. This is from the review of previous studies on verbs of Igbo. To a great extent, the structural composition of Igbo verbs determines their meaning.

2.2.2 Traditional approaches to the study of Igbo verb

Earlier in the past, scholars have been interested in the study of the syntactic and semantic issues of the Igbo verbs, more especially non-native speakers. They include Ward (1936); Schön (1861) and Williamson (1972) etc. The Igbo verbs are generally divided into simple and compound/complex because of their complexity. (Ward (1936), Emenanjo (1975), Nwachukwu (1983)) etc. In Nwachukwu's (1983) view, the simple verb is a verb that has the consonant + vowel (cv) structure. The structure of the complex verb is: verb + verb, verb + suffix; and verb + noun phrase or prepositional phrase. Emenanjo (1975) called the verb + noun phrase or prepositional phrase verbal complex while Nwachukwu (1985) called it inherent complement verb (ICV). Mba (2005) in his own definition of compound verb, sees it as a type of verb which

has a minimum of two verbs that may act as independent or is not subject to vowel harmony rule and cannot alter its original forms to obey the vowel harmony rule.

In his study of Igbo verbs, Schon (1861) sees the Igbo verb from the above two major classes (that is, simple and compound or complex structures). But he quickly adds that the problem is that in compound verbs, the verb can have a somewhat different meaning from its application as a simple verb. Equally, the relationship between the verb + verb compound and the verb + suffix structure (complex) is that the construction is usually seen as one action, which according to Lord (1975) is an internal action – result or action – goal meaning. By this, Lord means that the first verb expressed the action while the second verb/suffix expresses the result or goal of the action.

Nevertheless, when it comes to inherent complement constructions, the meaning difference between the simple verb and ICV is even wider. Based on this great divergence in the meaning of Inherent Complement Construction (IC construction), Schon (1861) was the first to raise the issue of semantic problem of the Igbo verb. Schon had serious problems getting at the compositional meaning of constructions with ICV and as a result came to the conclusion that it “must be attributed to the lively and descriptive manner in which the native mind views and narrates actions,” (Schon 1861:51). This is because he believed that Igbo verbs derive their meanings from the nominal or propositional complement within the structure. Schon’s conclusion was influenced by the traditional approach in the study of language, which Ward (1936:129) illustrates with the –gba (run) root verb.

Table 1: Wards verbal structures (Ward 1936:129) as categorised by Uchechukwu (2011).

Verb Type	Example
Simple verb	-gba
Compound verbs	verb + verb
	-gba + la ‘go home’ → gbala ‘run home’
	- gba + ga ‘go’ → gbaga ‘run go’ (run to)
	- gba _ laga ‘???’ → gbalaga ‘run away’
	Verb + suffix
	-gba + kq ‘together’ → gbakq ‘come together’
	-gba + go up (wards) → gbago ‘go/climb up(wards)’

	-gba + sà ‘on/upon’	→	gbasà	‘scatter/spread
on/upon				
Verbal complex	-gba + ɔsɔ ‘race’	→	gba ɔsɔ ‘run’	
	-gba + egbè ‘gun’	→	gba egbe ‘shoot’	

On the footnote of the table, Ward (1936:129) summarises the –gba verb root thus:

It is difficult to give the meaning of -gba in all these compounds; it is often made specific by the second element (e.g. gbalaga, ‘run away’, gbakoro, ‘climb (of yam about a stick), gbakɔ, join, gbasà, scatter etc.). A noun following –gba may also give its exact meaning, e.g. gba egbe (shoot with gun), gba ɔsɔ (run a race) etc. According to Ward, the whole structures are known as compounds. But a look at Table I shows that Ward actually presented all the basic morphological types of the Igbo verb. But the fact remains that the -gba root verb does not have a single meaning (see Table I above). Suffice it to say that the structure of the Igbo verb is not complex to explain; rather, the semantics usually involves some form of variation that is not readily apparent; hence, Ward’s conclusion that it is difficult to decipher the meaning of ‘gba in the structures she presented in Table I above. Moreover, her conclusion as Uchechukwu (2011) observes, marks the beginning of the view that the semantics of the Igbo verb, whether simple or complex verb, is difficult to understand. As we shall observe in the next section of this work, her conclusion is almost the same as the conclusions of other linguists after her.

2.2.3 The modern approaches to the study of Igbo verb

The earlier approaches to the study of Igbo verbs provide the basis for subsequent studies. Hence, in addition to Ward’s approach, Uchechukwu (2011), categorises the different approaches to the study of Igbo verbs under three groups: the structuralist approach, the case grammar approach and the lexicographic approach. This study has four approaches with the fourth as the cognitive linguistic approach. There are three major theories that dominated these recent approaches to the study of Igbo verbs. These are: structuralism, generative grammar and cognitive linguistic approach. It is in the studies carried out by Emenanjo (1975a), (1975b), (1978) and (2005); Ubahakwe (1976), (1979); Nwachukwu (1983) and (1987); Uwalaka (1983); Manfredi (1991); and Hale, Ihionu and Manfredi (1995). Emenanjo’s (1978) analysis is not on a

specific approach but rather eclectic in nature. In Emenanjo's investigations, both the traditional and structuralist approaches are used. Moreover, Emenanjo (1975a); (1984) and Nwachukwu (1983), (1987) etc. carry out their own studies within the framework of structuralism. These scholars in one way or the other re-emphasized Ida Ward's findings and conclusions. For instance, Emenanjo (1975:165) identifies the Igbo verbal complex structure as "the essential feature of the Igbo verbal system". Emenanjo (1984:29) and (2005:484) presents the Igbo verb root component of the verbal complex as lexically empty. He says that Igbo verbs are better classified based on complementation rather than transitivity. This is in opposition with the views of Ubahakwe (1976), Nwachukwu (1983) and Uwalaka (1983).

It is because, according to Emenanjo (2005:479), the transitivity of classification of Igbo verbs is a "surface structure feature which does not help us to classify Igbo verbs according to the complements they select". For instance, the same verb can be transitive in one context and intransitive in another. (Emenanjo (2005). For instance,

1 (a) Okeke jere ije (transitive)

Okeke went for a walk

(b) Okeke jere Kano (intransitive)

Okeke went to Kano.

Emenanjo rather than classify Igbo verbs on the basis of transitivity, believes that complementation is itself the category that allows the correct generalization to be framed. He says that the semantic content of every Igbo verb describes a certain action, or state, which by its very nature implies the co-existence of a certain nominal phrase. He illustrates by sub-classifying Igbo verbs into the following: (see Emenanjo 2005:479 - 485).

i) General Complement Verbs (GCV)

These are Igbo verbs which, according to Emenanjo, take general noun complement.

Example:

2(a) Iri erimeri 'to eat edibles'

(b) [ñx añxmañx 'to drink drinkables'

Emenanjo further says that the application of classificatory noun root principle of Chafe (1970) to the GCV shows that in the deep structure, each Igbo GCV is used with one and only one general noun as complement.

ii) Inherent Complement Verbs (ICV)

Nwachukwu (1976) is credited with the concept of inherent complement verb. Inherent verbs are verbs the citation form of which includes a nominal element which may or may not be cognate with the verb. These verbs are usually followed by a free morpheme and in a few cases by a prepositional phrase. Example:

3. -gba clauster
- | | | | |
|------|-----|---|--------------------------|
| [gba | qsq | - | ‘to run’ |
| egbe | | - | ‘to fire a gun’ |
| mgba | | - | ‘to engage in wrestling’ |

Emenanjo claims that the Igbo ICVs are lexically empty, dummies, but the noun has an identifiable and independent meaning. Example by Emenanjo (2005).

4. [gba mgbā – ‘to X a wrestle’

The X according to him shows the empty lexical entity since there is nothing the X is referring to. He further claims also that in a few of the verbs, neither the verb nor its nominal complement has an identifiable and independent meaning synchronically. Example:

5. ihi nne - ‘to be many’

Emenanjo, based on his observation concludes that in all ICVs, we have instances of fixed pairing of verbs with their complements, or idioms which explains why in the deep and surface structures, the complement is obligatory.

iii) **Bound Complement Verb (BCV)**

The bound complement verbs are the subset of Igbo verbs that are often used with bound verb complements without the nuances of emphasis which is inherent in BVC; in other words, they do not admit any nominal modifier according to Emenanjo (2005) in Okeke (2015:19).

Example:

- 6(a) iju ejū - ‘to be full’
 (b) ife efe - ‘to fly’

iv) **Prepositional Phrase Complement Verbs**

These are usually followed by prepositional phrases with which they form one semantic entity. Example:

- 7(a) [hɔ n'anya - 'to love/like'
 (b) ìkwē n'isi - 'to nod the head in approval'

v) **Ergative Complement Verbs (ECVs)**

According to Emenanjo, these are the class of Igbo verbs which can take both the subject and the object positions. In other words, he is saying that they are verbs whose complements can either be used as surface subjects or as the only complement following their verbs. Uwalaka (1988) according to Okeke (2015:20) is the first to draw attention to this class of verbs. Example:

- 8(a) O mere ihe ukwu
 He do past something big/great
 He did a great thing
 (b) Ihe ukwu mere
 Something big/great do past
 Something great happened
 9(a) Ọ nà-ezò nnukwu mmiri taà
 It Dur rain heavy water today
 It is raining very heavily today
 (b) Nnukwu mmiri na-ezò taà
 Heavy water Dur rain today
 It is raining very heavily today

In his five-fold classification and analysis of Igbo verbs, Emenanjo (2005) concludes that every Igbo verb co-exists in the deep structure with some nominal complement with which it forms one semantic unit. This he calls the verbal complex, which is an idiom. (Emenanjo 1975a:45-46). His argument for complementation rather than transitivity of the Igbo verbs lies in the fact that the Igbo verb, whether transitive or intransitive, is always followed by some nominal or phrase element which is called its complement.

In his own view, Nwachukwu (1976); (1983); (1984) and (1987) emphasizes the inherent complement verbs (ICV) and classifies the Igbo verbs in some details. In his explanation of inherent complement verbs, Nwachukwu uses the expression 'cluster' to identify verb roots and their verbal complexes. According to him, the verbal complexes formed with a verb root are the clusters or lexical subclasses of inherent complement verbs ICVs of that verb root. For instance,

all verbal complexes formed with the verb root ‘gba’ (shoot) belong to the lexical subclass ‘gba’ and those with ‘kpa’ (dribble) or ‘tụ’ (throw) belong to the ‘kpa’ or ‘tụ’ subclasses respectively. This is one of the reasons why the CV-stem and its nominal complement form one unit of meaning and are glossed together in a dictionary entry to express their full meanings. For instance:

10. t_u lexical subclass (cluster)

it_u asi (to lie)
oyi (to be cold)
uj_o (to be afraid)
anya (to expect)

This possibility of combining one verb root with hundreds of nominal/prepositional phrases led Nwachukwu (1987:83) to conclude that in such combinations the verb root becomes “practically meaningless”, while Emenanjo (2005) posits that such nominal complements or their verbs have identifiable or independent meaning.

Nwachukwu (1987) also disagrees with Emenanjo (1984 & 1986) on the complementation of Igbo verbs. According to Nwachukwu (1987:17), “...none of them is a diagnostic characterization of any semantic class of Igbo verbs; rather, they lead to unnecessary cross classification”. Specifically, Nwachukwu (1987) as cited in Okeke (2015:21) sees the ICVs which Emenanjo describes as verbs often used with BVC without the nuances of emphasis which is inherent in BVC (Emenanjo 1975; 1978 & 1981), as bound verb forms that can be inflected, emphatic particle, which is usually optional in constructions. Therefore, since any and every verb in Igbo can be made emphatic with a BVC, Nwachukwu claims that it (the BVC verb) ceases to be a criterion for classifying verbs. For the ICVs, Nwachukwu believes that although the property of being obligatorily specified for an inherent complement sets them apart as a subclass of Igbo verbs, he is not of the view that this property translates to transitivity. Similarly, Nwachukwu believes that the prepositional phrase complement verbs are a class of locative verbs; but there are many other verbs according to him, though not locative verbs, which may also take a prepositional phrase (PP) based on the intended meaning. Nevertheless, PPs provide a prolific method of expressing adverbial meanings in the language. Consequently, he concludes that it is wrong to see PP as a potential peg on which to hang transitivity distinction.

Nwachukwu (1987) does not believe that ergative complement verbs do exist in Igbo (Okeke 2015:22). He sees Emenanjo's ergative complement verbs as a misnomer for there is no such class of verbs in Igbo, nor is the language an ergative one in the sense of the Australian language, Dyrabal, a language in which grammatical relations between a verb and its argument is as follows: the subject receives the patient role, while the object assumes the agent role. This is the converse, according to Nwachukwu, of what obtains in an accusative language such as Igbo, in which a subject receives the agent role, and the object, the patient role. In spite of this, Nwachukwu (1987:25) believes certain verbs in Igbo do participate in a type of transitivity alternation. He finally sees Emenanjo's GCVs as transitive verbs because they involve two participant in their lexical conceptual structures (LCSs); an agent that receives the subject grammatical role, and a patient that is an entity that undergoes a change in state or location as a result of the action expressed by the verb, which receives the object grammatical role. He concludes that the essential problem with Emenanjo's analysis is that the term complement is not defined in any rigorous manner; and as such, Emenanjo's subset of verbs are far from being mutually exclusive.

Moreover, Nwachukwu (1983) in Okeke 2015:23) describes the verbal element of the complex predicate as semantically opaque in the absence of its nominal compound. This leads Ihionu (1992) to follow the tradition of calling the verbal components of such complex predicates 'light verbs', with reasons that the verbal element is semantically empty. Some syntactic and semantic issues have been raised in the analysis of the Igbo verb in its inherent complement. Such issues concern the verb root complement, on the one hand, and the nominal component, on the other hand. But all seem to agree that the verb root and its nominal complement form a semantic unit, (Nwachukwu 1985, 1987; Manfredi 1991; Ihionu 1992; Anyanwu 2003) etc. But the point of agreement is on the syntactic characteristics of the IC and the predicative power of the verb, (see Oha 2009). Manfredi (1991) has a divergent opinion of any devaluation of the argument status of the IC, arguing that it behaves the same way and in fact is syntactically licenced as an NP except that unlike other NPs, it supplies the thematic content to the verb as a lexical constant since the verb is thematically light. Anyanwu (2003) in Okeke (2015:23), arguing from the minimalist approach, supports Nwachukwu (1985) & (1987). He insists that the relationship between IC and its verb root is a semantic one, while it is a separate syntactic constituent within the VP.

According to Uwajeh (2003), the verb (v) of the ICV has a causative implication, and in line with Manfredi (1991) and Ihionu (1992), he argues that IC delimits the events of the ICV. For Uwajeh, all other Igbo verbs take complement of a sort to sufficiently convey definite meaning. But Oha (2007) maintains that the problem with Ihionu (1992) and Manfredi (1991) is their references to the whole complex as ‘light verb’ and ‘light VP’ respectively. These terms according to him, are descriptively inadequate in accounting for the phenomena. Oha goes further to argue that an adequate description would x-ray the internal structure of the complex to ascertain which component is impaired (or impaired more) in its function. And the ability of a lexical category to function outside its category has been widely reported in Hopper and Thompson (1980), which states that central instances of a category are prototypical for that category. Mbah (2005) in his own investigation maintains that lexical function is structural in nature and not inherent.

The role of the verb in an Igbo verbal complex is another aspect of the studies in the Igbo verb. This Uchechukwu (2011) calls the selectional relationship between the verb root and its complement. According to Uchechukwu, the selectional or collocational restriction is the co-occurrence constraints that exist between lexical items. The definition of selectional restriction was made by Katz (1972) as the constraint on the combination of senses indicated by certain semantic markers. Palmer (1981), Lyons (1977) and Kempson (1977) agree that selectional restriction exists between lexical items. Based on the above, some Igbo scholars in various Igbo studies like Emenanjo (1975), Nwachukwu (1987) etc have all identified the ability of the Igbo verb root to select specific lexical items. Also Uwalaka’s (1988) high selectivity hypothesis between the verb root and its complement in a verbal complex construction is another effort in this direction. Umeasiegbu (1979) and Anoka (1983) explore how the nature of complement plays a role in the choice of the verb with which it can form a verbal complex. Anoka’s description is on how the dimension and weight of an item that is to be bought contributes to the choice of the verb with which it is combined.

The examination of verbs of planting and harvesting in Ngwa and Obimo dialects of Igbo was done by Anyanwu and Iloene (2004). Their conclusion shows that the choice of the lexical item for planting and harvesting is pragmatically determined by the kind of process involved in planting or harvesting of a particular crop. But suffice it to say, according to Uchechukwu (2004)

that since the process of planting or harvesting is coded by the verb, the source of the selection should also be the verb. But there was no light thrown by the authors on this source of selection.

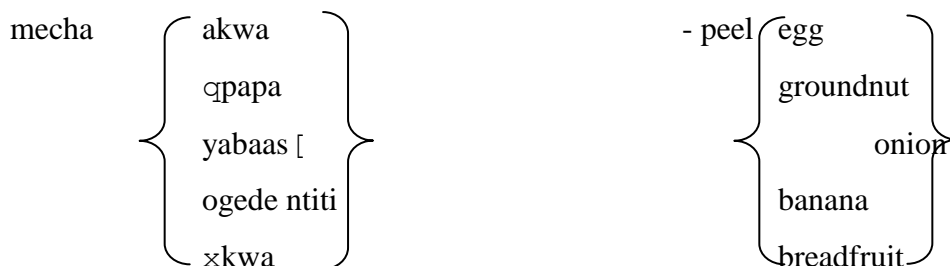
According to Onumajuru (2005:79) who explores how the verb in the verb phrase selects its noun, he opines, “in isolation, the infinitive can be said to have a vague semantic idea apart from the under-determined denotative sense”. He goes further to admit the fact that Igbo verbs do not combine with their complements anyhow. This is contrary to his former claim that they combine with their complement. At the end of his study, he finally concludes that it is the nature of the commodity that determines the stem of the verb. Therefore, he says that it is the noun that selects the verb and not the verb selecting the noun.

Verb-noun selectional restriction in Igbuzo-Igbo was reviewed by Oweleke (1995). Oweleke posits that the degree of selectivity is very high between verbs and their nominals. According to her, “a lexical item in Igbo, which has the meaning ‘peel’ in English can be realised through many different verbs, each of which selects some varying number of ‘peelable’ items and rejects others”. Using the Igbuzo dialect of Igbo, Oweleke as cited in Okeke (2015:26) posits that in example (11) below, all the items mean ‘peel’ or remove an outer covering’ of some sort. Example:

- 11 a - bacha
 b - kwacha
 c - fucha
 d - kpacha
 e - mecha

The degree of selectivity from her analysis varies tremendously; while some verbs select numerous items as object, others select very few. Example:

- 12- **fxcha** [ɔka] peel { * fixed collocation with corn }



Oweleke (1995) argues that the selectable nouns share certain semantic features which qualify them to be selected by the verb. Such features define the manner in which an action is performed; the time or duration of the action, or the physical nature of the noun (that is, weight,

size, quality and quantity of the noun). The features above according to Oweleke's claim, have strong roles to play in determining the selection of nouns by verbs.

Oweleke (2007) in another study investigates the verb- noun selectional restrictions in Igbo dictionaries; using the following dictionaries: Welmers and Welmers (1986), Williamson (1972), Igwe (1999) and Echeruo (1998). In his investigation, she analyses the 'peel' cluster of verbs in the dictionaries. In Echeruo's dictionary, according to Oweleke, the following fall under the 'peel' cluster:

13(a) baa V[HH] peel var – bee

(b) bee V[HH] peel var – baa

(c) kpee V[HH] peel

(d) bacap_x V[HLH] completely peel off skin or rind off tuber of fruit, (Oweleke 2007:123 in Okeke 2015:27).

She observes that all the entries for 'peel' did not reflect the features of selectional constructs. Moreover, no effort is made at discriminating against the specific objects that are selected by each variant and as such fails to reflect the semantic nuances inherent in the language. She also presents the entries of 'peel' in the other three dictionaries applauding Igwe's treatment of selectional restrictions where 'kpe' for instance, selects a good number of peelable objects which are entered separately. Example:

14 (a) **kpè** I. v. t. tear off, remove outer covering, strip, peel, (fruit and vegetables), skin, bark (tree), flay animals, (i.e. deal with husk, peel, rind, bark, skin, hide, scales etc.

(b) ikpè àb [r [kà - to strip; skin a plantain fruit

(c) ìkpè ikpukpe - to remove scales of a fish

(d) ìkpè jìgbq - to peel cassava

(e) ìkpè osisi - to bark a tree

(f) ìkpè qj [- to break open kola nut or skin the seed

(g) ìkpè ugiri - to peel orange with hand

(i) ìkpè unere - to strip banana

The above inclusion helps to bring out the semantic realities of verbs. For Williamson's dictionary (see Oweleke 2007:124), Oweleke observes that Williamson shows a fair application of the selectional restriction in the Onicha dialect but leaves loopholes for wrong interpretations

with the use of ‘etc’. This approach when applied to the peel entries, leave the ‘peelable’ objects unrestrained. For Welmers and Welmers dictionary, the treatment of selectional restriction from Oweleke’s investigation is unsatisfactory. The selection of nouns is not made clear in the entries even though the compilers have to give some descriptions of the instruments used in peeling. But the accompanying nouns are not specified. Oweleke finally recommends that an Igbo dictionary must select appropriate nominals that should co-occur with certain verbs, which should be enclosed in parenthesis. But, like Onumajuru (2005), she contradicts herself by saying that it is the noun that selects the verb and not the other way round.

Welmers (1970), Williamson (1972) and Igwe (1999) categorise the ICVs of the Igbo verb roots in groups in their Igbo-English dictionaries. Williamson (1972:xiv) as cited by Edeoga (2013:11) posits, “It was decided that the dictionary would be much clarified if groups of related words were placed together under a single root”. According to Williamson, nominal and prepositional complements in verbal complex constructions are related words and not the individual verb roots themselves. These verb roots are not arranged semantically, rather, they are arranged alphabetically with the broad structural framework of the dictionary. Welmers holds the same opinion as Williamson that in this type of arrangement, the nominal complements which have semantic resemblances are grouped under one of the many meaning groups of the verb root. For example; a verb root like -ma in Williamson (1972) has 11 meaning groups, that is **-ma 1-ma 11**, while in Igwe (1999), it has **ma I – ma16**. Table 2 below are the summary of some of the meaning groups in both dictionaries:

Table 2 – Groups of the ICVs formed with the verb root –ma as classified by Uchechukwu (2005:70-71)

Williamson (1972)		Igwe (1999)	
-má 1	Know - -má ányá be familiar with attract; -má ífé have sense; be wise -má ákwxkwq to be literate, brainy (Lit. know book)	-má 1	v.t./intr. Know; understand; be or become familiar with. má àhx (lit. to know body) to be or become used to, to suit body (of e.g. drug) -má ákwxkwq to be literate; to be educated; to be learned.
-má 2	(a) jump: -má àmá hop; máfè leap over; (b) shake: -má lilili shiver; márùbé shake; move	-má 2	v.t. teach, influence to become accustomed to -má ákwxkwq influence to

	àni rímárùbé earthquake		become literate, studious, learned. –má ohi influence to become a thief.
-má 3	Stab; throw, pierce; stick in –má rímà pierce, strike with sword, hatchet; –má ósísí plant live stick, cutting –má xla slap	-má 3	v.t/intr. be or become good, nice, beautiful, pleasant –má rímā to be good, nice, pleasant, beautiful.
-má 4	(a) mould: –má òkpókó mould large morsel of pounded food, –mákq compress together; mould together –má ríkpúlú make mould (b) stick together: –má àbxbà be fatty; plump; –má èbùbè mouldy, –mákx embrace	-má 4	v.t(i) tie a knot; tie ends of a thread or rope; tie round (e.g. the body): make noose; hold by gripping. –má áká grip with hand. –má ákp× tie into a fast knot (ii) (a) construct something that catches something else; make a rule, regulation or law; legislate [...]; (b) condemn by application of rules of law [...]; (c) catch or be caught by a trap [...]; –má íkpé convict; condemn prove/pronounce guilty; –má ìwú make rules, laws against
-má 5	–má rímā be good	-má 5	v.t(i) east, hurl, sling, throw something long (baton, truncheon, spear etc.) –má ñkwèké throw horizontally a long piece of stick (iii) throw or hurl oneself forward. mábà hurl oneself into; leap into.
-má 6	beat (of rain and sun) –mádè beat by rain to the skin/beat soggy	-má 6	v.t stick in; put into (e.g. hand); thrust; push into; stab; pierce. –má áká put, push or thrust hand into –má rímà stab, thrust or pierce with a knife.
-má 7	Wrap; tie –má ákwà/qgq`d` wear, tie wrapper	-má 7	v.t (i) ram, beat down (e.g soil, new earthen floor), –má ájā ram the soil (ii) lay on, lay over (of bunch of leaves, cover), –má áh[h[a n'édè lay leaves on cocoyam
-má 8	announce –má àt` point at an example; compare, –má íkpē condemn; be condemned.	-má 8	v.t./intr. shake up/forcefully; agitate; sift by haking –má ájárátá sift pebbles in water to clean them.
-má 9	Rub, press: –málà rub; stroke; soothe; massage; –málx` óbì sooth the heart	-má 9	v.t. make/produce noise with motion of air in the mouth or nose –má òpì blow flute, trumpet, horn
-má 10	–má qsq` suck the teeth in contempt	-má 10	v.t. develop, grow, produce (flower, fungus) –má èvùvù get mouldy; má àbxbà become fat.
-má 11	(agwa) –má miss (àgwà xnq) –má be home sick	-má 11	v.t. paint or rub on, rub between the palms of the hand –má únyì paint or rub on charcoal
		-má 12	v.t. cut off; sever –má án× cut off flesh from
		-má 13	v.t. start/set off early –má àwq` –má xzq` start/begin set off early

		-má 14	v.t. bluff; scare, -má òj àk [r̀] intimidate/put off by pretending hostility.
		-má 15	v.t./intr be extra/in excess -má íhē have extra/more than required
		-má 16	Particle; functioning as specific reference and emphasis to a pronoun, having the sense of ‘the’ [...] m̀x mà ónyé byārā... I know the one who came

In Uchechukwu’s observation, Williamson’s –má 2 corresponds with Igwe’s –má 8, while Igwe’s má 2 has no equivalent in Williamson’s entries. Another similar situation according to Okeke (2015:32) is Williamson’s –má 4(a), which corresponds with Igwe’s –má 10. In addition to this, there are also cases where a group in one author’s system corresponds to two different groups in the other author’s system. For instance Williamson has ‘stab, throw, pierce’ in –má 3, while Igwe has ‘throw’ in his –má 5(a) and ‘stab and pierce’ in –má 6. Some glosses and their examples also bring out both the author’s perspective on the structure, as well as the dialectal differences between the two dictionaries. The best examples here are Williamson’s –má 4(b) and Igwe’s –má 10. While Williamson glosses this group as ‘stick together’, Igwe glosses his own as ‘develop, grow or produce’. The major difference is that Williamson has the gradual but concentrated covering of a surface through mould growth, as her perspective, while Igwe has the general sense of ‘growth/put on flesh within the biological domain as his focus. But one of the author’s illustrative examples in this group is a dialectal variation. However, in the two dictionaries, it is mainly the nominal expressions that can be combined with the verb roots that are used to form the meaning groups. But as Uchechukwu (2011) points out, there is silence on the significance of the verb roots themselves. Therefore, it is not clear from the lexicographic assessment whether or not the different meaning groups of each verb root in the dictionaries are related in any way. Moreover, one cannot easily establish any form of semantic contribution of the verb root to an ICV construction.

Uwalaka’s (1988) work is another good inspiring one in the study of Igbo verb. It is an interesting aspect of Igbo syntax and semantics where a select or (set) group of verbs known as “subject – object” switching verbs are studied. It is an aspect of Igbo syntax where the grammatical subject and object of a verb can freely switch their positions with the sentences still retaining its meaning. This phenomenon as pointed out earlier was first discussed extensively in Uwalaka (1988:43-52). Since then, many Igbo scholars have not been paying much, if any

attention, to this aspect of Igbo syntax. According to Uwalaka (1988), using the case grammar approach, this phenomenon is not allowed by all Igbo verbs but by experiential and process verbs. But the above assertion by Uwalaka has been disproved by Agbo (2009), who tested other verbs that are not experience or process verbs and discovered their switching ability, (see Agbo 2009 for details). The (1988) model of Uwalaka's case model is based on the fact that for each major semantic class of Igbo verbs, there is a corresponding semantic case role. It adopts assumption that for each simple sentence, one case is ascribed to one NP. In Uwalaka (1988), the following semantic case roles are adopted: Agent; Instrument; Causative; Experiencer; Patient; Attribuant; Source and Goal. Furthermore, Uwalaka identifies six classes of Igbo verbs. These are action verbs, verbs of occurrence, experiential verbs, verbs of quality. Others include: locative verbs and identificatory and equative verbs. In her conclusion, she says that only the experiential and process (verbs of occurrence) verbs in Igbo allow 'subject-object' switching, (Uwalaka 1988). Example:

15 (a) Àda kpùrù ìshi
 Ada put-on -rv (past) blindness

Ada is blind

(b) Ishi kpùrù Ada

Blindness put-on rV (past) Ada

Ada is blind

16 (a) Òbi ch[r[qch[

Obi laugh -rV(past) laugh

Obi laughed (laughter)

(b) Qch[ch[r[obi

Laugh laugh -rV(past) Obi

Obi laughed

17 (a) Ada kwara xkwara

Ada cough -rV(past) cough

Ada coughed

(b) Xkwara kwara Ada

Cough cough -rV(past) Ada

Ada coughed

The case role experience from example 15-17 is assigned to a grammatical subject with a +animate feature. Consequently, with regard to the transitivity or otherwise of Igbo verbs, Uwalaka (1983:7-15) posits the pronominalisation test for direct objects and transitive verbs. According to her, if an NP can be replaced by a pronoun, and be used, unlike the direct object, as the only complement in a sentence, then that NP is the direct object and its verb is transitive. Then again, Uwalaka describes the relationship between the verb and its PP/Np complement as a case of ‘high selectivity’, (see Uwalaka 1983:36). But she fails to explain very well whether it is the noun that selects the verb or the verb that selects the noun.

It is based on the views of scholars on Igbo verbs that one finds out that it is possible to combine one verb root with many nouns and or prepositional phrases. Nwachukwu (1987:83) opines that Igbo verbs in such circumstances are without meaning but Emenanjo (2005) says that such nominal complements or their verbs have identifiable or independent meaning. In addition, Ubahakwe (1976), Manfredi (1991) and Hale, Ihionu and Manfredi (1995) see Igbo verb root as semantically vague in meaning. But eventually they all agree that Igbo verbs co-exist with some nominal complements in the deep structure to form a semantic unit according to Chafe (1970).

Uchechukwu (2011:10) however observes that “some remarkable issues were either not raised at all, or raised but not addressed in the syntactic analysis of Igbo verbs especially in Nwachukwu (1987) and Emenanjo (1984).” The issues he framed in the form of questions. They are as follows:

- a) Are the meanings of the verbal complexes compositional? That is, is it always the case that a combination of a verb root with a nominal or prepositional phrase always yields a sum total of the components?
- b) Emenanjo (1975:165) notes that the ICV structure is the most remarkable feature of the Igbo language. Is the ICV structure productive in the language? If it is productive, does its meaning change with each new verbal complex?
- c) Both Emenanjo and Nwachukwu have described the ICV construction as an idiom (Emenanjo 1984:28 and Nwachukwu 1987:79; 85). In what sense is the Igbo verbal complex an idiom?
- d) Nwachukwu concludes that the verb root is selective with regard to the noun it combines with (Nwachukwu 1987:48). In what way is the verb root selective?

With reference to the observation above, Uchechukwu (2011:11) posits that “questions a and b were not raised in the previous works on the language, while issues connected with questions c and d were raised but not addressed”.

Uchechukwu, (2004), (2005), (2006) and (2011) in order to proffer answers to the above nagging questions, adopts the cognitive semantics approach in his investigation of the Igbo verb. Uchechukwu (2011:23) in his definition of cognitive linguistics says, “cognitive linguistics is an approach to language analysis that originated in the late 70’s and early 80’s of the last century”, especially in the works of George Lackoff, Ronald Langacker and Leonard Talmy. It does not embody one theoretical approach, neither is it to be associated with one name alone. Gibbs (1996) sees the endeavour as deserving the term cognitive, because “cognitive linguistics incorporates a wide range of data from other disciplines, seeks for correspondences between conceptual thought, bodily experience and linguistic structure, and also seeks to discover the actual contents of human cognition”. Arising from this assumption, according to Uchechukwu, is the view that the areas of grammar that have been described for decades as distinct models are seen within this approach as sharing the same common organizational principles. Again, Gibbs (1996) says that language structure should reflect what is known about human cognition from other cognitive sciences like neuroscience, psychology, philosophy and so on. Here, language and linguistic organisation are seen as reflecting general cognitive ability or principle, and not just cognitive principles that are peculiar to language. Uchechukwu (2011) is of the view that the study of the Igbo verb using the cognitive semantic approach cannot merely be linguistic, but must involve the incorporation of definite patterns of human conceptualisation, and again examine how such patterns are realized in the ICV structures they are formed with.

In line with this conclusion, the application of the cognitive linguistic approach has shown Igbo verb roots to have meanings that arise from specific image schemata and their metaphoric and metonymic extensions (Uchechukwu (2004a). In addition to this, the identified semantic extensions are also connected with minute meaning differences. This raises the problem of how many meanings that can be differentiated for a single verb root. In answer to the question above, Uchechukwu (2005) investigates the homophony of the verb root **-ma** and its problems using the lexicographic presentations of Williamson (1972) and Igwe (1999). He points out that the lexicographic presentations of the verb root **-ma** is typical of the treatment of all other verb root of the language. But although the two dictionaries adopt a similar approach in handling the

verb root, their points of difference are greater than their points of similarity. However, the conclusions arrived at with regard to this particular verb root also apply to the treatment of all the other verb roots of the languages. In doing that, he identifies the semantic extensions which are connected with minute meanings that can be differentiated for a single verb root. By adopting the image schemata of cognitive semantics, Uchechukwu asserts that the separation of the meaning of the verb root to the point of semantic un-relatedness has its origin in the lexicographer's decision-making process, and should not be seen as pure and unchangeable facts of the language. This conclusion according to him, is further strengthened through the image schema approach and the view of the network model. Moreso, Uchechukwu (2011:45), by using the image schema also analyses the Igbo verb root '-tx'. The image schema as he explains is "condensed but abstract and dynamic redescription of perceptual interactions or experiences of human beings". They function as organizing structures for partially ordering and forming human experience, but are also modified by concrete human experiences. However, they are not specific to any sensory modality, (Johnson 1987, Lackoff 1987).

Using the image schema in the analysis of individual Igbo verb, Uchechukwu (2011:47-48) identifies the emergence of two tendencies: "either the verb root's image schema turns out to be an instance of one of the image schemata in the cognitive linguistic literature (like the image schema of -tx being an instance of the source-path-goal schema), or the schema turns out to be a combination of different image schemas, thus forming a kind of schema matrix: like the schema of the verb root -gba, (Uchechukwu 2004a). Example:

18 (a) Úchè nà-àtu égwù

Uche Aux throw fear

Subj-Exper Obj-stimulus

[Literal: Uche is throwing fear]

"Uche is afraid"

(b) Égwù nà-àtx Úchè

Fear Aux -throw Uche

Subj - stimulus - obj - Exper

[Literal: Fear is landing on Uche]

Uche is scared.

In his analysis of the above example, he posits that with construal of experience constructions in the Igbo language, the literal translation of sentences (*18a) as ‘Uche is throwing fear’ aligns with the agent – oriented constructions, where an agent being in a state or carrying out an action that ends up only with the agent and does not reach out to affect other entity. The source of the fear emotion in the sentence is Uche, but the emotion is not directed at any entity. Instead, it remains with the source and affects only the source. The agency of the source, however, is in the fact that Uche is an entity that can act on his own. In (18b), ‘fear is landing on Uche; it does not have an agent-like subject and the event has no source.

In relation to the –tx verbal complex, Uchechukwu avers that it has a starting and end points, with ascent and descent profiles. Example:

19. –tx **bqqlx** ‘throw a ball’ has no less than two possible meanings each of which profiles the whole schema. the first is the situation of simply throwing a ball to someone, while the second could be a game of handball. In both instances, the ball must always be thrown from one person to another. 20. –tx **vootu** ‘cast a vote’. One could ask here why at all this particular verb root was chosen immediately there was the need to express cast vote in the language. The motivation could well be seen in the simple act of dropping one’s vote into a ballot box, which is a profile of descent and end point of the –tx schema. In his summary, Uchechukwu (2011) raises three main issues in connection with previous approaches to the Igbo verbal complex which are the semantics of Igbo verb, the semantics of verb’s inherent complement and the selectional relationship between the verb and its complement in a verbal complex structure. The effort to examine the semantics of the verb root with the cognitive linguistics tool of image schema analysis is connected with the general conclusion within the syntactic approach of the verb root. However, on the basis of an image schema motivation of its semantics, it can be argued that the root is not empty; neither does it become practically meaningless as a result of an increase in the number of verbal complexes formed with it. Instead, through an image schema analysis, one could establish a cognitive motivation of its semantics in the form of its root schema. The root schema is configurational in the sense that it is a set of points that are handled together as part of a single gestalt (Langacker (1957), which gives it a constant conceptual identity in different domains. This configuration forms the base for conceptualizing and profiling the different components or segments of the schema. The above overview clearly shows that works on Igbo verb roots by different scholars over the years are not context-based.

Just a few studies have been done in the cognitive semantic analysis of verbs in Igbo by Igbo scholars. They include: Uchechukwu (2004; 2011), Mbah and Edeoga (2012), Ogbonna (2012), Ifeagwazi (2013) and Okeke (2015).

Uchechukwu (2004) investigates the Igbo verb cluster the ‘-gba cluster’, using the cognitive approach. The study is informed by the fact that the Igbo verbal clusters have been regarded as verbal dummies and idioms. This is as a result of scholars failing to look at their cognitive organisation and motivation, as well as the metaphorical extension of their concrete meanings. The objective of the study is therefore, to develop a model knowledge base for the gba-cluster, by clearly showing the cognitive aspects of the Igbo lexicon that have been dismissed as verbal dummy. He studies the verb with the purpose of establishing (1) the concrete meanings of the chosen verbal dummy as a knowledge base. (2) the building of an ontology that is anchored in this knowledge base. (3) making explicit the organising principles behind the union of the vowel nodes with the verb root consonant to form the verb base. (4) clarifying the lexical networks arising from the nodes, as a link between the knowledge base and the EVENTS that are coded through the verb.

He identifies the core meanings of ‘gba’, for instance, BURST as in -gba qkx ‘burn/set on fire’ [qkx ‘fire’] MOTION as in -gba qsq ‘run’, [qsq ‘running/race’], SCATTER as in -gba mmiri ‘spray water’ [mmiri ‘water’], EJECT as in -gba egbe ‘shoot gun’ [egbe ‘gun’] etc. Adopting the cognitive approach in the analysis of the -gba cluster and also comparing Williamson’s (1972) and Igwe’s (1999) presentation of -gba in their dictionaries, the study among other things, reveals that there is no systematic study of the verb and the NP/PP structures they take. This fact according to the study, resulted to their interpretations of the verbal complexes formed with –gba as verbal dummies.

Uchechukwu’s (2004) study has resemblances with the present study in the sense that both of them study the verb ‘gba’ with cognitive semantic approach, including the use of image schemata. But the area of divergence is mainly in the analysis. In the analysis, Uchechukwu did not analyse the verb based on (1) building of ‘gba’ dictionary (2) nature of the complement (3) argument structure. Again, he did not look at the interrelationships among the ‘gba’ verbal complexes which include: the similarities and differences, tone variations. Equally, he fails to study what underlies the ‘gba’ verbal complexes like same subject verb-forms, action-result verb-forms, fossilized verb-forms, cross-referred verb-forms and ambiguous verb-forms.

Furthermore, he never used a combination of image schema and two or three image schemata to analyse the verb 'gba'. In this present study, the dictionary of -gba verbal complexes is built and analysed accordingly by looking at the following: nature of the complement, the argument structure, etc in the simple verb. Furthermore, in the analysis of verbal compound, the present study contrasts the interrelationships among the 'gba' verbal complexes; underlying the verb are: same subject verb-forms, action-result verb-forms, fossilized verb-forms, crossrefered verb-forms, to mention but these few. Also, this study aims to carry out detailed investigation of the nature of 'gba' verbal complexes in various Igbo dialects. This is no doubt, advancement in the analysis of the verb 'gba'. It has equally provided a step further in the analysis of the verb using a cognitive semantic approach. All the same, Uchechukwu's study is carried out with standard Igbo which speakers constitute a very small fraction of the entire Igbo race and which has not been imbibed by many to provide wide spectrum of features of the 'gba' verbal complexes. Again, the size of the population for the research is not representative enough for the speakers of Igbo language. This is perhaps because the study is limited to the standard variety. With these observations, therefore, it becomes necessary to investigate further the cognitive semantic analysis of the Igbo verb 'gba' in different Igbo dialects. Furthermore, it is important to conduct a further cognitive semantic analysis of the Igbo verb 'gba' to confirm or dispute the claims by the earlier studies

He also did a study to examine the semantics of the Igbo verb *tx* 'throw', with the cognitive linguistic tool of image schema analysis. This he did because of the general conclusion of some Igbo scholars within the syntactic approach that the verb root is empty. This conclusion, he said, is best reflected in Nwachukwu's (1987:83) statement that "the greater the number of verbal complexes formed with a verb root, the more practically meaningless the verb root becomes". Uchechukwu therefore, on the basis of an image schema analysis argues that the Igbo verb is not empty; neither does it become practically meaningless as a result of an increase in the number of verbal complexes formed with it. He identifies the verb *tx* as an instance of SOURCE – PATH – GOAL schema.

The semantics of the Igbo verb *sè* 'draw' has been examined by Mbah and Edeoga (2012). In their study, they examine the role of CONTAINER, SOURCE – PATH- GOAL and COMPULSION (FORCE) schemas play in conceptual interaction with the verb *sè* especially in relation to metaphor. The study reveals that the common human experience of maturing and

interacting in the society motivates basic conceptual structures that make understanding of language possible. Furthermore, the study also reveals that the verb *sè* is not empty and that metaphor and image schemas can be used to extend meaning by transforming one conceptualisation into another that is roughly equivalent in terms of content but differs in how this content is construed.

Ogbonna (2012) examines the semantic analysis of the Igbo verb *kwà* ‘push’. In her own study, she examines the verb *kwà* using a combination of image schema to capture the complex conceptualisation of this verb. The image schemata are:

PATH (SOURCE – PATH - GOAL), COUNTERFORCE and ENABLEMENT types of FORCE schema. The study reveals that the image schemata of SOURCE – PATH – GOAL reflect that our journeys typically have a beginning and an end, and a sequence of places on the way. The study also observes that *kwà* fit into two types of FORCE image schema: COUNTERFORCE, which involves the active meeting of physical or metaphorical opposing forces, and ENABLEMENT, which derives from our sense of potential energy or lack of it, in relation to the performance of a specific task such as ‘push’. Her analysis finally reveals that these image schemas of *kwà* are experientially based conceptual constructs which can be metaphorically extended across a range of domains, typically shifting from the external and concrete to the internal and abstract domains.

Okeke (2015) studies the cognitive domains of the sense relations in selected Igbo verbs. In his study, he uses polysemy to analyse and classify the Igbo verbs from the lexical semantic perspective in literary works. The over-view shows that knowledge of language emerges from language use which provides an opportunity for cognitive linguistics to engage with the social interactional nature of language. Cognitive semantic seem to offer a new approach to processing words as it examines the role of human imagination in exploring meaning in human language.

The cognitive semantics of the Igbo verb ‘*bà*’ ‘enter’ has been examined by Ifeagwazi (2013). In her study, she uses metonymy and image schemata in analysing some Igbo inherent complement verb (ICV) constructions, compound verb structures, verbal complex structures and sentences that contain the verb ‘*bà*’. Also the image schemata of containment, path and force form the basis of analysis for conceptualizing the ‘*bà*’ based Igbo constructions. The study reveals that with appropriate complements, the verb ‘*bà*’ which is commonly glossed as ‘enter’ can yield other semantic imports. The study also reveals that the image schemata and the

metonymic constructs help to extend meaning from the external and concrete to the internal and abstract domains. The study concludes that the Igbo verb is not an empty dummy as posits by some scholars.

2.4 Summary of literature review

Looking at the above review of relevant related literature on the theory of cognitive linguistics, cognitive semantics, cognitive lexical semantics, polysemy and sense relations; one finds out that cognitive linguistics as well as cognitive semantics offers a suitable tool for a comprehensive analysis of polysemy. Several books, articles and studies quoted in this study and others that are related to the topic of discussion, focus on different components: Lackoff and Johnson (1980) write on metaphor and metonymy, Uchechukwu (2004), (2005), (2011) on image schema of different Igbo verbs, Mbah and Edeoga (2012) on image schema of Igbo verb 'sè', Ogbanna (2012) on analysis of 'kwà', Ifeagwazi (2013) on the analysis of 'bá' and others, with the exception of Uchechukwu (2004), did not in any way discuss Igbo verb gba 'set forth' using the cognitive semantic approach and analogical mapping/image schemata as their theoretical framework. Though Uchechukwu (2004) studies the Igbo verb 'gba' with the cognitive approach, this study differs from his, mainly in the analysis. In his analysis, he did not look at the nature of the complements, the argument structure, the interrelationships among the 'gba' verbal complexes, the tone variations and the similarities and differences among the 'gba' verbal complexes. He equally fails to look at what underlie the verb like same subject verb-forms, action-result verb-forms, fossilized, crossrefred and ambiguous verb-forms.

Therefore, the review of literature clearly shows that this study is an additional contribution on the study of cognitive semantic analysis of the Igbo verb gba 'set forth' from the lexical semantic perspective, hence the importance of this work.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Preamble

This section of the research examines in detail the research methodology in relation to the topic of study. In doing this, attempts are made to define and discuss the research design, research instrument, methods of data collection and procedure for the analysis of data.

3.1 Research design

This study adopts a cognitive semantic approach in the analysis and descriptive method. According to Nworgu (2006), a descriptive research is a scientific method which involves observing and describing data (especially secondary data) without influencing it in any way. It is a valid method for researching specific subjects and as a precursor to more qualitative studies.

3.2 Research instrument

The Igbo verb root ‘gba’ was examined by identifying its manifestations and use in context. The occurrence of the above verb root in different contexts was shown and precisely analysed using image schema as designated.

Validation of instrument

The appropriate Igbo verb to provide the required information for the study was presented to the researcher’s supervisor. Also, two experts in education were approached to determine the appropriateness of the Igbo verb used in the course of this research.

3.3 Method of data collection

In the course of this research, one Igbo verb root ‘gba’ was critically studied. The method of data collection is through introspection and use of secondary sources of data. Also, data were elicited from speakers of different dialects of Igbo.

Some Igbo dictionaries are also consulted to see how the verb root was presented by the lexicographers. The data were outlined, acknowledging the lexicographer’s technical strategies in the use of the verb in different Igbo structures. This helps to compare the Igbo verb in context and out of context. The Igbo verb used is ‘gba’ which is translated in this study as ‘set forth’.

Sample technique and size

The prospective sampling was used to select the respondents. This is because the researcher believes that to draw conclusions based on the sample to the study will produce the expected result of the cognitive semantic analysis of the Igbo verb ‘gba’.

Also considering the enormous work to be done in processing the data to get the required result, and coupled with the fact that it may not be possible to work with all those that may meet with the required qualification, the researcher decided to use a sample population of limited size. Consequently, ten consultants from five Educational zones of the dialect of Igbo were used—five males and five females in each Educational zone. The Educational zones used are Owerri, Abia, Ebonyi, Enugu and Anambra. Out of these numbers, the best six (three males and three females) that met the requirements of the purpose of the study were used. These consultants are people who speak Igbo as their native language as well as command high competence in their different dialects. They are predominantly teachers and scholars of language and linguistics.

3.4 Procedure for data analysis

The data was arranged in groups by the researcher along the lines of polysemy indicating their cognitive domains. Furthermore, all the manifestations of the above verb root are qualitatively analysed lexico-semantically and the image schemata presented accordingly. The interrelationships among the gba verb complexes were x-rayed.

CHAPTER FOUR

THE SINGLE 'GBA' VERBAL COMPLEXES

For one to study the 'gba' verbal complexes, there is a need to divide them into different subheadings for simplification purposes. The subheadings are as follows:

4.1 The Structure of the Igbo Verb

“Based on the complexity of their structure, the Igbo verbs can generally be divided into simple and complex verbs, whereby the simple verb has a consonant-vowel (CV) structure while a complex verb is any verb whose form goes beyond the CV structure of the simple verb”, (Uchechukwu 2011:1). He goes on to say that it can further be divided into (1) simple verb, (2) compound verb: [verb + verb] and [verb + suffix], and (3) verbal complex: [verb+ noun phrase] or [verb + prepositional phrase]. Mbah (1999:138) on the other hand, says that simple verbforms are verbs without affixes like 'b[a]'. A complex verb according to him, is the verb which comprises free verbs with at least one affix e.g 'bata'. He further says that “the affixes in complex verbforms change according to vowel harmony rules. The nature of the verb of the verb root influences the nature of the verb of the affix etc”. While the compound verb is a verb which contains at least two simple verbs that are independent. While the affix in complex verbforms changes, depending on vowel harmony, none of the vowels of compound verbs changes its forms due to vowel harmony e.g 'gbaba', (Mbah 1999: 139).

In view of the above, the simple verb root, according to Uchechukwu (2011), “consists of a consonant-vowel structure, but without the infinitive marker. For example, the verb root *-gba* has the simple CV structure, a combination of the consonant /gb/ and the high tone vowel /a/. With the addition of the infinitive marker <i> it is realised as *igba* 'to kick/play' with a change in the root vowel from a high tone to a downstep. But this is not the same with low tone vowels that retain their tones regardless of whether the infinitive marker is present or not. For example: *-da*+ <i>= *ida* 'to fall'. He said that all such verb roots with or without the infinitive markers constitute the simple verb roots in the language, and that no structure can occur between the root consonant and the root vowel. Furthermore, the citation form of the verbs is always without the infinitive marker. For example, *-gba* is the citation form of the verb *igba* while *-da* is the citation form for *ida*. The affixation of any structure to the verb does not alter its category as simple verb, (Uchechukwu 2011:1-2).

4.1.1 Conceptualisation of inherent complement verb construction in Igbo

“Inherent complement verb” according to Nwachukwu (1985) or “verbal complex” according to Emenanjo (1987) is a construction made up of a combination of a verb root with a noun or a preposition, represented syntactically as V + NP/PP. Langacker (1987:138) as cited by Uchechukwu (2011:35) opines that, “grammatical structure is based on conventional imagery” , which arises from the mental process connected with the given object of interaction and the communicative intention . Such mental processes according to Uchechukwu have interchangeably been termed perspective, conceptualisation or construal, that is, “capable of making adjustments, thereby transforming one conceptualisation into another that is roughly equivalent in terms of content but differs in how this content is construed” (Langacker 1987:138).

This chapter uses the manipulation of physical objects with the verb root ‘gba’ to illustrate the above assumptions, especially in connection with the conceptualisations associated with ‘gba’ as well as the construal operation which ‘gba’ is used to encode. Typical ‘dynamic’ actions are expressed with this verb root ‘gba’ in the Igbo language, thereby leading to its being generally translated or glossed as ‘set forth’. It shall in addition be seen that the same construal operations of the verbal complexes or psyche verbs formed with the verb root ‘gba’ encode similar conceptualisations as when the verb root is used to manipulate concrete objects.

4.1.2 Conceptualisation of ‘gba’ based sentences

Here, the verb ‘gba’ is discussed according to how it is grouped. It is viewed in the following ways as discussed hereunder.

4.1.3 Gba sentences based on bifurcation

This section is an analysis of gba verbal complexes that involve complements all of which have bifurcation in their physical form. It is this common feature that gets mapped unto the image schemata that are analysed hereunder.

1.	gba	àbà ̀ngà̀nà̀bà àb́x́q mkṕl nt[q	bifurcate branches double pair multiple (Ezeagu dialect)	 Image schema is source and path
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The senses described by the sentences below can be extended using metaphor. eg.

S/N	Verbal Structure	Sentence	Meaning Types
1 a b	gba abà	O si Enugwu b[a n'xzq̣ gba-ra àbà He/she follow Enugwu come prep road set forth rV past bifurcate [Literal: He/she follow Enugwu come to the road bifurcation] He/she came from Enugu to a bifurcated road He/she is in a confused state	concrete metaphorical
2 a b	Ngànàbà	O rùterè n'osisi gba-ra ngànàbà He/she reach rVpast prep tree set forth rV past branches [Literal: He/she reached on tree branches] He/she reached on a tree that has branches He/she is comfortable.	concrete metaphorical
3 a b	Abxq̣	Ji Uchè nà-à-gba-ka-r[àbxq̣ Yam Uche Aux prefix set forth sufx Encl. two [Literal: yam Uche is always two] Uche's yam is always double Uche is always lucky/she always has double gain	concrete metaphorical
4 a b	mkp[̣	Ogè tàrà ak[gba-ra mkp[̣ Oge chew rV past kernel set forth rV past pair [Literal: Oge eat kernel that is pair] Oge chewed a kernel with two nuts. Oge has a cog in his wheel	concrete metaphorical
5 a b	nt[q̣	Nwa m gá-à-gba nt[q̣ be g[̣ Child my Aux prefix set forth multiply place you [Literal: Child my will be multiple house you] My child will bear many children in your house. My child will be multiplied in your house.	concrete metaphorical

What holds the complements together is being more than one.
The nature of the complement in all instances of (1-5) is that

they grow into multiple units or branches. The verb is therefore a copulative verb, which does not assign case to the complement. The complements of the verbs are therefore nominal adjectives.

The argument structure of the verb in examples (1) and (2) are V(NPP). For instance, in example (1) "Q nq n'xzq gbara aba", 'Q' is N while 'n'xzq' is PP. Also in example (2) "Q nq n'osisi gbara nganaba", 'Q' is N while 'n'osisi' is PP. In examples (3), (4) and (5), the argument structure is V(NN), it is a second degree verb. For instance, in example (3) "Ji Uche na-agbakar[abxq". 'Ji Uche' is N₁, while 'abxq' is N₂. Equally, in examples (4) and (5) the same thing applies. In (4) 'Oge' is N₁, 'ak[' is N₂. In (5), 'nwa m' is N₁, 'nt[q' is N₂.

In the cognitive interpretation, all the examples in (1a), (2a), (3a), (4a) and (5a) are concrete or physical instantiation of the verb set forth in real life social activity while the (b) examples like (1b), (2b), (3b), (4b) and (5b) express the same movement but within the psychological domain, hence the (b) examples are metaphorical extensions of the meanings in (a) examples. The concrete meaning is mapped unto the abstract; for instance, in example (1) 'aba' – bifurcate, in actual sense, is a road that is up to two or more. So, when one is on a bifurcated road, mentally, one is confused on which 'road' to take, assuming one does not know the road. Likewise, in the other examples, it is the knowledge from the concrete meanings that is used to derive the abstract or metaphorical meanings.

The image schema used to interpret the verb is Source and Path schema. For example as analysed in the sentences thus, in (1), 'Enugwu' is the source, the distance from there to the road is the path. Also in example (2), from the place he started is the source, the distance from there to the tree is the path. Equally, in example (3) The very day he planted the yam is the source. From that time till the harvesting period is the path. In example (4), the point where Oge started becomes the source. The path is evoked through the distance covered to get at the venue of the palm kernel. Finally, in example (5), my house is the source. The length of time taken for my child to have children is the path.

4.1.4 Gba verbal complex based liquefaction

Here, the ‘gba’ verbal complexes include complements that have liquid in their concrete form. This feature, which they share together, is mapped unto the mental by image schemata which are analysed below:

6.	gba	abx	discharge pus	The image schema is container
		ùshi/ahx	ejaculate/discharge sperm	
		afq	running bowels	
		àm[r[urinate forcefully	
		shi/ñs[defecate forcefully	
		nkwx	yield wine	
		ezi	menstruate	
		mnee	bleed	
		mmanx	yield oil	
		mmiri	yield water/water something	
		q̄sxsx	sweat	
		mmanya	exude wine (of wine being tapped)	
		anya mmiri	shed tears	

S/N	Verbal Structure	Sentence	Meaning Types
6	gba abx	Otuto ya gba-px-rx̄ abx taà Boil him set forth open rV past pus today [Literal: boil him discharge pus today] His boil discharged pus today His/her secret was exposed today	concrete metaphorical
7	ùshi/ahx	Agx gba-ra ùshi/ahx a hxr̄x̄ anya Agx set forth rV past sperm one see rV past eye [Literal: Agx discharged sperm one see eye] Agx discharged sperm that was seen Agx produced his replica/carbon copy	concrete metaphorical
8	Ezi	Nneka nà-à-gba ezi ugbu à Nneka Aux prefix set forth outside now Literal: Nneka is running outside now Nneka runs outside Nneka is not clean	concrete metaphorical
9	Mnee	Isi ya nà-à-gba mnee Head him Aux prefix set forth blood Literal: head him is bleeding blood His head is bleeding He/she is in a critical condition	concrete metaphorical
10	Mmanx	Akwx ya nà-à-gba mmanx Palm nut him/her Aux prefix set forth oil	

a b		[Literal: Palm nut him is flowing oil] His/her palm nut yields oil His/her days have broken	concrete metaphorical
11 a b	mmanya	Òbi nà-à-gba mmanya Ada taa Obi Aux prefix set forth wine Ada today [Literal: Obi is kicking Ada's wine today] Obi kicks Ada's wine today Ada's traditional marriage is taking place today	concrete metaphorical
12 a b	sh[/ns[Q gba-ra ns[/nsh[qkx He/she set forth rV past excreta hot [Literal: He/She passed shit hot] He/she forcefully defecated hot excreta He/she was taken aback	concrete metaphorical
13 a b	Afq	Anx ewu na-a-gba ya afq Meat goat Auxprefix set forth him stomach [Literal: goat meat is making him defecate] Goat meat causes him diarrhea Goat meat is an eyesore to him	concrete metaphorical
14 a b	Mmiri	Odo nà-à-gba Xzq mmiri qkx Odo Aux prefix set forth Xzq water hot [Literal: Odo is watering Xzq water hot] Odo is splashing hot water on Xzq Odo is maltreating Xzq	concrete metaphorical
15 a b	Qsxsx	Ebo mèrè ihe gba-ra ya qsxsx Ebo do rVpast thing set forth rV past him sweat [Literal: Ebo do something that caused him sweat] Ebo did something that made him sweat He did a Herculean task	concrete metaphorical
16 a b	anyammiri	Ihe Ndx mè-rè Chiqma nà-à-gba ya anya mmiri Thing Ndx do rV past Chioma Aux prefix set forth her eye water [Literal: Thing Ndx do Chiqma making her shed tears] What Ndx did to Chiqma made her shed tears What Ndx did to Chiqma is very painful	concrete metaphorical
17 a	am[r[Ibè gba-ra onwe ya am[r[n'ihu qhà Ibe set forth wash rV past self him urine prep face public [Literal: Ibe washed self him urine in public] Ibe urinated on himself in public	concrete

b		Ibe made himself an object of caricature	metaphorical
18	Nkwx	Ike ga-a-gba nkwx echi Ike Aux prefix set forth palm tree tomorrow [Literal: Ike will kick palm tree tomorrow]	
a		Ike will uproot palm tree tomorrow	concrete
b		Ike will perform a traditional marriage ceremony tomorrow	metaphorical
19	Qgwx	Q gba-ra qgw` ya]xq ugbu a H/she set forth rVpast medicine him/her drink now [literal: he/she take medicine him/her drink now]	
a		He/she drank her medicine now He/she minded his/her business	concrete metaphorical

The nature of the complement in examples 6-19 is that they are liquefied or liquids. They are all watery in nature. None of the I.Cs is in a solid state, . eg. 'abx', pus, ushi, sperm, am[r[, urine ns[' excreta etc. Unlike examples 1-5 which have predicative adjectival meanings, because 'gba' is copular, in 6-19, the verb is dynamic verb. The complements are assigned theta function, namely theme.

One finds out that the argument structure in examples 6, 7, 8, 9, 10, 11 and 12 is V(NN). The verb is a second degree verb. For instance, in (6) 'otuto ya' is N₁ and 'abx' is N₂. In (7), 'Agx' is N₁ while 'ushi' is N₂. In (8), 'Nneka' is N₁ while 'ezi' is N₂; in example (9) 'isi ya' is N₁ and 'mmee' is N₂. In example (10), 'akwx' is N₁ while 'mmanx' is N₂. Also in example (11), 'Obi' is N₁ while 'mmanya' is N₂ etc. In examples (12) - (18), the argument structure is V(NNN). The verb is a third degree verb. In example (12), 'Q' is N₁ and 'ns[while 'qkx' is N₃. Again in (13) 'anx ewu na-agba ya afq', 'anx ewu' is N₁, 'ya' is N₂ while afq is N₃. Example (14) shows that 'Odo' is N₁, 'Xzq' is N₂ and 'mmiri qkx' is N₃. Also in example (15), 'Ebo' is N₁, 'ya' is N₂ and 'qsxsx' is N₃. In example (16), 'Ndx' is N₁ 'Chiqma' is N₂ while 'anya mmiri' is N₃. Furthermore, in

(17), Ibe is N₁, 'onwe ya' is N₂ and 'am[r[' is N₃. Finally, in (18), 'Ike' is N₁, 'nkwx' is N₂ while 'echi' is N₃ etc.

Here, the cognitive interpretation as shown in the tables indicate that all the examples in (6a), (7a), (8a), (9a), (10a) through (19a) are concrete or physical interpretations of the motion of set forth action, while the examples in (6b)- (19b) involve the conceptualisation of the same movement but within the psychological domain, hence all the (b) examples are metaphorical extensions of the concrete meaning in the (a) examples.

The image schema implicated by the verb, gba is the containment schema. For instance in the sentence examples; example (6) 'otuto' boil is the container while 'abx' pus is the contained entity or content. Here, the boil hides the observer's view of the pus so long as it remains in the boil. Therefore, the 'pus' which is the contained entity experiences relative fixity of location. Also in example (7), 'Agx' is the container while 'ushi' sperm is the contained entity. The sperm will not be seen by observers so long as it is in 'Agx' and the sperm experiences relative fixity of location. In example (8) the stomach is the container while excreta is the content. Equally in example (9) 'q' he, is the container while urine 'am[r[' is the contained entity and so on. The Path schema is also implicated in the interpretation.

4.1.5 Gba verbal complex based on growth

We analyse here the gba verb complexes that comprise hair growth that shoots out from a base. The complements have hair in their physical form. This general attribute is what is mapped unto the mental and is metaphorically extended by the image schemata thus:

20.	gba	aj[akx òzè àfx` qnx	grow hair grow pubic hair (Ezeagu dialect) grow hair (as in ram's neck) grow beard	Image schema is source and path
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S/N	Verbal Structure	Sentence	Meaning Types
20	gba aj[Chinwe gba-ra aj[kà qbx'bx Chinwe set forth rV past hair like caterpillar	

a b		[Literal: Chinwe grow hair like caterpillar] Chinwe has hairs like that of a caterpillar Chinwe is a caterpillar	concrete metaphorical
21 a b	Akx	Ugòchi a-gba-a-la akx Ugochi prefix set forth sufx pubic hair [Literal: Ugochi grow pubic hair] Ugochi has grown pubic hairs Ugochi has come of age/Ugochi is matured	concrete metaphorical
22 a b	Ozè	Zx̄ta èbùlè gba-ra òzè Buy ram set forth rV past special kind of hair in the neck [Literal: Buy ram grow special kind of hair in neck] Buy a ram that has a special kind of hair round the neck Buy a mature ram	Concrete Metaphorical
23 a b	qnx	afx̄ Nwata ànagh[á-gba àfx̄ qnx Child prefix Aux Neg Prefix set forth beard mouth [Literal: Child not grow beard mouth] A child does not grow beard Everything has its season	concrete metaphorical

In the nature of the complements here, we have entities that shoot out from a base. For instance, ‘aj[’ is a hair which both man and animal can grow. So, one can say that it shoots out from the skin of a person or animal. Also ‘akx’ is grown by a mature person. So, it shoots **out** from a person’s private part; the root is its base. Also ‘oze’ shoots out from ram that is matured and the root is its base. ‘Afx qnx’ likewise shoots out from a man’s jaw, so the hair root is the base. The verb is therefore a copulative verb, which does not assign case to the complement. Equally, the inherent complement functions as adjectival qualifiers of the subjects of the sentences. Furthermore, the nature of the complement in all the examples are concrete.

The argument structure of the verbs in the examples is V(NN). They are second degree verbs. For instance in (20), ‘Chinwe’ is N₁, ‘aj[’ is N₂. In (21), ‘Ugochi’ is N₁ while ‘akx’ is N₂. Also in example (22) ‘ebule’ is N₁ while ‘oze’ is N₂. In example (23), ‘nwata’ and ‘afx qnx’ is N₁ and N₂ respectively.

The cognitive interpretation in all the examples in (20a), (21a), (22a) and (23a) as shown in the table are concrete or physical instantiation of the motion of ‘set forth’ action. On the other hand, the examples in (20b), (21b), (22b) and (23b) involve the conceptualisation of the same

movement of setting forth but within the psychological domain, hence, the examples in (20b) through (23b) are the metaphorical extensions of the concrete meanings of set forth in examples(20a)-(23a). The mapping of the abstract on the concrete stems from the fact that it is from the knowledge we have of the concrete that the abstract is derived. For instance, in example (20), ‘q̄b̄x̄b̄x̄’(caterpillar) is known for its hairness. No man can be as hairy as a caterpillar but to show that somebody is hairy; that comparison would be made. In example (21), ‘ak̄x̄’ in the Ezeagu dialect means ‘pubic hair’. A child does not have pubic hair. Whoever gets it has come of age.

The image schema used in the mapping by the gba verb complex is the Source and Path schema. For example, as analysed in the sentences; in example (20) “Chinwe gbara aj[ka q̄b̄x̄b̄x̄’, the hair root is the source, while the outward projection is the path. Also in example (21), “Ugochi gbara ak̄x̄’, the pubic hair root is the source and the outward projection is the path. In these examples, the projection of the agent from a source to a path is internal to the agent and it still makes the schema the Path schema.

4.1.6 Gba verbal complex based on instrumentality

The gba verbal complexes whose complements involve instruments for shooting in their physical forms are analysed using the image schema.

24.	gba	egbè àk̄x̄ akwa nta bq̄q̄l̄x̄ x̄kw̄x̄ mgbq	shoot gun shoot arrow funeral ceremony hunting kick ball kick shoot bullet	Image schema is force
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S/N	Verbal Structure	Sentence	Meaning Types
24 a b	gba nta	Onye na-a-gba nta nà-àd[ntà Person Aux prefix set forth hunt Aux prefix be small [Literal: Person shooting hunt is small] One who hunts is usually small There are no riches in hunting	concrete metaphorical
25	Egbè	Obi nà-à-gba egbè q̄nx̄ Obi Aux prefix set forth gun mouth	

a b		[Literal: Obi is shooting gun mouth] Obi is shooting with his mouth Obi is a braggart	concrete metaphorical
26 a b	Akx	Q gba-ra ùdèlè àkx He/She set forth rV past vulture arrow [Literal: He/She shoot vulture arrow] He/She shot at a vulture He/She made a futile effort	concrete metaphor
27 a b	Akwa	Èmeka gba-ra akwa ego ya Emeka set forth rV past cry money him [Emeka do cry money him] Emeka cried for his money Emeka made effort in futility	Concrete Metaphorical
28 a b	Bqqlx`	Q gba-ra ya bqqlx` n'isi He/She set forth rV past him ball prep head [Literal: He kicked him ball in head] He/She kicked/shot ball on his head He deceived him	concrete metaphorical
29 a b	Xkwx	Q gba-ra ya xkwx n'eze He/She set forth rV past him leg prep teeth [Literal: He/She kicked him leg in teeth] He/She kicked him in the teeth He bribed him	concrete metaphorical
30 a b	Mgbq	Ode gba-ra nwunye ya mgbq Ode set forth rV past wife him bullet [Literal: Ode shoot wife him bullet] Ode shot bullet at his wife Ode impregnated his wife	concrete metaphorical

The complements in the examples are instruments (for shooting). So, they have the ability of kicking or being shot. These make accessible to the subcategorisation frame of the verb. The argument structure in example (24) is V(NN), it is a second degree verb. For instance ‘onye’ is the N₁ and ‘nta’ is the N₂. Examples (25) through (30) have the argument structure of V(NNN), the verb is a third degree verb. For instance, in (25), ‘Qbi’ is N₁, ‘egbe’ is N₂ and ‘qnx’ is N₃. Example 26, ‘Q’ is N₁, ‘udele’ is N₂ while ‘akx’ is N₃. In (27) ‘Emeka’ is N₁, ‘akwa’ is N₂ while ‘nna ya’ is N₃ etc. Furthermore, in example (28), ‘Q’ is N₁ ‘ya’ is N₂ while ‘bqqlx’ is N₃. Equally in examples (29) and (30) ‘Q’ is N₁, ‘ya’ is N₂ and ‘xkwx’ is N₃ in (29) while in (30), ‘Ode’ is N₁, ‘nwunye ya’ is N₂ while ‘mgbq’ is N₃

The cognitive interpretation of all the (a) examples like 24a, 25a, 26a to 30a in the above table indicate that they are the concrete interpretation of the motion of ‘set forth’ but while the (b) examples like 24b, 25b, 26b to 30b involve the conceptualisation of the same movement, they are within the abstract or psychological domain. Therefore, the (b) examples are the metaphorical extensions of the concrete meaning in (a). The mapping of the concrete to the abstract portrays a natural semantic path in the language. One uses the knowledge of setting forth an instrument to understand the abstract meaning of setting forth metaphorical meaning. For instance in example (24) in ‘egbe qnx’ is understood as somebody boasting. So, that is where the metaphorical or abstract meaning comes from. In example (25), ‘udele’, vulture is not animal eaten by many; so shooting at it is making a futile or wasteful effort.

The image schema implicated here by gba verb complex is force schema.

4.1.7 Gba verbal complex based on promiscuity

In this section, the gba verb complexes which are associated with promiscuity are analysed. Here, the complements of the verbs are promiscuous in their physical form. It is therefore this feature they have in common and is profiled by the image schemata and analysed in this way.

31	gba	àkwǎnà n’ezi òkòso nr[ra qkwa	prostitution prostitution play an okoso game concubinage have sexual relationship with a widow/woman	Image schema is source and goal
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S/N	Verbal Structure	Sentence	Meaning Types
31 a b	gba àkwǎnà	Uchè nà-à-gba àkwǎnà xkà Uche Aux prefix set forth prostitution church [Literal: Uche is prostituting prostitution church] Uche is a church prostitute/Uche runs from one church to the other Uche has no choice of church	concrete metaphorical
32 a b	Òkòso	Àda mà à-gba òkòso n’àkwà Ada know prefix set forth okoso game prep bed [Literal: Ada know dance okoso game in bed]	concrete metaphorical

		Ada knows how to play cone game on bed Ada is a sex maniac	
33 a b	n̄r[ra	Nkechi n̄a-a-gba n̄r[ra Nkechi Aux prefix set forth concubine [Literal: Nkechi is running from husband to another] Nkechi runs from one husband to another man Nkechi is a flirt	concrete metaphorical
34 a b	Qkwa	Nnaji n̄a-a-gba qkwa Nnaji Aux prefix set forth sexual relation with widow [Literal Nnaji is goes with widows] Nnaji has sexual relationship with widows Nnaji is a nonentity	concrete metaphorical
35 a b	n'ezi	Nnenna n̄a-a-gba n'ezi Nnenna Aux prefix set forth prep outside [Literal: Nnenna is running outside] Nnenna runs outside Nnenna is adulterous	concrete metaphorical

The complements here in their nature, involve copulation. The inherent complements qualify the subjects of the sentences and are therefore predicative adjectives.

The argument structure of the verbs in examples (31) – (34) is V(NN), a second degree verb. For instance, in example (31) ‘Uche’ is N₁ while ‘akwxna xka’ is N₂. Also in example (32), ‘Ada’ is N₁ while ‘qkoso’cone is N₂. In example (33), ‘Nkechi’ is N₁, and ‘nr[ra’ is N₂. Again, in example (34), ‘Nnaji’ is N₁, ‘qkwa’ is N₂, but in example (35), we have the argument structure of V(NPP). For instance, Nnenna is N while ‘n’ezi’ is PP.

The cognitive interpretations in the table show that the examples in (31a) – (35a) are the concrete instantiation of the motion of set forth while examples (31b) – (35b) involve the conceptualisation of the same movement but within the psychological domain; hence, examples in (b) are metaphorical extensions of the examples in (a).

The image schema exhibited by ‘gba’ verbal complex is the path and goal schemata. In the sentence analysis, example (31), The areas covered in his bid to find another church is the path while the church which he eventually finds is the goal. Also in example (33), The area covered in her bid to getting another man is the path

while getting hold of the man is the goal. Moreover, in (34), The length of time taken to find a widow is the path and having an affair with a widow represents the goal. Moreso, in example 35, The path is implicated through the period Nnenna covered by her to achieve her objective of adultery, and achieving her objective of being adulterous is the goal.

4.1.8 Gba verbal complexes based on demand

This subdivision is an analysis of ‘gba’ verbal complexes that involve complements all of which have demands in their denotation. This common attribute gets mapped unto the mental by the image schemata and are hereby analysed.

36.	gba	egō (Arqchuku dialect) contribute money, donate (pay due collection)	Image schema is path and goal
	mbìbì	borrow money	
	egwē (Arq)	impose levy or tax (make a compulsory tribute)	
	xgwq̄	recover debts	
	ngq̄	pay dowry or bride price	
	akx̄ (Arq)	pay bride price	

S/N	Verbal Structure	Sentence	Meaning Types
36 a b	gba mbìbì	Qfq nà-à-gba mbìbì Qfq Aux prefix set forth borrowing [Literal: Qfq is borrowing] Qfq borrows money Qfq is not well of/comfortable	concrete metaphorical
37 a b	Ngq̄	Ha gba-ra ngq nwaany[They set forth rV past dowry woman [They pay dowry woman] They paid the woman’s dowry The got a better half	Concrete metaphorical
38 a b	Àkx̄	Ude ga-a-gba akx Qla Ude Aux prefix set forth wealth Ola [Literal: Ude will kick wealth Qla] Ude will pay Qla’s bride price Ude will have Qla’s hand in marriage	concrete metaphorical
39 a b	Ego	Ha gba-a-ra Ibè ego They set forth sufx rV past Ibe money [They give Ibe money] They donated money to Ibe Ibe was handicapped	concrete metaphorical

40	egwe	Any[gba-ra ya egwe We set forth rV past him levy [Literal: We give him levy] We levied him We made him pay through his nose	concrete metaphorical
41	Xgwq	Ndx gba-ra Oke xgwq Ndx set forth rVpast Oke debt [Literal: Ndx recovered Oke debt] Ndx recovered his debt from Oke Oke was paid in his own coin	concrete metaphorical

In this section, the nature of the complement is that they involve levy and therefore involve some demand.

For the argument structure of the verbs, we have in examples (36), (37) and (38) the structure of V(NN), a second degree verb. For instance, in example (36), ‘QfQ’ is N₁ while ‘mbibi’ is N₂. Example (37) has ‘ha’ as the N₁, and ‘ngq nwaany[’ as N₂. Again, example (38) has ‘Ude’ as N₁ and ‘akx Qla’ as N₂. But in examples (39), (40) and (41), the argument structure is V(NNN), the verb is a third degree verb. For instance, in example (39), ‘ha’ is N₁, ‘Ibe’ is N₂ while ‘ego’ is N₃. In example (40), ‘any[’ is N₁, ‘ya’ is N₂ while ‘egwe’ is N₃. Finally, in (41), ‘Ndx’ is N₁, ‘Oke’, N₂ and ‘xgwq’ N₃.

In the cognitive interpretation, all the examples in (36a) through (41a) as indicated in the table above are the concrete instantiation of the verb ‘set forth’. The (b) examples involve the same movement but within the psychological domain. Therefore, the (b) examples are the metaphorical extensions of the concrete meaning in (a). The concrete is mapped onto the abstract in that it is from the knowledge of the concrete that the figurative meaning springs from. For the example in (39) people are levied and the money was donated to Ibe.

The image schemata used in the analogical mapping of the ‘gba’ verb is the path and goal schemata. Looking at the sentence examples, (36), The places covered by Ofo in order to borrow money is the path and his success in borrowing money is the goal. Also in example (37), the distance from there to where the dowry is paid is the path while the payment of the dowry is the goal. Equally, in example (38), the path schema is evoked through the running around of Ude, while the payment of the bride price

becomes the goal. In example (39), from the point to where Ibe was, is the path while donating money to Ibe is the goal. Again, in example (40), the distance travelled in the bid to get at him is the path and making him pay the levy represents the goal. Conclusively in example (41), the path schema is represented by the distance from Ndx's house to Oke's house while the recovery of the debt is the goal

4.1.9 The gba complexes based on revelation

Here, we analyse the gba verb complexes which have revelation in their concrete form. It is this common feature that is reflected by analogical mapping and shown in this section.

42.	gba	afa	perform divination/tell fortune	Image schema impliated is path, force and goal
		àmà	reveal secret	
		amxma	(Izzih) prophecy/foretell the future	
		agx	determine a child's name through	
	divination (Udi dialect)			
		àjà	offer sacrifice	

S/N	Verbal Structure	Sentence	Meaning Types
42	gba afa	Ebo na-a-gba afa Ebo Aux prefix set forth divination [Lit: Ebo is making divination] Ebo performs divination Ebo is guessing	concrete metaphorical
43	Àmà	Òkoafq nà-a-gba àmà Okoafq Aux prefix set forth secret [Lit.Okoafq is revealing secret] Okoafq reveals secret Okoafq is a traitor	concrete metaphorical
44	Amxma	Qzq na-a-gba amxma Qzq Aux prefix set forth prophesy [Literal: Qzq is telling prophesy] Qzq is prophesying Qzq is a fortune teller	concrete metaphorical
45	Àjà	Qnà gba-ra àjà. Qna set forth rV past sacrifice [Literal: [Qna perform sacrifice] Qna offered a sacrifice Qna fought tooth and nail	concrete metaphorical
46	Agx	A na-a-gba ya agx One Aux prefix set forth him divination	

a	[Literal:somebody is doing him	concrete
b	divination] He is being divined He was initiated	metaphorical

The complements in the examples have the attribute of divination and revelation in common. That is, they all fore-tell the future and reveal something that is hidden. In other words, the complements reveal something that is not known.

In examples (42) to (45), we have the argument structure of V(NN). This is a second degree verb, like in (42), 'Ebo' is N₁ and 'afa' is N₂. In examples 43-46, 'Qkafq' is N₁ while 'ama' is N₂, in (44) 'Qzq' is N₁, 'amxma' is N₂ and in (45) 'Qna' is N₁ while 'aja' is N₂. On the other hand, the argument structure of the verb in example (46) is V(NNN), the verb is a three place predicate verb. For instance, 'A' is N₁, 'ya' is N₂ and 'agx' is N₃ respectively.

The cognitive interpretation is x-rayed in the table above, showing that all the (42a) to (46a) examples are the concrete or physical instantiation of the motion of 'set forth' action. But while the examples in (42b) to (46b) involve the conceptualisation of the same movement; it is within the psychological domain; showing that the examples are metaphorical extensions of the denotative meanings in (a). The concrete is mapped unto the abstract in the sense that a structure can project different meanings. For instance, in example (42) 'afa' in the real sense is on consulting the oracle which may be correct or incorrect. So, when somebody performs a divination, it may be a guess in another sense. In example (46); offering of sacrifice is, may be for one to get what one wants but where it is done and nothing comes out of it; one has done his best. Consequently, it is the knowledge one has in the concrete meaning that is extended to the figurative meaning.

The image schemata implicated by the 'gba' verbal complex here as shown in the table are path' force and goal. For instance in sentence analysis, in example (42), the length of time taken in the process of divination is the path. The expended energy in the divination represents the force while the outcome of the divination becomes the goal. This is applicable to other examples.

4.1.10 Gba verbal complexes involving locomotion

In this context, the gba verb complexes whose complements have movement of the body are discussed and the analogical mapping substantiated.

47.	gba	aghara	riot, be disorderly, break into confusion	Image schema implicated is force
		abùbọ ọrù	go on strike	
		egwu	dance	
		ọsọ	run	

S/N	Verbal Structure	Sentence	Meaning Types
47 a b	gba Àghara	Xmx akwxkwq nà-à-gba àghara Children school Aux prefix set forth riot [Literal: children school are doing riot] Students are rioting The students are on rampage	concrete metaphorical
48 a b	abxbq qrx	Ha na-a-gba abxbq qrx They Aux prefix set forth strike work [Literal: they are striking] They are on strike They are on the street	concrete metaphorical
49 a b	Egwu	Chid[mà à-gba egwu n'elu àkwà Ch [d[know prefix set forth dance prep top bed [Literal:Chidi know dance dance on top bed] Chidi knows how to dance on the bed. Chidi is a slut.	concrete metaphorical
50 a b	Qsq	Ije na-a-gba qsq xka Ije Aux prefix set forth run church [Literal: Ije is running in church] Ije is avoiding church Ije is not a church goer	concrete metaphorical

In the above examples, the complements involve the movement of the body, a locomotive act. The complements are abstract in nature. They are 'aghara', 'abxbq qrx', 'egwu' and 'qsq'.

We have the V(NN), a second degree verb as the argument structure in all the examples. In (47), it is 'xmx akwxkwq' that is N₁, 'aghara' is the N₂. Furthermore in examples (48) through (50) 'ha' is N₁ and 'abxbq qrx' is N₂; 'Chidi' is N₁ while 'egwu' is N₂ and 'Ije' is N₁, 'qsq' is N₂.

In (47a), (48a), (49a) and (50a), the cognitive interpretation has a concrete meaning. But the (47b), (48b), (49b) and (50b) have the abstract meaning. So the (47b) to (50b), are the extended meanings of the (47a) to (50a) examples.

In this analysis, the image schemata of gba verb is Path, force and goal.

4.1.11 Complex verbs of gba associated with removal (of substances)

These are complex verbs whose complements are associated with the removal of substances. This can be seen in the analysis below.

51	gba	ègwusi imē mbq akpɔkpq amɔ qtq ibi (Ntezi)	remove epicarp of melon seed abort/commit abortion pair nails skin castrate be naked hydrocele	The image schema implicated is force
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S/N	Verbal Structure	Sentence	Meaning Types
51 a b	gba ègwusi	Xmɔ nwaany[nà-à-gba egwusi qnɔ Children woman Aux prefix set forth melon mouth [Literal: women remove melon back mouth] Women remove the epicarp of melon with their mouths Women are talkatives	concrete metaphorical
52 a b	Ime	Àda gba-ra imē Ada set forth rV past pregnancy [Literal: Ada removed pregnancy] Ada removed her pregnancy Ada is a murderer	concrete metaphorical
53	mbq	Ngozi gba-ra mbq Ngozi set forth rV past nail [Literal: Ngozi cut nail]	

a b		Ngozi removed her nail Ngozi washed her dirty linen in public	concrete metaphorical
54 a b	akpxkpq	Ezè gba-ra Igwē akpxkpq Eze set forth rV past Igwe skin [Literal: Eze removed Igwe skin] Eze skinned Igwe Eze punished Igwe severely	concrete metaphorical
55 a b	Amx	Ha gba-ra ya amx̄ They set forth him penis [Literal: They removed him penis] They castrated him He was humiliated	concrete metaphorical
56 a b	Qtq	Xzq̄igwe gba-ra ya q̄tq Xzqigwe set forth rV past him naked [Literal: Xzqigwe removed him naked] Xzqigwe made him naked Xzqigwe exposed him	concrete metaphorical
57 a b	Ibī	Okoro gba-ra Nzè ibī Okoro set forth rV past Nze hydrocele [Literal: Okoro removed Nze hydrocele] Okoro removed Nze's hydrocele Nze was relieved of his worries	concrete metaphorical

The complements share the removal of some substance in common. For instance, in example (51), 'gba egwusi' is removal of epicarp of melon. Equally in (52) 'gba ime' is removal of pregnancy. In (53), 'gba mbq' is removal of finger nail. Furthermore, in (54) – (57), 'gba akxkpq', 'gba amx', 'gba qtq' and 'gba ibi' are all removal of substances. The complements are all concrete in nature.

In examples (51) through (53), the argument structure is V(NN). This is a second degree verb. This is shown thus, in (51) 'xmx nwaany [' is N₁, and 'egwusi' is N₂. 'Ada' is N₁ while 'ime' is N₂ in example (52), and 'Ngqz [' is N₁ and 'mbq', N₂ in (53). But from example (54) to (57), the argument structure is V(NNN), which makes the verb a third degree verb. In (54), 'Eze' is N₁, 'Igwe', N₂ and 'akpxkpq', N₃. Also in (55), 'ha' is N₁ 'ya', N₂ while 'amx' is N₃. Furthermore, in (56), 'Xzqigwe' is N₁, 'ya' is N₂ and 'qtq' is N₃. Conclusively, in (57), 'Okoro' is N₁, 'Nze' is N₂ while 'ibi' is N₃.

As indicated in the above table, the cognitive interpretation of the verbs in examples (51a) through (57a) are the denotative meanings of 'gba' and the examples from (51b) - (57b) are figurative or abstract meanings of gba. So, the examples in 51b, 52b, 53b, 54b, 55b, 56b and 57b

are the metaphorical extensions of the concrete meanings in (51a) to (57a). There is the mapping of the concrete unto the abstract. This is because it is from the knowledge of the concrete that the abstract is projected. For instance, in example (54), to skin a goat or cow is well understood as physical removal of the skin of a goat or cow. Human beings are not skinned. It is only used to show that the person in question underwent some severe suffering and punishment.

The image schema evoked in the above through the Igbo verbal complex ‘gba’, is the force image schema. For instance, as analysed in the sentences above, in example (51), the action of removal of melon’s epicarp requires force. Therefore, women are the vector F, while melon is the entity U. Women use force to remove the epicarp of melon. Also in example (52), ‘Ada’ is the vector F that acted on ‘ime’ pregnancy, the entity U. Ada aborts her pregnancy. Again, in examples (53) to (57), the vectors F are Ngqz [, that acted on ‘mbq’ finger nail, the entity U, in (54); ‘Eze’ that acted on ‘Igwe’, the entity U, in (55); ‘Ha’ they, that acted on ‘ya’ him, the entity U, in (56), ‘Xzqigwe’ that acted on the entity U ‘ya’ him, and in (57), ‘Okoro’ that acted on ‘Nze’ the entity U. The above vectors F acted on the entities U. These follow the usual metaphorical extensions from the external concrete world to the internal world of cognition and emotion.

4.1.12 Gba verbal complexes on variable textures

This is where we look at the gba verb complexes whose complements have variable textures like structure in their physical forms. These features which they share in common, is what has been analysed using the implicated image schema.

58	gba	àkpxkpx	have lumps (as in foo foo)	Image schema is counterforce
		mkpxrx [≡]	have seeds	
		kpxrx kpxrx	have many lumps	

S/N	Verbal Structure	Sentence	Meaning Types
58	gba àkpxkpx	Nri ji nà-à-gba àkpxkpx Food yam Aux prefix set forth lumps [Literal: Yam foo foo has lumps]	

a		pounded yams have lumps	concrete
b		The world is not a bed of roses	metaphorical
59	mkp̄rx̄	Mmad̄x̄ x̄fq̄dx̄ n̄à-à-gba mkp̄rx̄ Person some Aux prefix set forth seeds [Literal: some people is having seed]	
a		Some people have seeds in them	concrete
b		Some people are diehard	metaphorical
60	k̄p̄rx̄ k̄p̄rx̄	Q n̄à-à-gba k̄p̄rx̄ k̄p̄rx̄ He/She Aux prefix set forth lumps [Literal: He/She is having lumps]	
a		He/She has lumps	concrete
b		He/She is restless	metaphorical

The complements in the above sentences have variable textures. The complements function as adjectival modifiers and are descriptive in nature.

The argument structure of the verbs in the examples is V(NN), the verb is a second degree verb. In example (58), ‘nri ji’ is N₁ and ‘akp̄x̄kp̄x̄’, is the N₂. Again, in example (59), ‘mmad̄x̄’ is N₁ while ‘mkp̄rx̄’ is N₂. In example (60), ‘Q’ is N₁ and ‘k̄p̄rx̄ k̄p̄rx̄’ is N₂.

In the cognitive interpretation, all the examples in 58a, 59a and 60a as shown in the table are denotative instantiations of the motion ‘set forth’ action. The examples in 58b, 59b and 60b involve the conceptualisation of the same movement but within the psychological domain. Therefore, examples in 58b, 59b and 60b are metaphorical extensions of the ones in the (a) examples.

The image schema exhibited by gba verb complex above is counterforce.

4.1.13 Gba complexes based on pains

In this section, the analysis of gba verb complexes that involve pain in their state were done. It is this common feature that is mapped unto the mental by the image schemata. The analysis is illustrated below.

61	gba	osisi/ap[p[a (Nike dialect) flog/whip with stick osè rub in pepper by way of punishment aka nt[give a slap in the face akw̄kwa rain abuse(Ubahu dialect)
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Image schema is path & force

S/N	Verbal Structure	Sentence	Meaning Types
61	gba osisi/ap[p[a	Onye nkxzi gba-ra ya osisi/ap[p[a Person teacher set forth rV past him	

a		stick [Literal: Teacher flogged him stick] The teacher flogged him	concrete
b		He received the reward of his wrong deed from the teacher	metaphorical
62	Osè	Ezè nà-à-gba Ngqzi osè Eze Aux prefix set forth Ngqzi pepper [Literal: Eze is splashing Ngqzi with pepper] Eze is applying Ngqz [’s body with pepper	concrete
a			concrete
b		Eze inflicts pains on Ngqzi	metaphorical
63	aka nt[̀	Obì gba-ra Àda ajo aka nt[̀ Obi set forth rV past Ada bad hand ear [Literal: Obi slapped Ada bad hand ear] Obi gave Ada a dirty slap Ada saw stars	concrete
a			concrete
b		Ada saw stars	metaphorical
64	Akẁkwà	Ijè gba-ra Èke akẁkwà (Ubahu dialect) Ije set forth rV past Eke abuses [Literal: ije abuse Eke] Ije abused Eke Ije belittled Eke.	concrete
a			concrete
b			metaphorical

Here, what the complements have in common is that each and every one of them involves inflicting pain. Looking at the argument structure, the predicate structure is V(NNN). In example (61) “onye nkxzi” is N₁, ‘ya’ is N₂ and ‘osisi/ap [p [a’ is N₃. In (62), ‘Eze’ is N₁ ‘Ngqzi’ is N₂ while ‘ose’ is N₃. Furthermore, examples (63) has ‘Obi’ as N₁, ‘Ada’ as N₂ and ‘aka nt [’ as N₃, while (64) has ‘Ije’ as N₁, ‘Eke’, N₂ and ‘akẁkwà’, N₃.

For the denotative interpretation, all the examples in (61a) to (64a) show physical or concrete meanings of the verb set forth while the examples in (61b) to (64b) are metaphorical extensions of the one given in 61a, 62a, 63a and 64a. The mapping of the concrete unto the abstract is that from the knowledge of the concrete for instance ‘flogging’, the abstract is projected. In example (62), ‘pepper’ is associated with pain. So, when pepper is applied on somebody, the person feels great pains and so on.

The image schemata exhibited by ‘gba’ verbal complex are path and force. The force schema is implicated for instance, in the sentence example (61) where the teacher is the vector F that acted on ‘him’ the entity U. and the expended energy involved in the flogging. This force

schema is applicable to the analysis of gba in the other examples 62-64. The path schema is reflected through the distance from the teacher to the student in example (61) etc.

4.1.14 Gba complex on loss of quality

This is the gba verb complexes that have loss of quality in their original form in the complements. This common attribute is mapped onto the mental by image schemata that are analysed here.

65	gba	nchara xka/qla	become rusty become	 The image schema implicated is path and force sour
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S/N	Verbal Structure	Sentence	Meaning Types
65	gba nchara	Ego ahx̄ gba-ra nchara Money that set forth rV past rust [Literal: Money that got rust] That money is rust	concrete
A			
b		The money is a counterfeit/fake	metaphorical
66	xka	Òmùme Ego gba-ra xkā Behaviour Ego set forth rV past sour [Literal: behavior Ego is sour] Ego's behaviour is not good	concrete
a			
b		Her behaviour is rancid	metaphorical

What holds the complements here together is loss of quality. That is, the complements have lost quality. They are no more current. The verb is therefore a copulative verb, which does not assign case to the complement. The complement of the verbs, therefore, is adjectival in function.

Looking at the two examples above, one finds out that the argument structure is V(NN). For instance, in example (65), 'Ego' is N₁, nchara is N₂ while in example (66) 'omume Ego' is N₁ and 'xka' is N₂. In the cognitive interpretation, (65a) and (66a) exhibit concrete or physical meanings and (65b) and (66b) are the metaphoric or abstract interpretation. This shows that the examples in (65b) and (66b) are the metaphorical extensions of (65a) and (66a).

The above 'gba' verbal complex show that the path and force image schemata are implicated.

4.1.15 The gba complexes that involve freedom

The profile of the gba verb complexes here involves gaining freedom or independence. The complements all of which have freedom as their common feature are analysed like this.

67	gba	mmadx ònwè	buy a person out from slavery buy oneself out	The image schema is path and counterforce
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S/N	Verbal Structure	Sentence	Meaning Types
67 a b	Gba mmadx	Q gba-ra mmadx He/she set forth rV past person [Literal: He/She buy person out] He/she sets somebody free He/she is a philanthropist	concrete metaphorical
68 a b	Onwe	Ede gba-ra ònwè ya n'òhù Ede set forth rV past self him prep slave [Literal: Ede get out self him in slave] Ede bought himself out of slavery Ede gained his freedom/independence	concrete metaphorical

The complements in all the examples in their nature involve means of gaining independence or freedom; getting out of bondage. For the argument structure, examples (67) and (68) have V(NN). This is reflected thus, example (67) 'o' is N₁ and 'mmadx' is N₂. 'Ede' is N₁ and 'onwe ya' is N₂ in (68).

The cognitive interpretation in the table show that examples in (67a) – (68a) are concrete meaning while (67b) and (68b) are the abstract meanings or the metaphorical extensions of the examples in (a).

The path and counterforce image schemata are evoked for the analysis of gba verb here.

4.1.16 Gba complexes on encircling

Gba verb complexes, which have in their physical appearance encircling, is looked into in this section. The complements of the verb have encircling in their physical form and are analysed as follows:

69	gba	ògìgè gbùrù gburù òkìrikiri èhìrimehi	fence encircle round and round surround, circle	The image schema implicated is path, goal and force
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S/N	Verbal Structure	Sentence	Meaning Types
69 a b	gba ògìgè	Àja gba-ra ògìgè n' x1q ya Aja set forth rV past fence prep house him [Literal: Aja made fence in house him] Aja fenced his house Aja fortified his house	concrete metaphorical
70 a b	gbùrù gburu	Nd[iro gba-ra ya gbùrù gburù Many enemy set forth rV past him encircle [Literal: many enemy surrounded him surround] He was encircled by enemies He is in a quandary	Concrete metaphorical
71 a b	òkìrìkìrì	Xka na-a-gba x1q òkìrìkìrì Xka Aux prfx set forth house round and round [Literal: Xka is running house round and round] Xka runs round the house Xka is making a futile effort	concrete metaphorical
72 a b	èhìrìmehi	Qhà mmadx gba-ra onye ohi ahx èhìrìmehi Group person set forth rV past person thief that surround [Literal: group person surround person thief that surround] Group of people surrounded the thief The thief was humiliated	concrete metaphorical

The complements here have the attribute of surrounding or encircling as what holds them together. Example (69) has V(NPP) as its argument structure while examples (70) – (72) have the V(NNN). For instance, in example (69), ‘Aja’ is N₁, and ‘ogige n' x1q ya’ is N₂. In (70) ‘nd[iro’ is N₁, ‘ya’ is N₂ while ‘gburu gburu’ is N₃. In examples (71) and (72), ‘Xka’ is N₁, ‘x1q’ is N₂ and ‘okirikiri’ is N₃; while ‘qha mmadx’ is N₁, ‘onye ohi’ is N₂ and ‘ehirimehi’ is N₃ in example (72).

The concrete meanings of the verbs in the above sentences are x-rayed in examples 69a, 70a, 71a and 72a while the abstract or psychological meanings are shown in examples 69b, 70b, 71b and 72b respectively. In the (69b) – (72b) are shown the metaphorical extensions of the concrete meanings in the examples.

The image schemata reflected in the gba verbal complex are path, containment and goal.

4.1.17 Gba complexes that involve strength and efforts

The gba verb complexes that involve strength and efforts in their complements are implicated here.

73	gba	mbq̣	try hard	Path and force are implicated in the verb complex
		vxka vxka	make some efforts	
		q̣g̣x̣	fight for/defend	
		ṃgba	wrestle	

S/N	Verbal Structure	Sentence	Meaning Types
73 a b	gba mbq̣	Xgà nà-à-gba mbq̣ Xga Aux prefix set forth try hard [Xga is trying hard] Xga tries very hard Xga is industrious	concrete metaphorical
74 a b	vxka vxka	Qf̣q nà-à-gba vxka vxka Qf̣q Aux Prefix set forth make effort [literal: Qf̣q is making effort] Qf̣q is making some efforts Qf̣q runs from pillar to post	concrete metaphorical
75 a b	Q̣g̣x̣	Ndx nà-à-gba-ra xmx̣ ya q̣g̣x̣ Ndx Aux prefix set forth rV past children him fight [Literal: Ndx is fighting children him fight] Ndx defends his children Ndx is his childrens bull dog	concrete metaphorical
76 b	Ṃgba	Qhà nà-a-gba Òyòfò ṃgbà Qha Aux prefix set forth Oyoyo wrestle [Literal: Qha is wrestling Oyoyo wrestle] Qha is wrestling with Oyoyo Qha is a foe to Oyoyo	concrete metaphorical

In this section, the complements involve strength and efforts. They are abstract in nature. In the argument structure, examples (73) and (74) have V(NN) while examples (75) and (76) have V(NNN). In (73), ‘Xga’ and ‘mbq̣’ are N₁ and N₂ while in (74). ‘Qf̣q’ is N₁ and ‘vxka vxka’ is N₂. But in (75), we have ‘Ndx’ as N₁, ‘xmx̣ ya’ as N₂ and ‘q̣g̣x̣’ as N₃.

In the area of cognitive interpretation, all the examples in (73a) – (76a) x-ray the physical or concrete instantiation of the verb ‘set forth’ action. The examples in (73b) – (76b) involve or show the same action but this is within the psychological domain. Then of course, one can say

that the examples in (73b) through 76b are the metaphorical extensions of the concrete instantiation in 73a – 76a.

The path and the force image schemata are reflected in the gba verb complex above.

4.2 Compound gba verbal complexes

The compound verb structure according to Uchechukwu (2011) involves either the combination of two simple verb roots or the combination of one single complex verb root with a suffix. In both instances, no linguistic structures can come between the components of the compound verb in the form of inflectional affixes. According to Mbah (1999:139), “a compound verb is a verb which contains at least two simple verbs that are independent”. While the affix in complex verb forms changes, depending on vowel harmony, none of the vowels of compound verbs changes its form due to vowel harmony. These are exemplified hereunder:

77 gba bà run into gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
77	gba bà na nchedo	Ìde gba-bà-rà na nchedo gĩ Ide set forth enter rV past prep protection you. Ìde gba-ra ɔsq Ide set forth rV past run Ide ran Ìde bà-rà na nchedo g [Ide enter rV past protection you Ide entered your protection Ide gbara na nchedo g [
a		Ide ran into your protection	concrete
b		You are Ide’s be all and end all here.	metaphorical

The observation made here is that after deconstruction, the verb ‘gba’ is a two argument verb. ‘Nchedo’ which is the complement is the indirect object of the resultative verb ‘bà’. The interpretation connects the physical entering into somebody’s guard and protection. This physical interpretation can be extended using metaphor to mean ‘be all and end all’, that is, the only one to help. It is an example of same subject verbform as Ide performs both actions in the sentence.

The image schema evoked in the gba verb complex above is Path.

78. gba ba break/tear gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
78	gba ba	Òkwè gba-ba-ra Odò afq Okwe set forth break rV past Odo stomach Òkwè gba-ra Odo Okwe set forth rV past Odo Okwe broke Odo Afq Òdò bà-rà Stomach Odo open rV past Odo's stomach was operated upon Òkwè gbabara Òdò afq Okwe operated on Odo's somach Okwe exposed Odo's secrets	concrete metaphorical

The gba verb complex in the above sentence is a three argument verb. Here, the complement is 'afq'. This is interpolated with and it is the subject of the ergative verb 'ba'. The concrete interpretation is the physical opening of the stomach either through operation or killing. This physical meaning can be extended to mean exposition of secrets of somebody.

The image schema involved in the gba verb complex is path.

79 gba bè snap gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
79	gba bè eriri	Ogè gba-bè-rè eriri Oge set forth snap rV past rope Ogè gba-ra eriri Oge set forth rV past rope Oge made the rope snap Eriri gba-bè-rè Rope snap rV past The rope snapped Oge gbabere eriri	

a		Oge snapped the rope	concrete
b		Oge gave up the ghost	metaphorical

‘Gba’ is a two argument verb. The complement ‘eriri’ is pied piped with and is the subject of the resultative verb ‘bè’. The physical interpretation relates to the physical breaking or snapping of rope. In other words, it can be extended to mean giving up the ghost.

Here, the image schema implicated in the gba verb complex is path.

80. gba be run half way. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
80	gba be	Ebō gba-be-re n'xzq̣ Ebo set forth stop rV past prep road Ebō gba-ra ɔsɔ Ebo set forth rV past run Ebo ran Ebō be-re n'xzq̣ Ebo stop rV past prep road Ebo stopped on the road Ebo gba-be-re n'xzq̣ Ebo ran and stopped half way Ebo lost at the end	concrete metaphorical
a			
b			

The sentence above has the argument structure of V(NPP). The complement ‘Xzq’ is overlapped with and becomes the indirect object of the resultative verb ‘be’. The denotative interpretation of the gba verb complex here is the social activity of having a limit where a race should end. This physical interpretation is extended to mean losing at the end. In a race, if an athlete fails to get to the end and stops half way, he/she has lost at the end. There will be no prize for such an athlete.

The image schema evoked by ‘gba’ verb above is path. The path schema in the sentence is implicated through the action of covering a distance from the starting point to where Ebo ended.

81. gba bɪ stop dance or run gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
81	gba bi' egwū	Xzq̄ gba-bì-rì egwū Xzq̄ set forth stop rV past dance Xzq̄ gba-ra egwū Xzq̄ set froth rV past dance Xzq̄ danced Egwū bì-rì Dance stop rV past The dance stopped Xzq̄ gbabiri egwu Xzq̄ stopped dancing Xzq̄ kicked the bucket	concrete metaphorical
a			
b			

In the above example, 'gba', is a two argument verb . The complement 'egwū' is interpolated with and is the subject of the ergative verb 'bi'. The concrete interpretation relates to the actual dancing of some music, but can metaphorically be extended to mean 'live' and 'die'. In this context, 'gba' relates to 'live' while 'bi' is mapped on 'die'.

Path image schema is involved in the above gba verb complex.

82. gba bq̄ last long gba - path image schema

S/N	Verbal Structure	Sentence	Meaning Types
82	gba bq̄	Qbàrà gba-bq̄-rq̄ ya chi Blood set forth bleed rV past her day break Qbàrà gba-ra ya Blood bleed rV past her She bled Q̄bàrà gbagidere ya tùtù chi èfoo Blood setforth ooze out rV past him day	

a		break	
b		He wsa bleeding till day break Qbara gbabqrrq ya chi She bled till day break She is in a pathetic condition or she is a piteous spectacle	concrete metaphorical

The above sentence has a two argument verb. The complement of the verb gba is ‘chi’ and is pied piped with and is the subject of the ergative verb ‘bq.’ The concrete meaning in the example is the actual bleeding of blood in human beings for a long time. The abstract or psychological meaning is being a piteous spectacle being in a pathetic condition. The physical relates to bleeding while metaphorical relates to being a piteous spectacle. One who bleeds till day break in a pathetic condition or is a piteous spectacle.

In the analysis of the gba verb complex, it is the path image schema that is evoked.

83. gba bq to reduce gba - path image schema

S/N	Verbal Structure	Sentence	Meaning Types
83	gba bq	Qj[gba-bq-rq omume qjqq ya Qj[set forth reduce character bad him Qj[gba-ra omume qjqq ya Qj[set forth rV past charadter him Qj[kicked his bad behavior Omume qjqq ya bqrq Behaviuor bad him reduce rV past His bad behaviour reduced Qj[gbabqrrq omume qjqq ya Qj[reduced his bad character Qj[has turned a new leaf	concrete metaphorical
a			
b			

The sentence above contains a three argument verb. ‘omume qjqq ya’ is the complement of ‘gba’ and it is the subject of the resultative verb ‘bq.’ The interpretation connects the physical reducing of ones bad character. This physical interpretation can be extended to mean ‘turning a new leaf’.

The image schema reflected in the analysis of gba verb complex is path.

84 gba bu set forth before. gba – path image schema

S/N	Verbal Structure		Meaning Types
84	gba bu	Nkem na-agba-bu mbq na mbu Nkem Aux prefix set forth before try hard Nkem na-agba mbq Nkem Aux prefix set forth try hard Nkem used to try hard. * Ndkem na-ebu mbq	

The above sentence does not contain a compound verb. The ‘bu’ suffix is the past tense marker of a stative verb. If it were once a full verb, then it must have been fossilised as a tense marker.

The image schema eminent in the gba verb complex here is path.

85 gba chà get out or move out. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
85	gba chà	Q gba-chà-rà n' xzq He/She set forth move rV past prep road Q gba-ra n' xzq He/She set forth rV past prep road He/She ran out of the road Q chà-rà n' xzq He/She get rV past prep road He/She got out of the road Q gbachara n' xzq	
a		He/she moved out from the road	concrete
b		He/she gave way from the road	metaphorical

In the sentence above, gba is a two argument verb. The complement ‘xzq’ is subcategorised as the indirect object of the resultative verb ‘chà’ . The denotative interpretation is

the real world of moving out from the road. This interpretation can be extended metaphorically to mean one giving way or yielding from a given point.

Path schema is exhibited as the image schema in the gba verb above. In the sentence, the place from where he or she started moving away to the point he veered to is the path.

86 gba cha tough. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
86	gba cha àhx	Qrx à gba-cha-ra m àhu Work this set forth tough rV past me body Qrx à gba-ra m àhx Work this set forth rV past me body This work is very difficult Àhx m cha-ra Body me tire rV past My body got tired Qrx a gbachara m ahx This work is tiresome The work is tough	concrete metaphorical
a			
b			

The verb 'gba' is a third degree verb. The verb takes 'ahx' as the internal argument. The internal argument 'ahx' becomes the external argument of 'cha'. But here, it is the subject of the ergative structure pied piped on the main verb 'gba'. 'Gbacha' denotes 'tiresome' or 'tough'.

The image schema of gba verb complex in example 86, is the path schema

87. gba chi lock. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
87	gba chi	Nne gba-chi-ri xzò Nne set forth lock rV past door Nne gba-ra xzq Nne set forth rV past door Nne locked the door Xzq chi-ri Door close rV past The door closed Nne gbachiri xzq	

a		Nne locked the door	concrete
b		Nne is closefisted	metaphorical

Looking at the above, one discovers that the verb ‘gba’ is a two argument verb. The complement ‘xzq’ is interpolated with and is the subject of the resultative verb ‘chi’. The physical interpretation relates to the physical locking up of a door. This meaning can be extended to mean being a closefisted, someone who is unwilling to spend money, a stingy person.

The image schema used in the mapping of gba verb complex is the Path schema. The path as analysed in the sentence is from being unlocked to being locked.

88. gba chi` run back. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
88	gba chi`	Ejim gba-chi`-ri` àzx Ejim set forth run back rV past back Ejim gba-ra qsq Ejim set forth rV past run Ejim ran Ejim chi`-ri` àzx Ejim turn rV past back Ejim turned back Ejim gbachiri azx	concrete metaphorical
a b		Ejim ran back Ejim is a coward	

The gba verb complex in the above is a two argument verb. ‘Azx’ is the complement of ‘gba’. It is the complement of the resultative verb ‘chi’. The denotative meaning here is the physical running back, in the the opposite direction. This connotes that Ejim is a coward.

The image schema implicated by the verb gba is path.

89. gba chu` discolour gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
89	gba chu`	Anwxrù` òkx gba-chu-ru itè Smoke fire set forth discolour rV past pot Anwxrx` qkx gba-ra itè Smoke fire set forth rV past pot Smoke covered pot Anwùrù` òkù chùrù` itè Smoke fire discolour rV past pot	

a		Pot discoloured Anwɔrɔ ɔkɔ gbachuru ite	
b		Smoke discoloured pot The pot is wearing an ugly look	concrete metaphorical

‘Gba’ is a two argument verb in the sentence above. The complement ‘ite’ is the complement of ‘gba’ but it is the ergative subject of the resultative verb ‘chu’. The denotative interpretation is the actual covering of pot by smoke while cooking. This can be extended using metaphor to mean the pot wearing an ugly look. It is the path and force image schemata that are evoked here.

The path schema is implicated in the above gba verb complex. In the sentence, it is from the former colour to the current one that the path image schema is implicated.

90 gba dà dim or lower down. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
90	gba dà	Q gba-dà-rà ɔkɔ He/she set forth fall rV past fire Q gba-ra ɔkɔ He/she set forth rV past fire He/she dimmed the light Qkɔ dà-rà Fire dim rV past The fire dimmed Q gbadara ɔkɔ He/she dimmed or lowered the light He/she is nonchalant	
a			concrete
b			metaphorical

In this sentence, ‘gba’ is a two argument verb. ‘Q’ is the logical subject while ‘ɔkɔ’ is the complement of the verb. It is the complement ‘ɔkɔ’ that is the subject of the ergative verb ‘dà’. In the denotative meaning, it is the example in (90a) that shows the actual activity of turning or lowering the light while the (90b) is its extension to mean nonchalance. (90b) is the metaphorical extension of the denotative meaning of (90a).

The image schema employed in the mapping on gba verb is Path; which is implicated in the sentence as turning the light from being high to being low. The subject employed the force schema to achieve the goal of dimming the light.

91 . gba do - hold up or stick. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
91	gba do	Òbi gba-do-ro ya Obi set forth hold rV past him/her/it Obi gba-ra ya Obi set forth rV past her Obi made love advancement to her o do-ro She cool rV past She was calm Obi gbadoro ya Obi intercepted her Obi coerced her to agree	concrete metaphorical

The ‘gba’ verb in 90, has two arguments, ‘Obi’ and ‘ya’, its complement is the subject of the resultative verb ‘do’. The physical instantiation is real social activity of love advances. However, it can be extended to mean coerce to agree, i.e using force, threat, fraud or intimidation in an attempt to compel one to act against his or her will. This is the metaphorical extension.

Path schema is implicated as the analogical mapping in the analysis of the gba verb above.

92. gba du walking gradually. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
92	gba du	Ọkpà nà-a-gba-du afọ Ọkpa Aux prefix set forth swell stomach Ọkpà nà- à-gba afọ Ọkpa Aux prefix set forth stomach Ọkpa is kicking/hitting stomach Afọ na- e-du-ru The stomach Aux prefix swell rV past The stomach becomes swollen Ọkpà nà- àgbadu afọ	

a		Ọkpa swells the stomach	concrete
b		Ọkpa rumbles the stomach	metaphorical

The ‘gba’ verb complex in the above sentence is a two argument verb. The complement ‘afọ’ is inchoative as it serves as the ergative subject of the ergative verb ‘du’. The denotative is the swelling of the stomach. The connotative meaning is the silence achieved in an otherwise rumbling situation.

The image schema which the verb gba implicates is path.

93. gba dx` frown. gba - path image schema

S/N	Verbal Structure	Sentence	Meaning Types
93	gba dx	Nkem gba-dx-bà-rà ihu Nkem set forth frown rV past face Nkem gba-ra ihu Nkem set forth rV past face Nkem’s face is not bright Ihu Nkem dx-ba-ra Face Nkem frown rV past Nkem frowned her face Nkem gbadxbara ihu	
a		Nkem has a frown in her face	concrete
b		Nkem has a sour face	metaphorical

The above sentence has a two argument verb. ‘Nkem’ and ‘ihu’ are the arguments. The complement ‘ihu’ (face) is the grammatical subject of the resultative verb ‘dx’. The physical interpretation is the mere frowning of face but this can connotatively mean being unhappy.

The image schema used to analyse the verb gba here is path. This is implicated in the sentence through the change from cheerfulness to a moody one.

94 gba fe go round/ encircle. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
94	gba fe xlq	<p>Ọ gbafere ọlọ He/she set forth gun round rV past house</p> <p>Ọ gbara ọsọ He/she set forth rV past run</p> <p>He/she ran</p> <p>Ọ fere ọlọ He/she jump rV past house</p> <p>He/she jumped over the house</p> <p>Ọ gbafere ọlọ</p>	concrete metaphorical
a b		<p>He/she ran round the house</p> <p>He/she chased the shadow</p>	

In the above example gba is a two argument structure. The arguments are ‘Ọ’, he and ‘ọsọ’ run. The complement ‘ọlọ’house is pied piped and is the indirect object of the ergativised verb ‘fe’. The denotative meaning of gba here is the ordinary running round the house while the denotative meaning can be chasing a shadow

The image schema implicated in the analysis by gba is path.

95. gba fè run pass. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
95	gba fè	<p>Òbi gba-fè-rè xzq Obi set forth pass rV past road</p> <p>Òbi gba-ra qsq Obi set forth rV past run</p> <p>Obi ran passed</p> <p>Òbi fè-rè xzq Obi cross rV past</p> <p>Obi crossed on the road</p> <p>Obi gbafere xzq Obi ran past the road</p>	Concrete
a			

b		Obi missed the point	Metaphorical
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The motion verb ‘gba’ here is a two argument verb. The arguments are ‘Òbi’ and ‘òsò’. The complement ‘úzò’ is inchoative with and is the indirect object of the ergative verb ‘fe’. The denotative meaning is the physical running and passing over somebody or somewhere, one passing the road where one is going. The connotative meaning is missing the point.

The image schema shown by the gba verbal complex here is the path schema. The path as analysed in the sentence is the point where Obi started crossing the road to the other side of the road where he actually crossed to.

96 gba fiè/hie shoot and miss gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types

Crossrefer gbafè ‘run pass’ in 95. The verbs are different forms of the same verb. The image schema exhibited by gba verb here is path.

97. gba fie peel off gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
97	gba fie	Q gba-fie-re àhx ji àhx He set forth peel off rV past body yam that Q gba-ra àhx ji	

a		He set forth rV past body yam He removed the body of the yam Ahx ji ahx gba-fie-re Body yam that set forth remove rV past The body of the yam peeled off	concrete metaphorical
b		Q gbafiere ahx ji ahx He peeled off the scale of that yam The yam was made naked	

In the sentence above ‘gba’ is a double argument verb. ‘Ahx ji’ being the complement of gba is interpolated and it is the subject of the resultative verb ‘fie’. The denotative meaning is the real peeling off of yam body either by falling down or any other form and the connotative meaning is nakeding the yam or exposing what was hidden.

The image schema evoked in the analysis of gba verb above is path.

98. gba fo - disperse gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
98	gba fo ah[a	Qg̀x̀ gba-fo-ro ah[a Fight set forth disperse rV past market Qg̀x̀ gba-ra ah[a Fight set forth rV past market Fight set up in the market Ah[a fo-ro Market disperse rV past The market dispersed Qg̀x̀ gbaforo ah[a	concrete metaphorical
a		Fighting made the market disperse	
b		The market was tumultuous	

In 98, gba is a two argument verb. The complement ‘ah[a’ is pied piped with and is the subject of the resultative verb ‘fo’. The denotative interpretation relates to the dispersal the market when there is a fight. This denotative meaning is extended to mean the market being tumultuous.

In the above, the image schema involved in the analogical mapping of the gba verb is Path. In the sentence example, path schema is exhibited from the peaceful to the riotous session.

99. gba fq leave some gba - path image schema

S/N	Verbal Structure	Sentence	Meaning Types
99	gba fq	Òbòdo gba-fq-rq mmanyà Obodo set forth leave rV past wine Òbòdo gba-ra mmanyà Obodo set forth rV past wine Obodo poured wine Mmanyà fq-rq Wine remain rV past Some wine remained Obodo gbafqrq mmanyà	
a		Obodo left some wine	concrete
b		Obodo has a hidden agenda	metaphorical

In the sentence above, the argument structure of ‘gba’ is V(NN). It is a second degree verb. ‘Obodo’ is N₁ and ‘mmanyà’ is N₂. The complement is ‘mmanyà’ and is the subject of the ergative verb ‘fq’. Here, the denotative interpretation is the social activity of leaving out some wine after people must have taken some bit. This concrete meaning is psychologically extended to mean having a hidden agenda.

The image schema for the analysis of the ‘gba’ verbal complex is path. In the sentence, this is the initial level of the wine to the level that is left over.

100 gba fù escape, run away gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
100	gba fù n' qh[a	Nwad [xtq gba-fù-rù n' qh[a Nwad [xtq set forth miss rV past prep bush Nwad [xtq gba-ra n' qh[a Nwad [xtq set forth rV past prep bush Nwad [xtq ran into bush Nwad [xtq fù-rù (n' qh[a) Nwad [xtq lose rV past (prep bush) Nwad [xtq got lost in the bush Nwad [xtq gbafuru n' qh[a	
a		Nwad [xtq ran and got lost into the bush	concrete
b		Nwad [xtq is a fugitive	metaphorical

The verb ‘gba’ in the example is a two argument verb. Its arguments are ‘Nwadijuto’ and ‘osọ’
 The physical interpretation refers to the action of running into the bush and getting lost in the process.

Path schema is implicated in the gba verb above.

101. gba fu bore open gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
101	gba fu	Èmekà gba-fu-ru àkù Emeka set forth dig rV past wealth Èmekà gba-ra àkù Emeka set forth rV past wealth Emeka opened wealth Akù fu-ru Wealth open rV past Wealth opened Èmekà gbafuru àkx Emeka bore open wealth Emeka has become wealthy	concrete metaphorical
a			
b			

In this context, ‘gba’ is a two argument verb. ‘Èmekà’ and ‘àkù’ are the arguments. ‘Àkx’ which is the complement of ‘gba’ becomes the subject of the ergative verb ‘fu’. The denotative interpretation is real finding out money or being rich actually while the metaphorical interpretation is that Emeka has become wealthy.

The image schema reflected in the analysis of the gba verb above, is path. The point from where he started the digging to the point where he succeeded is the path as shown in the sentence analysis.

102. gba fù run out gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
102	gba fù	Q gba-fùrù be di ya She set forth go rV past place husband her Q gba-ra qsq She set forth rV past run She ran Q fù-rù be di ya She go rVpast place husband her She went out from her husband's house Q gbafùrù be di ya She ran out from her husband's house	Concrete metaphorical
a b		She is not culture	

'Gba' in the sentence above is a three argument verb. 'be di ya' is the complement of gba and it is interpolated with and is the direct object the ergative verb fù. The denotative meaning is the physical activity of running out of ones husband but this connotes not being cultured. This is because a woman who is cultured finds it difficult to run out from her marital home.

The image schema implicated in the gba verb is path.

103. gba ga run to. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
103	gba ga	Q gba-ga-ra ah[a He/she set forth go rV past market Q gba-ra qsq He set forth rV past run He ran Q ga-ra ah[a He/she go rVpast market He/she went to market Q gbagara ah[a He ran to the market	concrete metaphorical
a b		He made his way to the market	

The above sentence shows that 'gba' is a two argument verb. The complement of the verb 'ah[a' market is interpolated with and is the subject of the ergative verb 'ga'. Here, the denotative meaning is the running into a market while the connotative meaning is making his way to the market.

The Path schema is the image schema evoked in the gba verb complex above. This path schema is shown in the sentence by the distance covered to reach the market.

104. gba gè surround gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
104	gba gè	Nd[ohi gba-gè-rè xlq ya People thief set forth surround rV past house him Nd[ohi gba-ra xlq ya People thief set forth house him Thieves surrounded his house Xlq ya gè-rè House him surround rV past His house was surrounded	concrete metaphorical
a b		Nd[ohi gbagere xlq ya Thieves surrounded his house He is in a big dilemma	

The ‘gba’ verb complex in the example above is a double argument verb. The complement is ‘xlq ya’. It is overlapping with and is the subject of the resultative verb ‘gè’. The physical interpretation is the actual surrounding of house by thieves. This physical interpretation can be extended to mean being in a big dilemma, a difficult circumstance or problem.

The image schema exhibited by gba verb as indicated above is path.

105 gba go ascend, run up gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
105	gba go ugwu	Igwē gba-go-ro ugwū Igwe set forth climb rV past hill Igwe gba-ra ɔsɔ Igwe set forth rV past hill Igwe ran up the hill Igwe r[-go-ro ugwu Igwe climb rV Past hill Igwe climbed the hill Igwe gbagoro ugwu Igwe ascended the hill	concrete
a			

b		Igwe has a hard nut to crack	metaphorical
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The ‘gba’ verb in example (105) is a two argument verb. The arguments are ‘Igwe’ and ọsọ. The physical meaning is running up the hill, while the psychological or abstract meaning is having a hard nut to crack, a difficult problem to solve. This is because ascending a big hill can have an underlying meaning of having a big problem worrying the person in question. This is the mapping of the concrete unto the abstract.

The image schema shown in the gba verb complex above is path

106. gba gò float gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
106	gba gò	Mmanx gba-gò-rò n’elu mmiri Oil set forth float rV past prep top water Mmanx gba-ra n’elu mmiri Oil set forth rV past prep top water Oil floats on water surface Mmanx gò-rò n’elu mmiri Oil cover rV past prep top water Oil floats on top of the water	concrete metaphorical
a b		Mmanx gbagòrò n’elu mmiri Oil covered the surface of the water The water is rugged	

The sentence above has a two argument structure V(NPP). The complement of ‘gba’ is ‘n’elu mmiri’. This complement is pied piped with and is the complement of the resultative verb ‘gò’. The ordinary meaning is the covering or floating of oil on the water surface. This meaning can be extended to mean that the water is blurred or invisible or impure.

The image schema implicated by the verb gba is path as shown in the table above.

107. gba gq̄ bend gba - path image schema

S/N	Verbal Structure	Sentence	Meaning Types
107	gba gq̄	Àmàd [gba-gq̄-rq̄ aka ya Amad [set forth bend rV past hand him	

a	Amadi gba-ra aka ya Amad[set forth rV past hand him Amadi cracked his fingers Amadi gq-rq aka ya Amadi bend rV past hand him Amadi bent his hand Amad[gbagqrq aka ya Amad[bent his hand	concrete
b	Amadi is not reliable	metaphorical

Example 107 has the structure of same subject verb-form. Both have the same subject. In the first sentence, ‘Amadi gbara aka ya’, the arguments are ‘Amadi and ‘aka ya’. ‘Aka ya’ is inalienable possession. The second sentence ‘Amadi goro aka ya’ also has the same arguments as the internal and external arguments of the verb ‘go’. The denotative meaning is associated with the actual bending of ones hand or bending something. This denotative meaning can connotatively mean not being reliable. So the example in (a) portrays the denotative meaning while that of (b) exhibits the connotative meaning.

The image schema shown by gba verb complex in 107 is the path schema.

108 gba gbu kill by shooting, execute. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
108	gba gbu anu	O gba-gbu-ru agx̄ He set forth kill rV past lion Q gba-ra agx (egbe/uta etc) He set forth rV past lion He shot a lion O gbu-ru agx (agx nwrx) He kill rV past lion He killed a lion O gbagburu agx	
a		He killed a lion with a gun	concrete
b		He is fearless	metaphorical

In this sentence, ‘gba’ is a three argument verb. The arguments are ‘O’, ‘egbe’/uta, and ‘agu’. The other verb (gbu) is a two argument verb. In the sentence ‘O’and ‘agu’ are the arguments of

the verb. The denotative meaning relates to the physical killing of a lion. But the extension of the meaning metaphorically is that the hunter who killed lion is fearless and strong.

It is noticed in the example above that the image schema used for our analysis of gba verb is path.

109 gba gha speak against/ argue. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
109	gba gha	Ada gba-gha-ra okwu ahx' Ada set forth argued against speech that Ada gba-ra okwu ahx Ada set forth rV past speech that Ada kicked against the speech Okwu ahx ghà-rà Speech that scatter rV past The speech scattered	concrete metaphorical
a b		Ada gbaghara okwu ahx Ada argued against that speech	

The verb 'gba' is a two argument verb. Its complement is 'okwu ahụ'.. The second sentence has 'gha' as the verb. It has two arguments, Anị and ezi na ụlọ. This complement is pied piped with and is the subject of the resultative verb 'gha'. The denotative interpretation is opposite of a particular position. This can connotatively mean controvertibility of the given position.

The image schema which gba verb implicates here is path.

110 gba ghà run past/overtake. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
110	gba ghà	Àn[gba-ghà-rà ezi nà xlq ya An[set forth run past rV past compound and house him Àn[gba-ra ọsọ An[run rV past run An[ran Ànì ghà-rà ezi na xlq An[leave rV past kiths and kin	

a		An[left his family	concrete
b		An[abandoned his family	metaphorical
		An[is an ingrate	

The ‘gba’ in the above sentence is a two argument verb. ‘Qsɔ’ is its complement. The second sentence lives ‘gha’ as the verb. It has two arguments, Anɪ and ezi na ɔlɔ. The path image schema is reflected in the gba verb in example 110.

111 gba ghe open/unlock. Image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
111	gba ghe xzq̣	Obinnà gba-ghe-re xzq̣ ya Obinna set forth open rV past door him Obinna gba-ra xzq̣ ya Obinna set forth rVpast door him Obinna kicked his door Xzq̣ ya ghe-re (oghe) Door him open rVpast (open) His door opened	
a		Obinna gbaghere xzq̣ ya Obinna opened his door	concrete
b		Obinna is open minded	metaphorical

The verb ‘gba’ is a two argument verb. The complement ‘xzq̣ ya’ is here moved to the immediate left of the verb ‘ghere’ and is the subject of the incoactive verb ‘ghe’. The cognitive interpretation proves that (111a) is the concrete instantiation of the physical opening of the door while (111b) is the abstract or metaphorical extension of the concrete meaning.

It is the path image schema that is reflected in the gba verb complex as displayed in the table. The path is exhibited in the sentence from being locked to being unlocked.

112. gba ghè dissolve. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
112	gba ghe	Q gbaghèrè qkpà na mmirī She set forth turn ɔkpa prep water Q gbara ɔkpa na mmiri She set forth ɔkpa prep water She dissolved ɔkpa in water Qkpa gbaghere na mmiri	

a		Ọkpa mix rV past prep water	
b		Ọkpa mixed up in water Ọ gbaghere ọkpa na mmiri She dissolved ọkpa in the water She made concoction	concrete metaphorical

The verb ‘gba’ in the sentence above is a three argument verb. The complement in this sentence is ‘na mmiri’ This complement is inchoative with and is the subject of the ergative verb ‘ghè’. The denotative meaning of the above ‘gba’ verb complex is ordinary mixing of ọkpa in water during preparation, while the denotative meaning is making up a concoction.

The path image schema is adopted in the analysis of the gba verb above.

113. gba gwa mix up. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
113	gba gwa	Diochi` gba-gwa-ra mmanyahx` Wine tapper set forth mix rV past wine that Diochi gba-ra mmanyah Wine tapper pour rV past wine Wine tapper poured wine Diochi gwara mmanyahx Wine tapper mix rV past wine that That wine mixed up the wine Diochi gbagwara mmanyahx The wine tapper mixed up something in the wine The wine underwent overhauling	concrete metaphorical
a			
b			

The ‘gba’ verb complex in this sentence is a two argument verb. This is because it has two nouns viz: ‘Diochi’, wine tapper, is N₁ and wine is N₂. The complement ‘mmanyahx’ is inchoative with and that makes it to be the subject of the ergative verb ‘gwa’. The physical instantiation of the above is the actual mixture of wine by wine tappers with either sugar or saccharin but the psychological instantiation is overhauling.

In the gba verb complex above, it is the path schema that is manifested. Path shema is implicated in the sentence through the distance covered by the wine tapper to go up and tap the wine.

114. gba gwò confuse. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
114	gba gwo`	Okwu ahx gba-gwo-ju-ru m anya Speech that set forth confuse full rVpast me eye Okwu ahx gbara m anya Speech that surprise rV past me eye That speech is surprising Anya m gbagworo Eye me full rV past Myeyes are full	concrete metaphorical
a b	Okwu ahx gbagwojuru anya The speech is surprising The statement is confusing		

The verb 'gba' in the above sentence is a three argument verb. 'anya' being the complement is interpolated with and it is here the subject of the resultative verb 'gwo'. The concrete or physical instantiation is the actual surprises or confusion of certain things or speeches. This is shown in the (a) example. The example in (b) involves the same motion of setting forth but within the psychological or abstract domain, hence the (b) example is the metaphorical extension of the example in (a).

The image schema reflected by gba verb as shown in the table above is path.

115 gba hà: leave open. Gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
115	gba hà`	Q gba-hà-rà qnx ya aka He/she set forth leave rV past mouth him hand Q gbara qnx ya He set forth rVpast mouth him He kicked his mouth	

		Q hàrà qnx ya aka She leave rV past mouth her hand She left her mouth open Q gbahara qnx ya aka She did not control her mouth She left her mouth wide open	
	a b		concrete metaphorical

The sentence in this example shows ‘gba’ verb complex as a three argument verb. It is ‘aka’ that serves as the complement. This complement is inchoative with and is the indirect object of the resultative verb ‘ha’. The physical or concrete meaning here is the physical leaving off of one’s mouth either when crying or talking too much. This concrete meaning can be extended metaphorically to mean one leaving her mouth wide open without minding what comes out of it.

The image schema patent in the analysis of gba above is path.

116. gba he go round/ encircle. gba – image schema is path

Crossrefer to gbafe in example 111. They are dialectal variants of the same verb

117 gba hè run pass/overtake. gba – image schema is path

Crossrefer gbafie/gbahie analysed in 96. They are just variants of the same verb.

118 gba ho disperse. gba – image schema is path

Crossrefer to gbafu in example 98. Two of them are dialectal variance.

119 gba hq leave some. gba – image schema is path

This has been analysed in example 99 gbafu because they mean the same thing.

120. gba hu go round. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
120	gba hu	Ogè gba-hu-ru xzq` Oge set forth go round road Ogè gba-ra xzq Oge set forth rV past road	

a		Oge rode on the road Ogè hù-rù xzq̄ Oge miss rV past road Oge missed the road	
b		Oge gbahuru xzq̄ Oge went round the road Oge was beating about the bush	concrete metaphorical

In this sentence, ‘gba’ is a two argument verb. The complement of the verb is ‘xzq’ road and is pied piped with which makes it become the indirect object of the resultative verb ‘hu’. The concrete interpretation here is the physical going round about without going straight. This physical interpretation can be extended to mean beating about the bush, making a mountain out of a mole hill, not going straight to the point.

The image schema that is implicated in the gba verb here is the path. The distance she travelled in her bid to get at her destination is the path as analysed in the sentence.

121. gba hù escape, run and miss. gba – image schema is path

The same verb has been analysed in example 100, ‘gbafù’. They are just variants of the same form.

122 gba ja shoot to pieces. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
122	gba ja isi	Qzq gba-ja-ra` ya isi Qzq set forth shoot rV past him head	

a	Qzq gba-ra ya Qzq set forth rV past him Qzq shot at him Isi ya (gba) ja-ra (gbariri) Head him break rV past His head broke to pieces	concrete metaphorical
b	Qzq gbajara ya isi Qzq shot his head to pieces Qzq is heartless	

‘Gba’ in this sentence is a three argument verb. The arguments are ‘Qzq’ and ‘isi’. The complement ‘isi’ is the grammatical subject of the resultative verb ‘ja’. The denotative interpretation of the sentence relates to the physical shooting of something to pieces while the connotative meaning or interpretation can be extended to be heartless and merciless.

The example of gba verb above has the image schema of path.

123 gba je run into. gba – image schema is path

Crossrefer to gbaga in example 102. They are variants of the same verb

124 gba ji break. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
124	ji igwe	Aka ya gba-ji-ri igwe Hand him set forth break rV past iron Aka ya gba-ra igwe Hand him set forth rV past iron His hand kicked iron Igwe ji-ri Iron break rV past The iron broke Aka ya gbajiri igwe His hand broke an iron	concrete metaphorical
a b			

‘Gba’ in this context is a two argument verb. Here, the complement ‘igwe’ iron, is the subject of the resultative verb ‘ji’. Then the physical interpretation is the physical breaking of an iron.

It is the path image schema that is evoked in this gba verb complex.

125. gba jq shoot badly. gba – image schema is path

S/N	Verbal	Sentence	Meaning
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	Structure		Types
125	gba jq	Òbi gba-jq-rq ya egbè Obi set forth bad rV past him gun Obi gba-ra ya (egbe) Obi set forth rV past him (gun) Obi shot him Egbe ya gbajòrò gun him wound rV past His gun wounded him. Obi gbajqrq ya egbe Obi shot him badly His effort was futile	
a			concrete
b			metaphorical

The verb ‘gba’ in this sentence is a three argument verb. The complement of the verb is ‘egbe’ gun. It is interpolated with and is the subject of the ergative verb ‘jq’. The concrete interpretation relates to the actual shooting of somebody badly with or without killing him. This concrete interpretation as shown in (a) example can be metaphorically extended to mean effort in futility as reflected in (b) example. While gbafe/gbahie can be decomposed into with the same subject, gbajò cannot.

Again, Path image schema is used here for the analysis of gba verb complex. Path schema as obtained in this sentence example, is the distance Obi traveled in his bid to get at his victim.

126. gba jq set forth until satisfied (Nsukka dialect). Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
126	gba jq	Agbajòrò m egbè I set forth shooting Agbara m egbè I set forth shoot rV past gun I shot gun Ògbugba egbè jòrò m Shooting gun satisfiy rV past I Shooting gun satisfied me Agbajòrò m egbè I shot gun until I became satisfied	
a			Concrete

In the above, the argument structure of ‘gba’ is V(NN), a second degree verb. The complement is ‘egbè’ is the subject of the resultative verb ‘jq’. The concrete instantiation is the normal activity of shooting. It has no metaphorical extension

The image schema implicated here in the gba complex as displayed in the table is also path.

127 gba ju fill up. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
127	gba ju ite	Ùdo gba-ju-ru itè mmiri Udo set forth fill up rV past pot water Udò gba-ra itè mmiri Udo set forth rv past pot water Udo put water in the pot Mmiri jù-rù itè Water fill rV past Pot Water filled up pot Udo gbajuru ite mmiri Udo filled up the pot with water Udo is helpful	concrete metaphorical
a			
b			

In this example, 'gba' is a three argument verb. The complement 'mmiri' is pied piped with and is the subject of the resultative verb 'ju'. The denotative interpretation relates to the filling of pot with water. The image schema which is exhibited in the aforementioned gba complex is path. The path is implicated in the sentence from the emptiness to fullness of the pot.

128. gba ka spoil. gba – image schema is path.

S/N	Verbal Structure	Sentence	Meaning Types
128	gba ka	Qgwx gba-ka-ra ya isi Medicine set forth spoil rV past him head Qgwx gba-ra isi ya Medicine set forth rV past head him Medicine spoilt his head Isi ya gbaka-ra Head him spoil rV past His head is spoilt Qgwx gbakara ya isi His head was damaged by drugs He is mentally deranged	concrete metaphorical
a			
b			

The above sentence shows that gba has three arguments. The complement is 'isi'. This is overlapping with the resultative verb 'ka'. In the sentence, the physical meaning is just the social

and adverse effect of drugs on those that take it. This physical interpretation is metaphorically extended to mean mental derangement.

The image schema reflected in this analysis by the gba verb is the the path.Containment schema.

129. gba kà join together. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
129 a b	gba kà	Ha gba-kà-ra` aka rxq qrx They set forth join together do rV past work Ha gba-ra aka	concrete metaphorical

The above sentence is inseparable. The sentence cannot be separated to get a grammatical structure . It is a fossilised verbform. The image schema is of of the gba verb complex is path.

130. gba ke get well. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
130	gba ke	Ebo gba-ke-re n`qr [a Ebo set forth get well rV past prep sickness. Ebo gbara *`qria kere	concrete metaphorical

One observes that the sentence here is ill formed. Therefore, it cannot be separated to make a meaningful utterance. This is equally an example of a fossilised verbform.

The image schema implicated in the gba verb complex here, is the path as indicated in the table.

131 gba kè scatter. gba – image schema is path

S/N	Verbal	Sentence	Meaning
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	Structure		Types
131	gba kè	<p>Akpaka gbakere ebe niile Oil bean fruit set forth scatter rVpast place many</p> <p>Akpaka gbara ebe niile Oil bean fruit set forth rV past place many</p> <p>Oil bean fruit scattered many places</p> <p>Akpaka kere ebe niile Oil bean fruit divide rV past place many</p> <p>Oil bean fruit are all over the places</p> <p>Akpaka gbakere ebe niile Oil bean fruit scattered everywhere</p>	

The above sentence shows gba to have two arguments. The arguments are ‘akpaka’ oil bean fruit and ‘ebe niile’ everywhere. This sentence is an example of same subject verb form due to the fact that the two verbs ‘gba’ and ‘kè’ have akpaka ‘oil bean fruit’ as their subject. The denotative meaning here is the normal spread of oil bean fruit when it broke open. This meaning can connotatively mean that trouble bursted everywhere.

The image schema implicated in the gba verb complex is path.

132 gba ko set forth hang. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
132	gba kq	<p>O gba-ko-ro n’elu oche He/she/it set forth hang rV past prep top chair</p> <p>Q gbara n’elu oche He/she/it set forth rV past prep top chair</p> <p>He/she/it be on top of chair</p> <p>O koro n’elu oche He/she/it hang rV past prep top chair</p> <p>HE/she/it hanged on top of chair</p> <p>O koro n’elu oche He/she/it hanged on top of a chair</p>	Concrete

Gba in this sentence is a two argument verb V(NPP).he complement is ‘n’elu oche’and is inchoative with and is the direct object of the ergative verb ‘ko’. The physical interpretation is the actual hanging of somebody or something on top of a chair.

The image schema involved in the analogical mapping of gba verb is path. Path schema is reflected through the distance from the source to the top of the chair as illustrated in the sentence.

133. gba kq dry. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
133	gba kq	Anwā̄ gba-kq-rq akwà` Sun set forth dry rV past cloth Anwx gba-ra akwa Sun set forth rV past (something) The sun dried (something) Akwa kq-rq Cloth dry rV past Cloth dried Anwx gbakqrq akwa	
a		The sun dried up the cloth	concrete
b		It is a welcome relief or development	metaphorical

The ‘gba’ verb complex in the above sentence is a two argument verb. The complement ‘akwa’ is interpolated with and it is the subject of the ergative verb ‘kq’. The physical instantiation is the physical drying of washed clothes in the sun. This physical interpretation can be extended to mean a welcome relief or development. This is because a wet cloth cannot be worn until it is dried up. That is when the owner will be happy to wear it.

The image schema evoked in the verb complex is path. The path schema is implicated in the sentence through the time lag which the cloth takes to dry up.

134. gba kq̄ come together. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
134	gba kq̄	Ha gba-kq̄-rq̄ màkà` ya They set forth together rV past because of him Ha gbara *Maka ya kqrq̄	

Looking at the sentence above, one discovers that it is not well formed and trying to delexicalize it will make it ungrammatical. Gba and kq fuse as a verb. Kq does not subcategorise arguments to form a different sentence.

The image schema reflected by the gba verb complex is path.

135 gba kù cling unto. gba - Image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
135	gba kù	Chikà gbakùrù nne ya Chika set forth hold rV past mother her Chikà gbara ọsọ Chika set forth rV past run Chika ran Chikà kùrù nne ya Chika cling rV past mother her Chika clinged round her mother Chika gbakùrù nne ya	
a		Chika held her mother firm	concrete
b		Chika is tied to her mother's apron strings	metaphorical

In the above sentence, 'gba' has two arguments. The arguments are 'Chika and 'nne ya'. The complement is nne ya which is interpolated with and it serves as the indirect object of the resultative verb 'kù. The concrete instantiation of the sentence is normal running of a child to her mother may be when the child is afraid to take refuge. This concrete meaning can be extended metaphorically to mean being tied to her mother's apron strings.

In the gba verb complex, it is the path image schema that is eminent. As illustrated in the sentence, it is from the place Chika started running to her mother implicates the image schema of path.

136. gba kpè come or run last. gba - Image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
136	gba kpè	Ọgq gba-kpè-tè-rè àzx Qgq set forth come rV past back Ọgq gba-ra (qsq) Qgq set forth rV past (run) Qgq ran Ọgq kpè-tè-rè àzx Qgq come rV past last	

a		Qgq came last	
b		Qgq gbakpetere azx	concrete
		Qgq ran last	metaphorical
		Qgq is a poor achiever	

'Gba' in this sentence is a two argument verb. The complement is 'osò' which is in the right periphery of the clause. 'Azx' serves as the object of the verb 'kpè'. The denotative meaning is the last to run. The psychological or abstract meaning is that he is a slow achiever, assuming he came last in the race.

The image schema culpable here in the verb complex is path.

137. gba kp[give small. gba - image scema is path

S/N	Verbal Structure	Sentence	Meaning Types
137	gba kp[Ege gba-kp[-nye-re Ugwu qj[Ege set forth small give rV past Ugwu kolanut Ege gba-ra oji Ege set forth rV past colanut Ege broke colanut Ege kp[-nye-re Ugwu qj[Ege small give rV past Ugwu kolanut Ege gave small kolanut to Ugwu	
a		Ege gbakp[nyere Ugwu qj[concrete
b		Ege gave small part of the kolanut to Ugwu Ege is stingy	metaphorical

The argument structure of gba after deconstruction in the above sentence is V(NN). This is a second degree verb. The complement is 'qj[' which is now the indirect object of the resultative verb 'kp['. The physical interpretation in the sentence is a social order of giving part of ones kolanut to another. This meaning can be extended metaphorically to mean stingy,

It is path image schema that is involved in the gba verb complex here.

138. gba kpò have secret council. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types

138	gba kpò	Ha gba-kpò-rò ya ìzù They set forth plot rV past him council Ha gba-ra izu They set forth rV past council They had council Izu ha kpò-rò/ Izu ha megidere ya Council them be against him Their council is against him Ha gbakporo ya izu They plotted secretly against him They conspired against him	concrete metaphorical
a			
b			

In the sentence above, ‘gba’ is a two argument verb. The complement in the sentence is ‘izu’ council. This is inchoative with and is the subject of the resultative verb ‘kpò’. The denotative meaning of the gba verb complex here is the concrete meaning of having council against somebody. Kpo on its own does not constitute a grammatical structure with its arguments. It does appear that whenever the second verb of a compound verb is in conflict with another verb when deconstructed, it gives way to the latter

We have the image schema of path implicated in the gba verb complex above.

139. gba kpq set forth break. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
139	gba kpq	Osisi gba-kpq-rq ya anya Stick set forth damage rV past him eye Osisi gba-ra ya Stick set forth rV past him Stick wounded him Anya ya kpq-rq Eye him damage rV past His eyes damaged Osisi gbakpq-rq ya anya His eyes was damaged by a stick He lost his sight.	concrete metaphorical
a			
b			

The ‘gba’ verb complex in the above is a two argument structure. The complement which is ‘anya’ eye, is inchoative with and it is the subject of the ergative verb ‘kpq’. Here, the denotative meaning in (139) is the physical wounding of the eyes. Its connotative meaning mean the person losing his sight.

The image schema evident in this analysis of gba verb complex is path.

140 gba kpu run into. gba – path image schema

S/N	Verbal Structure	Sentence	Meaning Types
140	gba kpu n'qnx	Anx ahx` gba-kpu-ru qnx̄ Meat that set forth run into rV past mouth Anx ahx gba-ra (qsq) Animal that set forth rV past That animal ran Anx ahx kpu-ru qnx Animal that enter rV past mouth The animal entered a hole Anx ahx gbakpuru qnx That animal ran into a hole	concrete metaphorical
a b		The animal is a victor	

In the above sentence, 'gba' is a two argument verb. The complement 'qnx' is interpolated and is the indirect object of the resultative verb 'kpu'. Here, the denotative instantiation colligates to the real life of animal running into a hole. But the connotative meaning is that the animal is a victor. After trying to kill the animal, it eventually ran into a hole. This is being victorious.

The example above has the image schema path implicated in the analysis of gba verb.

141. gba kpù hide. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
141	gba kpù	Nwata` ahx` gba-kpù-rù n'ime xlq Child that set froth hide rV past prep inside house Nwata ahx gba-ra qsq Child that set forth rV past run That child ran Nwata ahx kpù-rù n'ime xlq Child that hide rV past prep inside house That child hid inside the house Nwata ahx gbakpuru n'ime xlq The child ran and hid himself inside the house	concrete metaphorical
a b			

		The child was out of sight or inconspicuous	
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In the sentence above, ‘gba’ verb complex is a two argument verb. ‘xlq’ is the complement. This complement ‘xlq’ is the indirect object of the resultative verb ‘kpù’. In the sentence, we see that the physical interpretation of ‘gba’ is the physical hiding of somebody who does not want to be seen while this can be extended metaphorically to mean out of sight or inconspicuous.

The above shows that it is the path image schema that is reflected in the gba verb complex above.

142. gba kpx̣ do. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
142	gba kpx̣	Akpx̣ gba-kpx̣-rx̣ ya n'aka Lump set forth do rV past him prep hand Akpx̣ gba-ra ya Lump set forth rV past him Lump is on his hand Akpx̣ kpx̣-rx̣ ya n'aka Lump do rV past him prep hand Lump is in his hand Akpx̣ gbakpx̣rx̣ ya n'aka There is a lump in his hand	concrete metaphorical
a b		He has an external body	

The verb ‘gba’ is a three argument verb. ‘Aka’ which is the complement is pied piped with and it is the direct object of the resultative verb kpx̣. The meaning eminent in the sentence is the actual lump on peoples hands while this can be extended to mean having external body.

The image schema reflected in the gba verb complex is path.

143. gba kwa repeat. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
143	gba kwa	Q gba-kwa-ra qsq He set forth repeat rV past run Q gba-ra qsq	

		He set forth rV past run He ran Qsq kwà-rà Run begin rV past Race began Q gbakwara qsq He repeated the race	
a		He eventually took to his hills	concrete
b			metaphorical

A look at the above construction portrays that it is a two argument verb ‘qsq’ which is the complement is pied piped with and is the subject of the resultative verb ‘kwa’. The physical interpretation is just the repeating of a race while this can be extended to mean that he took to his hills. This is a figurative statement.

The image schemata evident in the gba verb complex is path as indicated in the sentence analysis

144. gba kwà break off. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
144	gba kwà	Q gba-kwà-px-rx aka oche He set forth break go rV past hand chair Q gba-ra aka oche He set forth rVpast hand chair He kicked the hand of a chair Aka oche kwa-px-rx(aka oche pxrx Hand chair go out rV past The chair’s hand went out Q gbakwàpxrx aka oche He broke off the hand of the chair.	
a		He broke off the hand of the chair.	concrete
b		The chair lost its hand	metaphorical

It is observed in the sentence above that ‘gba’ is a two argument structure. It is ‘aka oche’ that is the complement. It is interpolated with and it is the subject of the resultative verb pù’. In the cognitive interpretation, the example in (a) shows the concrete interpretation of ‘gba’ while the example in (b) involves the same motion but within the psychological domain. So, example in (b) is the metaphorical extension of that in (a). The physical meaning relates to break while the abstract meaning maps on lost.

It is path image schema that is patent in the gba ver complex here.

145. gba kwe ignore (Ezeagu dialect). gba - image
 schema is path

S/N	Verbal Structure	Sentence	Meaning Types
145	gba kwe	Xjq gba-kwe-re n'okwu ahx Xjq set forth ignore rV past prep talk that Xjq gba-ra n'okwu Xjq set forth rV past prep speech Xjq ran awayfrom the a speech Okwu ahx kwere Speech that agree rV past The speech is alright	Concrete metaphorical
a b	Xjq gbakwre n'okwu ahx. Xjq ignored the case Xjq is indifferent		

The sentence above is two argument. 'n'okwu' is the complement. It is pied piped with and it becomes the subject of the resultative verb 'kwe'. The concrete interpretation is the actual ignoring of certain things while this can be extended to mean being indifferent.

The image schema exhibited by the gba verb complex here is the path.

146. gba kwo break out. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
146	gba kwo	Nwa ahx gba-kwo-ro n'ike Child that set forth break rV past prep strong Nwa ahx gba-ra n'ike Child that set forth rV past strong The child broke off Nwa ahx kwo-ro Child that break rV past The child died Nwa ahx gakworo n'ike The child died premarturely	concrete metaphorical
a b	The child did not see the light of the day		

The verb complex ‘gba’ in the analysis is a two argument verb. The complement ‘n’ike’ is inchoative with and it is the indirect object of the ergative verb ‘kwo’. The interpretation concerns the physical breaking off of a child prematurely from the womb. This physical interpretation can be extended to mean ‘not seeing the light of the day’.

A close look at the gba verb complex shows that path image schema is reflected.

147 gba kwu. run up to. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
147	gba kwu mmxq	Xzqma gba-kwu-do-ro mmxq Xzqma set forth run up meet spirit Xzqma gba-ra qsq Xzqma set forth rV past run Xzqma ran Xzqma kwu-do-ro mmxq Xzqma meet rv past up with spirit. Xzqma met up wih spirit Xzqma gbakwudoro mmxq Xzqma ran up to the spirit Xzqma is passing on/ away	concrete Metaphorical
a			
b			

In the example, ‘gba’ has two arguments – ‘Xzqma’ and ‘qsq’. The complement in the sentence ‘mmxq’ is the direct object of the resultative verb ‘kwu’. The interpretation in example (147a) is the denotative meaning of the verb ‘gba’ set forth. The example in (147b) involves the same movement but within the psychological domain. This shows that the example in (147b) is the metaphorical extension of the concrete interpretation in (147a).

The image schema evoked in the gba verb above is path. Path is exhibited from the point Uzoma started the race to the point he met the spirit, just as indicated in sentence

148. gba kwx fence. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
148	gba kwx	Q gba-kwx-rx xlq ya ògìgè He set forth stand rV past house him	

		fence Q gba-ra xlq` ya o`gige` He set forth rV past house him fence He fenced his house Q kwrx xlq ya ogige He stand rV past house him fence He built fence in his house Q gbakwrx xlq ya ogige He fenced his house round His house is an enclosure	
a			concrete
b			metaphorical

In this example, ‘gba’ is a three argument structure. ‘Q’ is N₁, ‘xlq ya’ is N₂ while ogige is N₃. The complement ‘ogige’ is the grammatical subject of the ergative construction. Hence, the real meaning of ‘gba’ verb complex is surrounding or fencing round of a house but the implied meaning is his house being in an enclosure. This means an area or domain of something partially or entirely enclosed by barriers.

The image schema apparent in the gba verb complex is the path.

149 gba la/na run home. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
149	gba la/na `xlq`	Chimi gba-na-ra n' xlq` ha Chimi set forth go Rv past prep house them Chimi gba-ra qsq Chimi set forth rV past run Chimi ran Chimi na-ra n' xlq` ha Chimi go rV past prep house them Chimi went into their house Chimi gbanara n' xlq` ha	
a		Chimi ran into their house	concrete
b		Chimi survived in their house (Ezeagu dialect)	metaphorical

When we look at the argument structure of the above sentence, we discover that the verb ‘gba’ is a two argument verb. The complement ‘n' xlq` ha’ is the indirect object of the resultative verb ‘na’. In this example, one discovers that the denotative meaning is the actual

running home to one's house. This physical or concrete meaning can be extended to mean surviving from sickness. 'Gba' relates to the physical running into the house but metaphorically it means surviving in their house.

A look at the above gba verb complex, one finds out that the image schema reflected is also path image schema. The distance covered to reach their house is the path as analysed in the sentence example.

150. gba li kick up. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
150	gba li	Q gba-li-li bqqlx elū He set forth kick rV past ball high Q gba-ra bqqlx He set forth rV past bqqlx He kicked a ball Bqqlx li-li elu Bqqlx go rV past high The ball went up Q gbalili bqqlx elu	concrete metaphorical
a		He kicked the ball up	
b		He opened up the issue	

This sentence has the argument structure V(NN) 'o' he, is the N₁ and 'ball' is the N₂. The complement is 'ball'. Ball is the subject of the ergative 'li'. The physical interpretation is the normal game of playing.

The image schema adopted here for the analysis of gba verb complex is path.

151. gba li break. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
151	gba li	Eke gba-li-li òkwutē Eke set forth break rV past stone Eke gba-ra okwute Eke set forth rVpast stone Eke kicked stone Okwute li-li Stone break rV past The stone broke Eke gbalili okwute	concrete
a		Eke broke the stone to pieces	

b		He made everything easy	metaphorical
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In the example above, ‘gba’ is a two argument verb. The complement ‘okwute’ is overlapping with and is the subject of the resultative verb ‘li’. The concrete interpretation is the actual breaking of stones to pieces but the metaphorical extension is making things easy. This is because the broken stones are ready to be used for work.

The image schema evoked through the Igbo verb ‘gba’ is the path.

152. gba l[try hard. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
152	gba l[Q gba-l[-r[nke ukwu He/she set forth try rV past very well	

‘Li’ on its own in the sentence above does not constitute a grammatical structure with its arguments. It does appear that whenever the second verb of a compound verb is in conflict with another verb when deconstructed, it gives way to the latter.

The image schema employed by gba verb complex as shown in the table is path.

153 gba lu visit. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
153	gba lu	Any[gba-lu-lu be ha We set forth reach rV past place them Any[gba-lx osq We set forth rV past run We ran Any[lu-lu be ha We reach rV past place them We reached their place Any[gbalulu be ha	
a		We went to their place	concrete
b		We paid them a visit	metaphorical

The ‘gba’ verb in the above sentence is a two argument verb. The complement is ‘be ha’ their place. Here, it is the object of the resultative verb ‘lu’. The physical instantiation is the

social activity of going to the people’s house or places while this can be extended metaphorically to mean paying a visit.

The example of gba verb complex above shows that the image schema of Path is exhibited. The path schema is reflected in the sentence through the action of covering a distance to reach their place.

154. gba lx spoil. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
154	gba lx	Xjq gba-lx-lx Adamma Xjq set forth spoil rV past Adamma Xjq gba-lx Adamma Xjq set forth rV past Adamma Xjq ran kicked Adamma Adamma lx-lx Adamma spoil rV past Adamma was spoilt Xjq gbalxlx Adamma	concrete metaphorical
a		Xjq spoilt Adamma	
b		Xjq devirginated Adamma	

The ‘gba’ verb above, is a two argument structure. The complement ‘Adamma’ is pied piped with and it is seen as the subject of the ergative verb ‘lx’. The denotative meaning of ‘gba’ here is spoilt. The connotative interpretation is the devirgination of Adamma.

The image schema evoked in above through ‘gba’ verb complex is path. This path schema is seen from her virginity to devirgnating her as portrayed in the sentence example.

155 gba lù stir and make impure. Gba – image schema is path

Refer to gbarù in example (169) They mean the same thing but are variant of the same form.

156 gba mi run deep into. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types

156	gba mì n'qh [a	Qga gba-mì-rì n' qh [a. Qga set forth run deep into rV past prep bush Qga gba-ra (qsq) Qga set forth r rV past run Qga ran Qga mi-ri n'qh [a Qga sink rV past prep bush Qga sank in the bush Qga gbamiri n'qh [a Qga ran deep into the bush Qga is a hobo	concrete metaphorical
a			
b			

'Gba' in this sentence is a two argument verb. The complement 'n'qh [a' is pied piped with and is the indirect object of the ergative verb 'mi'. The concrete interpretation is the physical running deep into the bush by Qga while this can be extended to mean being a hobo, a homeless person. In this case 'gba' relates to the physical running into the bush but 'mi' maps on 'hobo, tramp'.

The image schema implicated in this example by gba verb complex is path.

157 gba mì stand erect (kwurū ɔtɔ). gba – image schema is path

Crossrefer to the analysis of 'gbatì' in example (182). They are the same verb with dialectal variation

The image schema exhibited by the gba verb complex is path.

158. gba mò persist. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types

The verb above is similar with 'gbata' in example (179).

159 gba nà get well gba – image schema is path.

This verb complex is the same as the one in example (163) gbanyà. They are the same verb with dialectal variants.

160 gba nwò alter/change. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
160	gba nwò àgwà	Xzq̣ gba-nwò-rò àgwà ya Xzq̣ set forth change rV past character her. Xzq̣ gba-ra agwa ya Xzq̣ set forth rV past character her Xzq̣ kicked her character Agwa ya nwò-rò Character her change rV past Her character changed Xzq̣ gbanworo agwa ya Xzq̣ changed her character Xzq̣ is no longer her old self	concrete metaphorical
a			
b			

The complex verb ‘gba’ is a two argument verb. The complement ‘agwa ya’ is interpolated with and it becomes the subject of the ergative verb ‘nwò’. The cognitive interpretation in the sentence shows that example (160a) is the denotative meaning of change of Ụzọ’s character whereas the connotative meaning can be that ‘Xzq̣ is a camelion’. Camelion changes its colour any how.

The image schema in this analysis of gba verb complex is path. From her old character to the new one is the path as indicated in the sentence.

161 gba nwu light up. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
161	gba nwu	Ijẹ gba-nwu-ru qkx Ijẹ set forth light rV past fire Ijẹ gba-ra qkx Ijẹ set forth rV past fire Ijẹ lighted up fire Qkx nwuru Fire light rVpast Fire lighted up Ijẹ gbanwuru qkx	

a		Ije put on fire	concrete
b		Ije ignited the problem	metaphorical

The above is a two argument verb. The arguments are Ije and qkx. The complement 'qsq' is interpolated with and it therefore becomes the subject of the ergative verb 'nwu'. The denotative meaning of gba in the above sentence is the actual lighting up of fire while the connotative meaning is igniting a problem.

It is the path image schema that is obvious in the gba verb complex here.

162. gba nwx benumb. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
162	gba nwx	Igwe` gba-nwx-rx m aka Iron set forth paralise rV past me hand Igwe gba-ra aka m Iron set forth rV past hand my Iron hit my hand Aka m nwx-rx Hand my die rV past My hand was benumbed	
a		Igwe` gbanwxrx m aka Iron paralysed my hand	concrete
b		I received a big shock	metaphorical

'Gba' in 162 is a two argument verb. The complement in the sentence is 'aka m',my hand. This complement is inchoative with and it is the subject of the ergative verb 'nwx'. The physical instantiation is the physical hitting of hand on iron and the feeling of the pain associated with it.

The image schema exhibited by 'gba' verb complement here, is path.

163. gba nyà put to excess. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
163	gba nyà	Nze` gba-nyà-ra` nnu n'ofe à` Nze set forth put salt to excess prep soup this Nze` gba-ra nnu n'ofe à` Nze set forth rV past salt prep soup this	

a		Nze added more salt in this soup Nnu nyàrà ofe à Soup this pass rV past salt This soup has much salt	concrete metaphorical
b		Nze gbanyara nnu n'ofe a Nze put salt in excess in this soup Nze always overdo things	

The argument structure of 'gba' in the above is V(NPP), a third degree verb. The complement found out here is 'nnu' salt. It is this complement that is pied piped with and then becomes the subject of resultative verb 'nyà' . The primary meaning of the verb 'gba' in the sentence is just the normal putting in salt or any other ingredient in a soup excessively while this primary meaning entails overdoing things.

The image schema obvious in the analysis of this verb 'gba' is path.

164 gba nye qkpa` give support. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
164	gba nye qkpa	Èjike gba-nye-re Eze qkpa` Ejike set forth give rV past Eze leg Ejike gba-ra Eze qkpa Ejike set forth rV past Eze leg Ejike kicked Eze with his leg Ejike nye-re Eze qkpa Ejike give rV past Eze leg Ejike gave Eze his leg Ejike gbanyere Eze qkpa Ejike gives Eze support or backing Ejike stands by Eze	concrete metaphorical
a b			

'Gba' in this sentence has two arguments – Ejike and qkpa. The complement 'qkpa', is interpolated with and is the indirect object of the ergative verb 'nye'. In the cognitive interpretation, the example in (164a) shows the physical or concrete instantiation of Ejike giving Eze a support but the example in (164b) is the abstract and psychological extension of that in (163a), that is Ejike standing by Eze. So, the physical interpretation relates to 'support' while the abstract maps unto 'stand by.'

However, it is the image schema of path that is exhibited in the gba verb complex above. The distance from Ejike to Eze is the path as analysed in the sentence.

165. gba nyi get up. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
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Cross refer to the analysis of gbali in example 150. Two of them are the same verb with dialectal differences.

166 gba nyx switch off, quench. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
166	gba nyx qkx	Q gba-nyx-rx qkx He/She set forth quench rV past fire Q gba-ra qkx He/She set forth rV past fire He/She kicked fire Qkx nyx-rx Fire quench rV past The fire quenched Q gbanyxx qkx He quenched or put out the light	concrete metaphorical
a b		He/She calmed down	

The verb ‘gba’ is a two argument verb V(NN). The complement in this example is ‘qkx’ which is ergativized to be the subject of the resultative verb ‘nyx’. The concrete interpretation is the ordinary putting off of fire/light. This denotative interpretation can be extended to mean being calm. Figuratively, when somebody is making noise or disturbing in a gathering, he can be asked to calm down ‘gbanyxq qkx’.

The image schema implicated in the gba verb complex is path. The path is from being lit to being extinguished as explicated in the sentence.

167. gba pe open. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
167	gba pe	Onye isi gba-pe-re xzq`	

a	Person head set forth open rV past door Onye isi gba-ra xzq Person head set forth rV past door The chairman kicked the door Xzq mepere Door open rV past The door opened Onye isi gbapere xzq The chairman opened the door	Concrete
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The sentence above shows that the argument structure of ‘gba’ is V(NN). This is a second degree verb. We have ‘x1q’, house as the complement of the sentence. It is this complement that is overlapped with, which becomes the subject of the resultative verb ‘pe’. The denotative interpretation here is the social activity of opening a house. The connotative meaning is that a new chapter has been opened.

The image schema of path is exhibited in this analysis of the gba verb complex. Path schema is from the locking of the door to the opening of it as shown in the sentence.

168. gba pè waste time. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types

The verb gbapè is fossilized and cannot be separated. The verb pè is no longer common as a single verb. But in Nsukka dialect, it is seen in verbs such as kwapè, In these verbs, it generally denotes wasting time in the performance of such verbs or using such verbs as a means of wasting time.

The image schema implicated by the verb gba is path.

169 gba pia destroy or damage. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
169	gba pia	Oku gbapiàrà ulò	

		Fire set forth destroy rV past house Ọkọ gbara ọlọ Fire set forth rVpast house Fire destroyed a house Ọlọ gbapịara House destroy rV past The house was destroyed Ọkọ gbapịara ọlọ The house was destroyed by fire out break	
a		The house was destroyed by fire out break	concrete
b		The house was raised down by fire	metaphorical

Gba verb complex in this example is a two argument verb. Ọkọ and ọlọ are the arguments. The complement is ọlọ and it is inchoative with and serves as the subject of the resultative verb 'pià'. The denotative meaning is the physical burning of a house by fire out break. This can connotatively mean raise down.

The image schema involved in the analogical mapping of gba verb complex is path.

170. gba pq damage. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
170	gba pq	Ah[h[a gbapqrq ya n'anya Weed set forth stick rV past him prep eye Ah[h[a gbara ya n'anya Weed set forth him prep eye Weed is in his eye Ah[h[a pqrq ya n'anya Weed stick rVpast him prep eye Weed stick in his eye Ah[h[a gbapqrq ya n'anya	
a		There is weed in his eye	concrete
b		He has a speck in his eye	metaphorical

In the above sentence, gba is a three argument verb V(NPP). The complement is 'ya' and it is interpolated with and serves as the direct object of the ergativized verb 'pq'. The concrete meaning of gba verb complex in the sentence is the real weed in his eye but the abstract meaning is that he has a speck in his eye. The speck cannot allow him see well.

It is the image schema of path that is evident in the analysis of gba verb complex here.

171 gba pu bore open or burst open. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
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Cross refer to gbafu in example 101. The verbs are the same with dialectal differences.

172 gba p̄x̄/fù exude . gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
17 2 a b	gba p̄x̄ mmanyà	Q gba-p̄x̄-rx mmanyà He set forth out rV past wine Q gba-ra mmanyà He set forth rV past wine He poured wine Mmanyà p̄x̄-rx Wine go rVpast Wine went out Q gbap̄x̄rx mmanyà He poured out wine He introduced our mission	concrete metaphoric al

The verb ‘gba’ is a two argument verb. ‘Mmanyà’ being the complement is interpolated with and it is the subject of the resultative verb ‘p̄x̄’. The denotative interpretation is the social activity of pouring out wine from a jar, while the connotative meaning is introduction of a mission. This is the metaphorical extension of the physical interpretation. So, in the context, the verb ‘gba’ refers to ‘exude’ whereas ‘p̄x̄’ maps on introduction of a mission.

The image schema that is adopted here in the analysis of the gba verb complex is the path schema.

173. gba ré run far (Owerri dialect). gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
173	gba ré	Q gba-re-re qkpà He set forth ran rV past leg Q gba-ra ɔkpà He set forth rV past leg He kicked leg Qkpà r-r Leg run rV past Leg ran Q gbarere qkpa	concrete metaphorical
a b		He ran as far as he could/He ran swiftly He took to is heels	

The sentence above is a two argument verb. The complement ‘qkpa’ leg, is overlapping with and this makes it to be the subject of ergative verb ‘ré’ . The physical interpretation is social activity of one running swiftly but this can connotatively mean one taking to his heels for safety.

The image schema identified in the gba verb complex is path.

174. gba rè level. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
174	gba rè	Chid[gba-rè-rè ikpo ajā Chid[set forth level rV past heap sand Chid[gba-ra ikpo aja Chid[set forth rV past heap sand Chid[kicked something Ikpo aja gbarèrè Heap sand level rV past Heap of sand leveled Chid[gbarere ikpo aja	concrete metaphorical
a b		Chid[leveled a heap of sand Chid[did a marvelous job	

In the above example, the argument structure of ‘gba’ is V(NN), a second degree verb. ‘Chid [’ is N₁ and ‘ikpo aja’, hip of sand is N₂. The complement ‘ikpo aja’ hip of sand is pied piped with and is the subject of the resultative verb ‘rè’. The denotative meaning here is mere leveling of sand or any other hipped something. This physical meaning can connotatively mean doing a marvelous work, very wonderful and exciting.

The image schema of path is exhibited by the gba verb complex here. Path is reflected here through the period or time it took Chidi to level the hip of sand as analysed in the sentence example.

175. gba ri cover or over flow. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
175	gba ri	Mmiri gba-ri-ri ogwe` Water set forth cover rV past bridge Mmiri gba-ra ogwe Water set forth rV past bridge Water covered bridge Ogwe gba riri Bridge cover rV past The bridge was covered Mmiri gbariri ogwe	concrete metaphorical
a b		The river covered the bridge/over filled the bridge The river was impassable	

The above sentence is a two argument verb. The complement ‘ogwe’ bridge, is inchoative with and it serves as the subject of the ergative verb ‘ri’. The denotative interpretation is the normal covering of bridge by water when there is a heavy down pour. But the connotative meaning is unmanageable. The river cannot be crossed because the bridge is covered by water and cannot be seen to match along by people. So, the river was impassable

It is the path image schema that is used in the analysis of the gba verb complex in the above table as indicated.

176 gba ri break or spend lavishly. Gba – image schema is path

See example 151 where we analysed gbalì. They mean the same but are variants of the same form.

177. gba rǫ stir (Owerri dialect). gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
177	gba rǫ	Ezi gba-rǫ-rǫ qgwǎ Ezi set forth stir rV past medicine Ezi gba-ra ǫgwù Ezi set forth rV past medicine Ezi turned medicine Qgwǎ rǫ-rǫ Medicine stir rV past Medicine stirred Ezi gbarqrq qgwǎ Ezi stirred the drug Ezi is agitated	concrete metaphorical
a			
b			

The observation made here, is that after deconstruction, the verb ‘gba’ is a two argument verb. ‘ǫgwǎ’ medicine, which is the complement is at the left periphery of the clause ‘ǫgwù rǫrǫ’ and it is taken as the subject of the resultative verb ‘rǫ’. The interpretation connects the physical stirring of a liquid by passing something through it. This physical interpretation can be extended using metaphor to mean agitation, that is, state of being moved with violence or with irregular action.

The image schema evident here in the gba verb complex is path. The path image schema is exhibited through the action of covering a distance to stir the drug.

178. gba ru run reach. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types

Cross refer to gbalu in example 151 where a similar verb was analysed.

179. gba rù /lù ripe. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
179	gba rù	Etuto a gba-rù-rù abx Boil this set forth ripe rV past pus Etuto a gba-ra abụ Boil this set forth rV past pus	

a		This boil has pus Abx ru-ru Pus ripe rV past The pus is riped Etuto a gbaruru abx	
b		This boil is riped with pus The boil suppurated	concrete metaphorical

The argument structure of the verb ‘gba’ is two. Here, the complement ‘abx’ is at the left periphery of the clause ‘abx ruru’ and is the grammatical subject of the resultative verb ‘rù’. The concrete meaning of ‘gba’ verb here, is the riping of a boil while abstract meaning is suppurated. The boil has reached the development stage of discharging a pus.

The image schema palpable in the analysis of the gba verb complex here, is also path.

180. gba rx destroy. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
180	gba rù		

Gba rù here is the same as analysed in example 152. Gbalù is used as standard while gbaru is dialectal.

181 gba rù mmiri pollute/spoil water. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
181	gba rx mmiri	Ezenwa gba-rx-rx mmiri ahx Ezenwa set forth pollute rV past water that Ezenwa gba-ra mmiri ahx Ezenwa set forth rV past water that Ezenwa kicked that water Mmiri ahx rx-rx Water that spoil rV past The water spoilt Ezenwa gbarxx mmiri ahx Ezenwa polluted that water Ezenwa committed atrocity	concrete metaphorical
a			
b			

The gba in this example is a two argument verb. The complement (mmiri) is ergativized and is the subject of the resultative verb ‘rx’. The denotative interpretation connects to the real

world of polluting water while the psychological or abstract meaning is that Ezenwa committed atrocity. This is because the act of polluting water used by public is wickedness, criminality and cruelty.

The image schema adopted in the analysis of the gba verb complex here is path. Path schema is reflected in the sentence through the distance Ezenwa travelled to pollute the water.

182. gba sa splash. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
182	gba sá	Chiazq gba-sa-ra Aga` mmiri n'ahx` Chiazo set forth wash rV past Aga water prep body Chiazo gbara Aga mmiri Chiazo set forth rV past Aga water Chiazo splashed Aga water Mmiri gbasara Aga Water splash rV past Aga Water splashed Aga Chiazo gbasara Aga mmiri n'ahx` Chiazq splashed water on Aga's body	concrete metaphorical
a b		Aga was assaulted	

The argument structure of the verb 'gba' is three V(NNN). Here, the indirect object is mmiri.

The example of 'gba' verb complex above shows that the image schema of path is equally obvious here.

183 gba sà spread. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
183	gba sà akwà`	Egō gba-sà-rà akwà Ego set forth spread rV past cloth. Egō gba-ra akwà Ego set forth rV past cloth Ego spread cloth. Akwa sa-ra Cloth spread rV past	

a		Cloth was spread. Ego gbasara akwa	concrete
b		Ego spread cloth Ego made the world see her character	metaphorical

The argument structure of the verb ‘gba’ is two. Here, the complement ‘akwa’ is at the left periphery of the clause ‘Akwa’ and is the grammatical subject of the resultative verb ‘sa’. In the denotative interpretation, the actual spreading of cloth is portrayed.

The image schema that is implicated by the gba verb complex is path.

184. gba si/shi be strong. Gba – image schema is path

S/N	Verbal Structure	Sentences	Meaning Types
184	gba sí	Nwata` ahx` gba-si-ri ike Child that set forth strong strong Nwata ahx gba-ra ike Child that set forth rV past strong That child be strong Nwata ahx si-ri ike Child that be rV past strong That child is strong Nwata ahx gbasiri ike That child is strong	concrete metaphorical
a		That child is strong	
b		The child has a single bone	

‘Gba’ is a two argument verb in the sentence above. The complement ‘ike’ strength, is pied piped with and is the indirect object of the resultative verb ‘si’. The physical interpretation here relates to the physical strength while the psychological or abstract interpretation can mean having a single bone.

The image schema apparent in the above sentence through the Igbo verb ‘gba’ is the path schema.

185. gba si/ shi waste.

S/N	Verbal Structure	Sentence	Meaning Types
185	gba sí	Q gba-si`-ri` mmiri or Q gbashiri mmiri He set forth waste rV past water Q gba-ra mmiri He set forth rV past water He poured out Mmiri si-ri (wxfuru /wusiri/wxshiri) Water waste rV past	

a		Water wasted Q gbasiri/gbashiri mmiri He wasted the water	concrete
b		The water was not used judiciously or handled	metaphorical

A look at the above, one observes that gba is a two argument verb. The complement which is ‘mmiri’ water, is interpolated with and is the grammatical subject of the resultative verb ‘sí’. The denotative instantiation of ‘gba’ in the example, is mere or normal way of wasting water but the connotative meaning is not making a profitable use of the water or the water not being judiciously handled

Here, it is the path image schema that is evident in the analysis of the gba verb complex as portrayed in the table.

186. gba s[gush out. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
186	gba sí	Qbara` na`-a`-gba-s[ya n` ahx` Blood Aux prefix set forth gush out him prep body Qbara na-a-gba ya n` ahx` Blood Aux prefix set forth him prep body Blood is gushing out of his body Qbara na-esi n` ahx` ya apx` Blood Aux follow prep body him go out Blood gushes out from his body Qbara na-agbas[ya n` ahx` Blood is gushing out from his body	
a		He is in a sorry state	concrete
b			metaphorical

‘Si’ on its own does not constitute a grammatical structure with its arguments. It does appear that whenever the second verb of a compound verb is in conflict with another verb when deconstructed, it gives way to the latter.

The image schema implicated in the gba verb complex here is path as shown above.

187 gba sò trail or run follow. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
187	gba sò aka	Ofe à nà-à-gba-sò aka Soup this Aux prefix set forth follow hand	

a		Ofe na-a-gba aka Soup Aux prefix set forth hand Soup flows the hand	
b		Ofe a na-eso aka Soup this Aux follow hand The soup follows the hand Ofe a na-agbaso aka This soup trails the hand The soup is watery	concrete metaphorical

Here, 'gba'takes two arguments. The complement is 'aka' which is pied piped with and is the indirect object of the resultative verb 'sò' . The denotative interpretation is here the flowing of soup on the hand. This denotative meaning can be extended to mean watery.

It is through the image schema of path that makes the analysis of the gba verb complex here possible. The path is the length of the hand where the soup trails.

188. gba su begin. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
188	gba su	Eya gba-su-ru qsq Eya set forth begin rV past run Eya gba-ra qsq Eya set forth rV past run Eya ran Qsq su-ru Run begin rV past The race began Eya gbasuru qsq	
a		Eya began the race	concrete
b		Eya took the lead	metaphorical

The sentence above is a two argument verb. It is 'qsq' – run, that is the complement. It is this complement that is at the left periphery of the clause 'qsq suru' and it is the subject of the ergative verb 'su'. Its physical interpretation is social activity of starting off of a race. This physical interpretation is what is extended metaphorically to mean taking a lead.

The image schema involved in the the analysis of the gba verb above is path.

189 gba ta shoot correctly. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
189	gba ta	Okpo gba-ta-ra ya àkx Okpo set forth shoot rV past him arrow Okpo gba-ra ya akx Okpo set forth rVpast him arrow Okpo shot him with arrow Akx nwe-ta-ra ya Arrow got rVpast him The arrow got him Okpo gbatara ya akx Okpo got him well with his arrow He received a terrible injury	concrete metaphorical
a			
b			

This sentence has three arguments. They are Okpo, ya and àku. The complement ‘akx’ is pied piped with and is the subject of the resultative verb of ‘ta’. Like similar verbs ‘ta’ got fossilized to the V₁ because it is semantically in conflict with another verb ‘ta’, chew. It can be reanalyzed as ‘nweta’ to get the ergative form. The physical interpretation relates to the physical shooting of arrow. This denotative meaning is extended to mean receiving a terrible injury.

Here again, the analogical mapping evident in the gba verb complex here is path.

190. gba te wake up by shooting. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
190	gba té	Q gba-te-re ya n'xra He set forth wake rV past him prep sleep Q gba-ra ya n' xra He set forth rV past him sleep He disturbs his sleep O te-re ya n'xra He wake rV past him prep sleep He woke him in sleep Q gbatere ya n'xra He woke him up from sleep by shooting He was a speck in his eyes	concrete metaphorical
a			
b			

‘Gba’ in the example above is a three argument verb. The complement ‘n’xra’ is pied piped with and is the indirect object of the ergative verb ‘te’. The physical meaning relates to usual waking up people from sleep while the abstract meaning is being a speck in his eyes, a tiny spit that prevents one from sleeping.

It is the image schema of path that is envisaged in the gba verb complex here. From the state of slumber to wakefulness is the path as seen in the sentence example.

191. gba tè run far. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
191	gba tè	Ugo gba-te-re qsq aka Ugo set forth run rV past hand Ugo gba-ra qsq Ugo set forth rV past run Ugo ran Qsq tè-rè aka Run far rV past hand The race is along one	concrete metaphorical
a b		Ugo gbatere qsq aka Ugo ran long race Ugo is a splinter	

The sentence above shows that ‘gba’ is a two argument structure. The complement is ‘qsq’, which is inchoative with and is the subject of the ergative verb ‘te’. The physical instantiation is the actual running of long race while the psychological meaning is being a splinter.

The image schema evoked in the gba verb complex here is path.

‘Te’ on its own does not constitute a grammatical structure with its arguments. It does appear that whenever the second verb of a compound verb is in conflict with another verb when deconstructed, it gives way to the latter.

192 gba t[stretch . gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
192	gba t[xkwx	Adaakx na-a-gba-t[xkwx ya Adaakx Aux prefix set forth stretch leg her Adaakx na-agba xkwx ya	

a	Adaakx Aux prefix set forth leg her Adaakx is kicking her leg Xkwx ya na-at[(at[) Leg her Aux stretch Her leg is stretched	
b	Adaakx na-agbat[xkwx ya Adaakx Aux prefix set forth stretch leg her Adaakx stretches her leg. Adaakx is going far	concrete metaphorical

‘Gba’ in the example is a two argument verb. Its complement ‘xkwx’ (leg), is an inalienable possession of Adaakx however. The denotative meaning of the sentence is the actual stretching of legs. This instantiation can be extended in a metaphorical form to mean going to a far place. Using traditional grammar terms, the verbs are intransitive.

The image schema that makes the analysis of the gba verb complex above possible is the path. The path is implicated from the beginning to the end of stretching of the legs as analysed in the sentence

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193. gba t[become cold. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
193	gba t[Nri ji a gba-t[-r[agbat[Food yam this set forth cold rV past cold Nri ji a gbara qla Food yam this set forth rV past cold This yam foo foo is cold Nri ji a t[r[Food yam this cold rV past This yam foo foo cold Nri ji a gbat[r[agbat[This pounded yam is cold	concrete
a			

b		The pounded yam has become rancid	metaphorical
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The ‘gba’ verb complex here is a two argument verb. The complement, ‘agbat[’ is pied piped with and it is the indirect object of the resultative verb ‘t[’. The denotative meaning is normal coldness of food but the connotative meaning is that the food has become rancid, that is being rank in taste or smell.

The image schema palpable in the analysis of the gba verb here is path.

194. gba tq tear. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
194	gba tq	Akwa` m gba-tq-rq n’ah[a Cloth my set forth tear rV past prep market Akwa m gba-ra n’ah[a Cloth my set forth rV past My cloth tore Akwa m tq-rq n’ah[a Cloth my tear rV past prep market My cloth tore in the market	concrete metaphorical
a b		Akwa m gbatqrg n’ah[a My cloth got torn in the market My cloth gave way or pulled apart in the market	

In the sentence above, the ‘gba’ verb complex is a two argument verb. The complement is ‘n’ah[a’ which is inchoative with and this serves as the indirect object of the ergative verb ‘tq’. In the cognitive interpretation, the example in (a) shows the concrete meaning of ‘gba’ verb complex while the example in (b) involves the same action but within the psychological domain. Therefore, the example in (b) is the metaphorical extension of the concrete in (a).

In the analysis of the gba verb complex above, the image schema evident is path.

195 gba tq` shoot badly. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
195	gba tq` mmadx`	Ifeany[gba-tq`rq` Uchè Ifeany[set forth shoot badly rV past Uche	

a	Ifeanyị gba-ra Uche Ifeanyị set forth rV past Uche Ifeanyị shot Uche.	concrete metaphorical
b	Uche tǫ-rǫ Uche bad rV past Uche got bad Ifeanyi gbatǫrǫ Uche Ifeanyị shot Uche badly Ifeanyị defeated Uche thoroughly	

The verb ‘gba’ here is a two argument verb. It has ‘Uche’ as the complement. Uche is the subject of the resultative verb ‘tǫ’. The physical interpretation in this context relates to real life shooting of somebody or animal. But it connotes defeating somebody thoroughly. This is the mapping of the concrete unto the abstract.

The image schema exhibited in the above by the gba verb is path as indicated in the table.

196 gba tǫ shoot down/kick down. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
196	gba tǫ mmadǫ	Enū gba-tǫ-rǫ nwunye ya Enu set forth down rV past wife him Enu gba-ra nwunye ya Enu set forth rV past wife him Enu put his wife in the family way Nwunye ya tǫ-rǫ Wife him fall rV past The wife fell. Enu gbaturu nwunye ya Enu shot down his wife Enu impregnated his wife	Concrete Metaphorical
a			
b			

Gba in this structure is a two argument verb V(NN). For instance, ‘Enu’ is N₁, ‘nwunye ya’ is N₂. The complement ‘nwunye ya’ is the subject of the resultative verb ‘tǫ’. The ordinary meaning refers to shooting down somebody. This, on the other hand, can be extended to mean impregnating the wife. When the object is not a female human being, the connotative meaning is blocked, example, Enu gbaturu enyi (Enu shot down an elephant)

It is the image schema of path that is involved in this analysis of the gba verb complex. The Path schema is from not being pregnant to being pregnant as explicated in the sentence.

197 gba tx run and stop. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
197	gba tx	Xjq gba-tx-rx qsq Xjq set forth trot rV past run Xjq gbara qsq Xjq set forth rV past run Xjq ran race Xjq txrx qsq Xjq trot rV past run stop Xjq trotted and stopped Xjq gbatxrx qsq Xjq trotted Xjq is a rolling stone	concrete metaphorical
a			
b			

In the above sentence, 'gba' is a two argument verb. The complement is 'qsq', it also the complement of 'tu' which is the verb of the second structure.

The image schema indubitable here in the analysis of the gba verb complex is path.

198. gba vu run ahead or run before others. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
198	gba vù	Q gba-vu-ru qsq He set forth before run Q gbara	

In the above sentence 'vu' on its own does not constitute a grammatical structure with its arguments. It does appear that whenever the second verb of a compound verb is in conflict with another verb when deconstructed, it gives way to the latter.

It is the image schema of path that was used on gba verb complex here.

199 gba wa xzq̣ the door. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
199	gba wa xzq̣	Òkè gba-wa-ra xzq̣ Oke set forth break rV past door Oke gba-ra xzq̣	

a	Oke set forth rV past door Oke kicked the door Xzq̄ wa-ra Door break rV past The door broke	concrete metaphorical
b	Oke gbawara xzq̄ Oke broke the door Oke backed out	

Here, in 199, the verb complex ‘gba’ is a two argument verb. The arguments are Oke and ụzọ. Ụzọ in turn is the grammatical subject of the ergative structure (ụzọ wara). The denotative interpretation is the physical breaking of door as exhibited in example (199a). This denotative interpretation can be extended figuratively to mean ‘back out’.

The above shows that the Path image schema is reflected in the analysis of the gba verb. The path image schema is implicated in the change of state of the door from being good to being broken as explained in the sentence.

200. gba wà spread. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
200	gba wà	Q gba-wà-rà ya qkpà (Oghe dialect) He set forth spread rV past him leg Q gba-ra ya ọkpà He set forth rV past him leg He kicked him with the leg Qkpa ya wà-rà Leg him break rV past His leg broke Q gbawara ya qkpa He encircled him with his legs	concrete metaphorical
a		He is his mentor	
b			

The observation of the verb ‘gba’ above shows that it is a three argument verb. The complement ‘qkpa’ is in the left periphery of the clause ‘qkpa ya wara’ and it is the subject of the resultative verb ‘wa’. The physical interpretation shows the physical sprading of legs while this physical interpretation can be extended to mean being a mentor.

The image schema envisaged in this gba verb complex is path.

201. gba wq sidetrack. gba - image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
201	gba wq	Ha gba-wq-rq ya bqqlx They set forth deny rV past him/her ball Ha gba-ra bqqlx They set forth rV past ball They played football Ha wq-rq ha bqqlx They deny rV past him/her bqlx They denied him/her ball Ha gbawqrq ya bqqlx He/she was sidetracked from playing football He/she was sidetracked	concrete metaphorical
a			
b			

The gba verb complex in this sentence is a two argument verb. It is the complement bqqlx that serves as the indirect object of ‘wq’. The underlying meaning is sidetrack.

It is evident that the image schema implicated in the analysis of gba verb complex is also path.

202 gba zè melt. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
202	gba za ze	Ncha gba-zà-rà/gba-zè-rè nà mmiri Soap set forth melt rV past prep water Ncha gba-ra na mmiri Soup set forth rV past prep water Soap soaked into water Ncha za-ra Soap melt rV past Soap melted Ncha gbazara na mmiri The soap melted in the water The soap was soluble	

‘Gba’ in the above sentence is a two argument verb V(NPP). The complement ‘na mmiri’ is pied piped with and has become the indirect object of the resultative verb ‘za’ . The example in (a) is the concrete or physical instantiation of the motion ‘set forth’, the normal dissolution or melting

of substance like soap in water. The example in (b) involves the same motion but within the connotative meaning. So the (b) example is the metaphorical extension of the concrete meaning in (a).

The path schema is evoked in the the analysis of the gba verb complex. This is from the solid to liquid state as seen in the sentence above.

203. gba ze dismantle or disengage. Gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
203	gba ze	Qta` gba-ze-re qnya` Qta set forth dismantle rV past trap Qta gba-ra qnya Qta set forth rV past trap Qta set trap Qnya ze-re Trap dismantle rV past Trap dismantled Qta gbazere qnya	
a		Qta dismantled or disengaged the trap	concrete
b		The trap is incapacitated	metaphorical

The argument structure of the above sentence is V(NN). It is a second degree verb. ‘Qta’ is N₁ and ‘qnya’ is N₂. It is ‘qnya’ that is the complement of the ‘gba’. The complement ‘qnya’ is the grammatical subject of the ergative verb ‘ze’. The denotative meaning of ‘gba’ verb complex in the sentence is the physical activity of disengaging a trap.

The analogical mapping implicated by gba verb here is path. The path is the change of state from being ensnared to being disengaged.

204. gba zi lend. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types

204	gba zì	Xka` gba-zi-ri m egō Xka set forth borrow rV past me money Xka gba-ra m ego Xka set forth rV past me money Xka borrowed money from me Xka zi-ri m ego Xka teach rV past me money Xka taught me money Xka gbaziri m ego Xka lent me money Xka gave me a helping hand	concrete metaphorical
a			
b			

The argument structure of ‘gba’ in the sentence above is V(NNN), a third degree verb. ‘Xka’ is N₁, ‘m’ is N₂ while an empty category signifying the presence of a noun is N₃. The complement ego is interpolated with and it is the indirect object of the ergative verb ‘zi’ after deconstruct. The physical interpretation is the social activity of lending or borrowing money. The psychological effect is giving a helping hand to somebody.

The image schema manifested in the ‘gba’ verb above is path. The path is seen in the distance covered to lend the money as sown in the sentence.

205. gba zù come together. gba – image schema is path

S/N	Verbal Structure	Sentence	Meaning Types
205	gba zù	Ha gba-zù-rù n’ama obodo They set forth come together prep village square Ha gbakqrø n’ama obodo They set forth meet rV past prep square village They met together in the village square Ha zu-ru n’ama obodo They all meet rV past prep village square They were together in the village square Ha gbazuru n’ama obodo They came together in the village	Concrete Metaphorical
a			
b			

		square They are putting heads together	
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In the sentence example, ‘gba’ is a two argument verb comprising V(NPP). The complement ‘n’ama obodo’ is pied piped with and it is the grammatical object of the resultative verb ‘zu’. The concrete meaning is the usual or actual gathering of people in their village square.

A look at the above gba verb complex shows that path image schema is culpable.

206 gba zu run ahead a bit. Gba – image schema is path

Crossrefer to gbatu which was analysed in example 197. They are the same verb with dialectal variant.

CHAPTER FIVE

THE INTERRELATIONSHIPS AMONG THE 'GBA' VERBAL COMPLEXES

5.1 Introduction

This section of study looks at the interrelationship among the groups of 'gba' verb complexes. The nature of the complements or what holds the complements together is discussed. The argument structure of the 'gba' verbal complexes and the tone variations are equally x-rayed. The similarities and differences of the complements are treated. Underlying the verbs are same subject verb-forms of the compound verbs, action-result verb-forms, fossilised verb-forms, cross-referred verb-forms, ambiguous verb-forms and the image schemata or analogical mapping implicated in the analysis of the 'gba' verbal complexes. The interrelationship refers to the relationship between two or more 'gba' verb complexes.

5.2.1 The nature of the complements

In the examples of the gba verbal complexes in examples 1-5, the nature of the complements is that they grow into multiple units or branches. They bifurcate. In examples 6-19, what binds the complements together is that they are in liquid state. They are watery in nature and none of the ICs is in a solidified state. In 20-23, the nature of the complements is that they all have a base (from where they shoot out). So, looking at the examples in this group, one finds out that the roots are their bases. The 'gba' verbal complexes in examples 24-30, what the complements share in common is that they are instruments for shooting. In examples 31-35, the complements involve copulation and are predicative. adjectives. The nature of the verb complex in 36 41 is that there is involvement of levy and some demands in their denotative expression. From examples 42-46, the complements have the attribute of divination and revelation in common. The complements foretell the future and reveal something that is hidden. Examples 47-50 are involve movement of the body. Furthermore, in examples 51-57, the complements have removal of substance in common. The complements in examples 58-60 have variable texture. That is, they are not homogeneous. They are equally descriptive in nature. In examples 61-64, what holds the complements together is inflicting pain. Examples 65 and 66, the nature of

the complements is loss of quality. The complements of the verb, therefore, are adjectival in function. In 67 and 68, the complements in their nature involve means of gaining independence or freedom. The examples in 69-72, the complements have encirclement as what binds them together. In examples 73-76, the nature of the complements here involves strength and effort. They are abstract in nature. In the compound verb complexes, the nature of the complements of each of the examples is pied piped with and is the subject, indirect or direct object of the ergativised or resultative verbs in their respective groups

The similarity among the gba verb complexes is that each of them subcategorises the verb ‘gba’ whose ordinary meaning is set forth but is realised or modified by the nature of the complements.

5.2.2 The argument structure

In this section of the study, the argument structures of ‘gba’ verb complexes in both single and compound verbs are discussed. Argument structure here means the number of nouns a verb subcategorises to make a grammatical sentence. In view of the above, the verb that has one noun in its structure is regarded as having one argument or single argument structure V(N). The verb that takes two nouns is said to have two or double argument structure V(NN); it is regarded as a second degree verb while the verb that subcategorises three nouns in its construction is taken to have three or triple argument structure V(NNN). This is the third degree verb. The verb that must subcategorise a noun and a prepositional phrase is equally seen to have a V(NPP) structure.

It is pertinent to mention here that throughout our discussions in this study, there is no one or single verb argument structure. Given that all Igbo verbs are transitive, one cannot get a single argument structure. This is to say that there is no verb that has only one noun in its underlying structure. Judging from the above explications therefore, the argument structures of the single and compound ‘gba’ verb complexes are as in examples 1, 2, 31, 68, 80, 85, 99, 104, 110, 125, 138 and 139, 156, 158, 163, 179, 183, 187 and 195 have the argument structure of V(NPP).

Furthermore, the ‘gba’ verb complexes in examples 3-12, 20-23, 31-38, , 41-44, 46-52, 57-59, 64-67, 72 and 73, 76 and 77, 79, 81 and 82, 87- 94, 96- 98, 100- 103, 105, 107- 109, 111, 113- 117, 119, 124, 126, 128- 137, 140, 142 – 144, 146 – 150, 152 -155, 159 – 162, 164 – 174, 176 – 178, 180 and 181, 184 – 186, 188 – 190, 192, 194, 196, 198 and 199 subcategorise two nouns in

their structure and therefore, are of two or double argument structure V(NN). They are second degree verbs. Finally, examples 13-18, 24-29, 30-40, 45, 53-56, 60-68, 69, 71, 74 and 75, 77 and 78, 83, 86, 95, 106, 112, 118, 120 and 121, 141, 151, 157, 175, 182, 193, and 197 have three nouns in their constructions. So, they are examples of three argument structure. It is a third degree verb V(NNN). So, they subcategorise two and three nouns respectively in their argument structures, their being the same verb notwithstanding. In the foregoing examples, all the numbers that have the argument structure V(NPP), the ones with V(NN) and the ones that have V(NNN) are similar. These are the similarities among them. The difference found among them is that even though each of them chooses the same verb ‘gba’, their subcategorisational frames are different.

5.2.3 The image schema or analogical mapping of ‘Gba’ verb complexes

This part of the study deals with the theoretical framework of the study – the image schema/analogical mapping. Image schema is a recurring structure within our cognitive process, which establishes patterns of understanding and reasoning. This study uses a combination of image schemata for the metaphorical extensions of the concrete or physical meaning of ‘gba’ verb complex sentences. Some of the verb complexes entail the image schema/analogical mapping of path, force, counterforce, enablement, containment while some have a combination of two image schemata. The different image schemata employed are discussed below, starting with path image schema.

In the first group, which is examples 1-5, the image schema exhibited by the ‘gba’ verb complex are source and Path. Other examples which implicate the source and path schema are: 20 – 23.

The underlisted examples are implicated by the force image schema. They are as follows: 24–30, 51-57. It is the image schema of counterforce that is exhibited in the following examples: 58–60.

The containment schema is the image schema reflected in the examples below; 6-19. Then again, as mentioned earlier, there are some examples that implicated two image schemata. For instance, path and force image schemata are involved in examples 65 and 66.

The path schema is the image schema implicated in the gba verb complexes below: 77-206. So all the ‘gba’ verbal complexes of the compound verb implicate path image schema. The numbers that implicate the path and goal image schemata include: 31-41. Those that exhibit path, force and goal image schemata are: 42-50. The image schemata of path, goal and containment

are implicated in the gba verbs below: 69-72. Path and counterforce are implicated in these examples: 67 and 68. In the examples enumerated above, the ones that have the same image schema are similar while their differences lie in their implications of different image schemata.

5.2.4 Tone variations

In this section of study, tone changes or variations of tones are looked into and discussed. The reasons for the tone variations are also discussed. This is done in both single and compound verb complexes respectively.

According to Emenanjo (1978:36) “the following rules account for the different tonal changes noticeable especially in the associative construction”.

- (i) If the first noun ends in a high low tone pattern and the following noun has a LH pattern, the final low tone of the first noun is raised to a step and the initial low tone of the second noun is also raised to a step. He gives examples ‘x1q̄ + ÷sa x1q̄ q̄sa’
- (ii) If the first noun ends with two final low tones and the second noun has a LL pattern, the last low tone of the first noun is raised to high. Example, àlà + ÷gbà àlà ÷gbà. This is to mention but a few.

In Igbo syntax, tone changes are vital for convergence to take place; they are also necessary for the desired meaning to be formed. Again ‘gba’ in isolation has high tone but in construction, the tones of the verb ‘gba’ or the complements may be modified.

In this study, we have verb noun and not noun noun construction. It is pertinent to note that in this study, the (gba) verb complex is always high tone. Therefore, we shall only account for the tonal changes in their noun complements here. In the first group of gba verb complexes, in the single verb, we have gba àbà, ngànàbà, àbàx̄q, mkp [] etc. ‘Gba’ has high tone while àbà has low tone. But when they are in associative construction, they will retain their inherent high low tones. E.g. ‘gba àbà’ in example 1. In gba ngànàbà, when they are isomorphic, their inherent tones are high for ‘gba’ and high low low for ngànàbà-branches. But in associative construction following the tone rule, the noun nganaba will take LL tones like ‘ng ànàbà’ 2. Again in ‘gba mkp []’, the tones retain their HHL tone pattern. It does not change. Example: ‘gba mkp []’ in 4, etc.

In the second group of gba verb complex, we have ‘abx’ whose tone is high high. If it is in associative construction, ‘gba abx’, the final high tone of the complement changes to high down step, thus gba abx̄ in example 6. This is applicable to all the nouns in that group because they involve high tones following the high tone verb ‘gba’, like in these examples; 8, 9,10,11, 13,18 with the exception of ‘ushi’, àm[r[’ and ns[which bear low high tones in their inherent tones’. If they are following the high tone in associative construction, the tones change to be down step like ‘gba ūshī , ām[r[, n̄s[in examples 7, 12, and 17. The reason is that when a word that has a low high (LH) tone follows another with high tone (H), the tone of the second word changes its tone to down step.

In group three of the ‘gba’ verb complex which involves aj[, akx, etc, the inherent tones are high. When they are in associative construction, their tones change to high down step. For instance, ‘gba aj[’, gba akx̄ in examples 20 and 21. Again, their counterparts òzè and àfx̄ in examples 22 and 23, have low tone. These do not change. They maintain their inherent low tones like ‘gba òzè, ‘gba àfx̄’ in 22 and 23.

The fourth group has egbe, akx, akwa, nta, xkwx, mgbq etc in examples 24-30. These nouns have different tones. But when they are in associative construction, some of their tones change; for example egbè – gun in example 25, is high low (HL) tone but in its associative construction, it still retains its tone, ‘gba egbè’ In àk x – arrow, whose tone is LH, in its associative construction, it changes to the down step tone, ‘gba àkx̄ in example 26. In others like akwa, nta, xkwx and mgbq, they have HH tone as their tone pattern but when they are in associative construction following ‘gba’, according to tone rules, the final tone of the noun complement is raised to down step. Example gba ntā, gba akwā, gba ntā, gba xkwā, gba mgbq̄ etc in examples 24, 27, 29 and 30.

In group five, the nouns are akwxna, ezi, okoso, qkwa etc. Akwxnà has a LLL tone as its tone. When it is in associative construction, it retains its inherent tone. This is because when a word with LL tones is followed by a word with high tone, none of the tones changes, e.g. gba àkwxnà in 31. But on the other hand, ‘ezi’ and ‘qkwa’ – ‘gba ezi’, ‘gba qkwā’ in examples 32 and 35 take the high down step tones. This is because they follow the verb ‘gba’ which bears the high tone. The complements in group six include ego, xgwq, egwe which have high down step tones. In the

associative construction, none of them changes its tone. They retain their inherent high down step tones, like in examples 39, 40 and 41; but in ‘mbìbì’ and akx in the same group which bear LL and are following gba, their tones are still retained; like ‘gba mbìbì ‘gba àkx’ in examples 36 and 38.

Group seven has ‘afa’, ‘amxma’ as high tone bearing nouns in their inherent tones. But when they are in associative construction, the tones are raised to a high down step; like ‘gba afā, gba amxmā in examples 42 and 44, but in others like ‘àmà’ and ‘àjà, whose tones are LL following ‘gba’, the tones will maintain their inherent tones of LL; ‘gba àmà’, ‘gba àjà’ in 43 and 45.

Furthermore, in group eight, the verb complements include: ‘aghara’, ‘qrx’, ‘egwu’ and ‘qsq’, ‘qrx’, ‘egwu’, and ‘qsq’ are high tone nouns but according to the Igbo tone rule, if they are in associative construction with ‘gba’ which is high tone, the final high tone of the complement changes to the down step, thus: qrx, egwu, qsq, ‘gba qrx̄’, ‘gba egwū’, ‘gba qsq̄’ etc in examples 48-50. But in ‘aghara’ whose tone is LHH, if it is in associative construction, with ‘gba’, the tone will not change, e.g. 47.

Group nine has as its verb complements ‘egwusi, ime, mbq, akpɔkpɔ, amx and qtq. ‘Ègwusi’ which bears LHH in its inherent tone changes to down step tone when in associative construction with ‘gba’ that bears high tone, ‘gba ēgwūsī in 51. The same thing applies to ime which changes to ‘imē’ down step tone, gba imē in 52. But ‘mbq’ and akpɔkpɔ whose inherent tones are (H), becomes (H) when they are in associative construction with ‘gba’. Example ‘gba mbq, ‘gba akpɔkpɔ’ in examples 53 and 54. In ‘amx’, the inherent tone is maintained but in ‘qtq’, according to Emenanjo (1978), if the first noun ends in high tone pattern and the second noun begins with a LH, the initial low of the second noun is raised to a down step. So, ‘gba qtq’ will be ‘gba q̄tq in 56, while ibì’ will maintain its inherent tone when it is in associative construction, ‘gba ibì’ in example 57 and so on and so forth. These are how the tone changes in all the single verbs were handled.

Compound verbs involve two verbs, V₁ and V₂. If the tone of V₁ and V₂ are high when they are in isolation, the past tense form will be LL in construction but if they are high and low respectively, they will retain their tone in construction. For instance, we have ‘gba bà’. Accordingly, when a low tone noun follows a high tone noun, the final high tone of the last noun

is raised to down step. Exampe àlà + egwu= àlà egwū. This is applicable to ‘gba bà’, ‘gba bè’, ‘gba bi’ in examples 77, 79, and 81 etc. But ‘gba ba’ tear which is HH, the second noun will change its tone to down step like gba bā in 78. But in this study, we have verb – noun and not noun- noun construction. So here, the noun complements are added to get the tone changes in their citation forms.

In the first example (77), we have ‘gba ba na nchedo g[’ ‘run into your protection,’ ‘nchedo’ bears HHH but when it is in associative construction according to tone rule, the final high tone is stepped down to the down step. Other examples are: gbabì egwū in example 81, gbadà qkx̄ in 90, gbagq̄ akā in 104, gbahà qnx̄ in 113, gbajà isī in 116, gbakà akā in 123, gbagwò ānyā in 112, gbare ajā in 164, gbarù abx̄ in 169, gbasò akā in 177, gbakwà qsq̄, gbanyà nnx̄, gbasò akā, gbakwà qsq̄, gbanyà nnū, gbarè ajā, gbatè akā etc. The above are for the compound verb of the ‘gba’ verb complexes whose complements are HH nouns, following low verbs.

Again, the tone rule states that if the second noun has two high tones, the second high of this noun becomes down step. This rule is exemplified hereunder in some of the examples of this study; like ‘gba ba afq’ which is high high all through becomes, gbaba afq̄ in example 78, gbabe qsq̄ in 80, gbafo ah[ā in 97, gbafu qnx̄ in 100, gbaga ah[ā in 101, gbago ugwū in 103, gbagbu anx̄ in 106, gbagha okwū in 107, gbaka isī in 122, gbakpq anyā in 132, gbakpu qnx̄ in 133, gbakwa qsq̄ in 136, gbakwu mmxq̄ in 140, gbanwu qkx̄ in 151, gbanwx akā in 152, gbanyx qkx̄ in 156, gbasu qsq̄ in example 178 etc.

As mentioned earlier, if the tone of V₁ and V₂ are high when in isolation, the past tense form will be LL in construction but if they are high and low respectively, they will retain their tone. This is manifested in the following examples, gbabò and gbabò in 82 and 83, gbachà and gbacha in 85 and 86, gbachi and gbachì in 87 and 88, gbafu and gbafù in 99 and 100, gbaru and gbarù in 168 and 169, gbaru and gbarù in 170 and 171, gbasà and gbasà in 172 and 173, gbasi and gbasì in 174 and 175, gbatì and gbatì in 182 and 183, gbatò and gbatò in 184 and 185, gbaze and gbazè in 192 and 193. This is what is applicable in all the V₁ and V₂ in this work.

5.2.5 Same subject verb-forms

Here, same subject verb-form is the logical subject of both the argument structures of the compound sentences. It is important to note that same subject verb-forms are only peculiar to compound verbs. The examples where we have same subject verb-forms in this study are as follows: 77, 78, 81, 94, 99, 101-106, 108, 111, 113, 117, 129 and 130,136, 138-142, 146, 148, 154 and 155, 159, 174, 177, 180,187, 189, 191 192, 194 and 195 etc.

5.2.6 Action-Result verb-forms

The important thing to mention here about the action- result verb-forms is that the relationship between either the Verb + Verb compound is that the construction is usually understood as one event that has internal action-result or action goal meaning (Lord 1975: 29 in Uchechukwu 2011: 6) whereby the first verb expresses the action while the second verb/suffix expresses the result or goal of the action.

In the action-result verb-forms, different subjects are the external arguments of the compound verb or the verbal complex. In this study, action-result verb-forms are implicated in the underlisted examples: For instance, in (87) ‘Nne gbaciri ụzò’, Nne locked the door. The action of ‘gba’ here, is ‘Nne gbara ụzò’, Nne kicked the door, while the result is ‘ụzò chiri’ the door closed or locked. Again in example (89) ‘Ọ gbadara ọkụ’, he dimmed the light. Action exhibited by ‘gba’ verb complex is ‘ọ gbara ọkụ’, he/she kicked the light and the result is ‘ọkụ dàrà’, the light dimmed. Other examples include 88, 90, 92, 95, 97 and 98, 100, 110, 112, 116 , 118 and 119, 121 and 122, 127, 132, 135, 137, 143, 147 and 146, 151-153, 156 and 157, 160-164, 167, 171-176, 178 and 179, 182, 185 and 186, 193.

5.2.7 Fossilized verb-forms

Fossilized verb-form on its own does not constitute a grammatical structure with its arguments. It does appear that whenever the second verb of a compound verb is in conflict with another verb when deconstructed, it gives way to the latter. Therefore, in this kind of verb structure, though we have two verbs, the argument structures cannot be separated from each other. If we separate the argument structures, one of the verbs will be in conflict with the meaning of a single verb in isolation. The following examples are where fossilized verb-forms reflect in this work, like in example (104) ‘mmanụ gbagoro n’elu mmiri’, oil floated on the water surface. Here, ‘go’ is a fossilized verb as it cannot constitute a grammatical structure of its arguments. Equally, in (131, ‘ha gbakporo ya izu’, They plotted secretly against him. ‘Kpò’ on

its own does not constitute a grammatical structure with its arguments. We have other examples of fossilized verbforms in the following examples, 122, 144, 152,60, 164 and 165, 175, 179, 181, 187 and 188, 194.

5.2.9 Crossrefered verb-forms

Some of the compound verb-forms have dialectal variants and they do not affect 'gba'. They usually affect the V₂ of the compound verb-form. The crossrefered verb-forms in this study are seen in the examples below: 94-101, 105, 108-110, 117, 119,123,133, 135, 137, 142 and 43, 145 -147, 154,157, 161-165, 167-172, 174, 188 and 189, 191 -193.

For instance in (101) 'gbaga' run to and 'gbaje' run go, in 117 are corefered. 'Gbali', kick up and 'gbari' over flow in examples 143 and 165 respectively. In addition, in examples 147 'gbalù' spoil and 'gbarù' in 171 pollute/spoil are all the typical examples of crossrefered verbforms. They are the same verb with the same meaning but are dialectal variants.

5.2.9 Ambiguous verb-forms

The compound verb-forms may have structures whose semantic output is more than one. In this study, there are some examples where ambiguous verb-forms are implicated. Ambiguous structures are structures that have more than one meaning. For this reason, the examples listed hererunder are where the ambiguous verb-forms reflect in the study with their potential meanings, for instance in example

89. Anwurù ọkù gbachuru itè, 'the smoke discoloured the pot'. The potential meaning can be,
Anwurù ọkù gbara itè (the action) 'smoke covered the pot',
Anwurù ọkù chùrù itè (the result) or itè chùrù, the pot was discoloured.

Also, in example

114. Ogè gbahuru ọzò, 'Oge went round before getting to the correct road'. We can have its potential meanings as

Ogè gbara ọzò, 'Oge ran on the road'

Ogè hùrù ọzò, 'Ogè lost her way'

Other examples of ambiguous verb-forms in the study include, 89, 91, 114,141, 149 and 50, 156, 170, 189.

In all the compound verb-forms, when the argument structure of the V_2 element has been removed from the compound verb structure, the argument structure of the V_1 realigns with the argument structure of the simple verb-forms already discussed ie $V(NN)$, $V(NNN)$ and $V(NPP)$.

In view of the above analysis of the interrelationship among the ‘gba’ verbs, examples 77-197 are compound verbs made up of two verb roots. Each of the compound verb incorporates two events; V_1 and V_2 . The verbs are decomposed and lexicalised to recover the simple single verbs or single sentence structure comprising the compound structures. Hence, the surface structures like ‘eriri gbabèrè’, egwu bìrì, egbe fièrè, ‘xzq̄ ghere’, ‘qnx̄ furu’ ‘ah[a foro, to mention but these few. The relationship in the argument structures of the single verbs with the compound verbs is that some of the ‘gba’ verb complexes in compound verb have double and triple arguments in their argument structure. They also have a $V(NPP)$ structure just like single verbs. These verbs are the same but have different argument structures. The reason is that some verbs subcategorise double nouns while some have triple nouns in their argument structures. So, it is the number of nouns subcategorised by each ‘gba’ verb complex that determines the number of argument structure it will take.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Preamble

This chapter presents the major observations that are made in this research. The chapter further concludes the study based on the findings of the investigation.

6.1 Summary of the findings

Semantics is an important area of inquiry in human cognition. Its various branches are concerned with various aspects of cognitive experiences. Cognitive semantics as a branch of semantic investigation explores the representation of conceptual structure in language. Based on this background information, the central concern of this study has been with the cognitive semantic analyses of the Igbo verb *gba* ‘set forth’.

The first research question in this study attempts to find out to what extent the Igbo verb ‘*gba*’ can be analysed using analogical mapping or image shema. The findings of the study show that the study has conveniently analysed the Igbo verb ‘*gba*’ using analogical mapping or image schema.

The second research question tries to find out the image schema that underlies the meanings of the Igbo verb ‘*gba*’. From the findings of the study, the image schemata that

underlie the Igbo verb 'gba' are the combination of image schemata which include: Path, Force, Compulsion, Enablement, Counterforce, and Containment. Also some implicate two or three image schemata like Source and Path, Path and Goal, Path, Force and Goal, Path and Force, Path and Counterforce, Path, Goal and Containment. The implication of this, is that some other image schemata found in the literature do not underlie the Igbo verb 'gba'. They are: Balance; Restraint-Removal; Attraction; Mass-Count; Link; Centre-Periphery; Cycle; Near-Far; Scale; Path-Whole; Merging; Splitting; Full-Empty; Matching; Superimposition; Iteration; Contact; Process; Surface; Object and Collection. (see Johnson 1987).

The research also wanted to find out the interrelationships among 'gba' verbal complexes. To answer this research question, the gba verbal complexes were divided into two- the simple and the compound verbs. Among the simple gba verb complexes, the research considered the nature of the complements, the argument structure, the image schema or analogical mapping, tone variations, etc. In the compound verb complexes, the method used to find out the interrelationships are same subject verb-forms, action-result verb-forms, fossilised verb-forms, crossrefered verb-forms and ambiguous verb-forms.

4. In the fossilised verbforms discussed, it was found out that in this kind of verb structure, though there are two verbs, the argument structures cannot be separated from each other. If the argument structures are separated, one of the verbs will be in conflict with the meaning of a simple verb in isolation.

This study examines the verb 'gba' and finds out that it can adequately be glossed as 'set forth' in all the data. But the complement that it subcategorises may vary this translation to mean 'kick', 'discharge', 'ejaculate', 'run', 'shed', 'yield', 'water', 'splash', 'grow', 'play', 'reveal', etc. Therefore, by implication, its meaning may be modified to express many semantic notions.

In the interrelationships among the simple gba verb complexes, it was found out that some 'gba' verb complexes, the nature of their complements or what holds them together is bifurcation like in examples 1-5, liquefaction in examples 6-19, base from where they shoot out in examples 20-23, instruments for shooting in examples 24-30, copulation in examples 31-35, levy and demand in examples 36-41, revelation in 42-46, inflicting pains in 61-64 etc.

In the argument structure of the simple verb, it was found out that some of the gba verbs have two nouns in their constructions, thereby being a V(NN) structure. Gba here is a second degree verb. Also some have V(NNN) in their argument structure. They are third degree verbs

while some have V(NPP). In the compound verb, the nature of the complement of each of the example is pied piped with and is the subject, direct or indirect object of the ergativised or resultative verb. There is a mapping of the abstract on the concrete which stems from the fact that it is from the knowledge we have of the concrete that the abstract is derived.

Tone variations are treated under the interrelationships among the ‘gba’ verb complexes where reasons for tone changes were explained. It was also found out that in compound verb, if the tone of V1 and V2 is high when they are in isolation, the past tense form of the verb is low low but if they are high and low respectively, they will retain their tones.

Another observation from the study is that in all the compound verbforms, when the argument structure of the V2 element has been removed from the compound verb structure, the argument structure of the V1 realigns with the argument structure of the simple verbforms.

In the study, we also discover that ‘gba’ is understood as polysemous if all its multiple meanings (literal and metaphorical) are systematically related to a semantic field.

Therefore, based on the compositional meaning of words, the question whether it is the verb that selects the complement or the reverse is solved. The answer could be that neither the verb nor the complement selects each other; rather, native speakers of the language do the selection based on mutual complementation of the verb’s image schema that agrees with the structure of the noun. For this reason, it is the case of the variation of the complements that suit the activities and properties of the verb, whether physically or mentally, in conjunction with property selection processes – structure the mappings between the physical and abstract domains. Therefore, selecting the properties and subcategorisation frame, together with the metaphorical processes involved are the cognitive tools that are mapped and structured in the conceptual systems experientially as Igbo native speakers, to arrive at the different polysemous senses of this dynamic and motion verb.

6.2 Conclusion

In this study, the focus has been the cognitive semantic analysis of the selected Igbo verb using the image schema or analogical mapping as a framework. The study sets out to find out how the Igbo verb ‘gba’ can be described using the cognitive semantic approach and image schema as a theoretical framework.

This work has successfully analysed the Igbo verb ‘gba’ using analogical mapping/image schema. The image schemata of the meanings of the Igbo verb ‘gba’ include: path, force,

compulsion, enablement, counterforce and containment. As mentioned earlier, there are the combination of two image schemata, like path and force, path and containment and path and counterforce. There is a mapping of the abstract on the concrete which stems from the fact that it is from the knowledge we have of the concrete that the abstract is derived. The analyses show that in the single verb, the nature of the complements involve bifurcation, liquefaction, instruments for shooting, copulation, encirclement, inflicting pain, base from where they shoot out. But in the compound verb, the nature of the complement of each of the example is piped out and it is the subject, direct or indirect object of the ergativised or resultative verb. In the argument structure of both single and compound verbs, some subcategorise two nouns V(NN) and some three nouns V(NNN) in their argument structures. These are regarded as second and third degree verbs respectively. A verb that must subcategorise a noun and a prepositional phrase in its argument structure, is represented as V(NPP). Though each of them chooses the same verb 'gba', their subcategorisational frames are different. In the image schema, the 'gba' verb complexes in some examples implicated different image schemata while some implicate similar image schemata. In the tone variation, the reasons for tone changes are shown. It was explicated that 'gba' in isolation has high tone but when combined with the complements, the tones of the complements may be modified. Also, same subject verb-forms are seen where the subject performs both actions in compound verb. Action-result, fossilized, crossrefered and ambiguous verb-forms form the interrelationships among the 'gba' verb complexes.

Again, as Pustejovsky (1995) proposes in his *Generative Lexicon*, meanings are not obtained by means of only one lexical item but by the interaction of the semantics of the different elements that occur in the sentence. Therefore, this study has shown that it is pertinent to analyse and state what elements and the extent to which these elements (complement, argument structure etc) contribute to the overall meaning of the sentence in arriving at the meaning of the verb. Also very important are the various cognitive domains of the verb and their cultural components in various contexts of usage in Igbo language. In addition, the image schemata based on the cognitive domains show that it can bear abstract, concrete (physical) and figurative meanings. Moreso, all the physical and extended meanings are established in Igbo by examining language in context. So, it can be stated that language is considered to be inseparable from all the factors that have contributed to its emergence, such as psychological, cultural, social and biological factors. The polysemy framework of cognitive semantics in relation to verb

meaning was more promising than the other approaches because it analyses language while accounting for changes in language development such as the metaphorical extension of the lexicon, and explains the trends in language development that have led to the current stage. In other words, it regards language as a concomitant of society and culture and, therefore, one to be examined in terms of whatever conditions that have contributed to its formation. This work in view of the previously related research gap has successfully solved the research problem.

6.3 Recommendations

There are varieties of verbs in Igbo. A study of this nature cannot exhaustively cover all the verbs in the language. An aspect has been chosen by the researcher. There are other aspects that have not received any attention. For this reason, therefore, the researcher recommends that the other aspects of the Igbo verbroots be studied by scholars using different theoretical frameworks. This is necessary because the area of cognitive linguistics in general and cognitive semantics in particular have not been sufficiently explored by researchers especially in the Igbo language.

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APPENDIX I

Dictionary of gba

1. gba	bà	run into	
	ba`		break
	bè		snap
	be	stop running	
	bì	stop	
	bq`		last long
	bq		reduce
	bu	run before	
2. gba	cha	become clear or clear day, happy, get well from seickness (Ezeagu dialect)	
	chà	give way or get out of the way	
	chi	close, lock	
		chi`	run
back	chu	discolour	
3. gba	dà	dim, run down	
	do	settle and become clear, being careful	
	du		swell
	dx`		frown
4. gba	fè	overtake, run past	
	fe		run round
	fiè	dislodge	
	fo	disperse, scatter, clear	
	fq		leave some
	fù	escape, run away, miss	
	fx	bore open	
5. gba	ga`	run to	
	gè		sorround
	go`	ascend, run up	
	gò`		float
	gq`	make crooked, bend	
6. gba	gbu		kill by shooting
7. gba			

		kpu` kpx`	hide stick
13.	gba		
		kwa` kwa`	repeat break off
		kwe kwo kwu kwx`	snob (Ezeagu dialect), ignore die untimely, sudden, break out run up to fence
14.	gba		
		la li li` l[lu lu` lx` lx	run home kick up break into bits strive or try hard visit be soft make impure, pollute spoil
15.	gba		
		mi m[mo`	run deep into, run far into stand erect persist
16.	gba		
		na	run home, survive from sickness
17.	gba		
		nwo` change nwu nwx	alter or be altered, transform, ignite, light up benumb
18.	gba		
		nya` nye nyi nyx	stir pour into get up, kick up switch or turn off lights or appliances
19.	gba		
		pe` pe` p[a pq	open waste time burn to ashes stick to

		pu	burst open,
bore open			
	px`	run or rush out, escape	
20.	gba		
		re`	run far
		re`	level
		ri	cover,
overflow			
		ri`	break to
pieces			
		rq`	stir
		ru`	run reach
		ru`	ripe
	rx`	destroy	
	rx`		pollute
21.	gba		
	sa`	splash	
	sa`		spread
	si`		be strong
	si`		waste
	s[`		gush out
	so`	follow after, trace, trail	
	su	be first to run	
22.	gba		
	ta	shoot correctly	
	te`		wake up
	te`		run far
	t[`	stretch, unroll	
	t[`		become cold
	tq`		tear
	tq`		over used
	tu`	shoot down, kick down	
	tx	run and stop	
23.	gba		
	vq	unmask, prove untrue	
	vu	run ahead, run before others	
24.	gba		
	wa`	break, crack	
	wa`		surround
	wq`		sidetrack

25. gba `
 zè melt, dissolve
 ze dismantle, disengage
 zi lend