CHAPTER ONE

BACKGROUND TO THE STUDY

1.0   Introduction

Learning to speak is one of the most significant and visible achievements of early childhood. The acquisition of language 'is doubtless the greatest intellectual feat any one of us is ever required to perform' (Bloomfield 1933:29). The major concern of language acquisition study is to know how children acquire their first set of words. For us to also understand adult linguistic knowledge, we need to trace its development from the early years. To understand a little more about how language is acquired by the child is to move a step forward in unravelling the complexities of language (Kessler, 1971:7). Considering the complexities involved in language acquisition, there is a great deal that we still need to know.

Of all the young child's startling accomplishments, none is as impressive and mysterious as his entrance into the world of language (de Villiers & de Villiers, 1979). Tamis-Lemonda and Rodriguez (2008) state that the entry of children into "formal language" is one of the most heralded achievements of early development. Learning a first language is something almost every child does successfully, in a matter of a few years and without the need for formal lessons, (Pinker, 1995).

Language acquisition is the process by which the ability to use language develops in humans; it enables man to develop language use. It is a natural human activity. Language acquisition begins very early in life and research has shown that some children

start talking as early as from four to eight months (Brown 1973, Cook, 1979, Dromi 1987, and Surakat 2001). The acquisition process begins logically with the acquisition of the sound patterns of the language. What a child learns in the course of language acquisition is not a set of utterances, but a set of rules for processing utterances (Slobin 1974:19). Pinker (1994a:2) further states that once acquired, a language is not a fixed list of sentences but a combinatorial algorithm allowing an infinite number of new thoughts to be expressed. Language acquisition is indeed a complex process.

After discovering the meaning of certain words, the child has to determine the complex ways in which words are combined to form sentences; he has to determine the frame in which the verbs in the language occur. Hróarsdóttir (2003:116) says that evidence from human language studies show that children learn very complex phenomena in a relatively short period of time during their first language acquisition. The researcher's interest in language acquisition is aroused by the knowledge that understanding the grammar of the young child means gaining a better insight into the nature of grammar in particular and language as a whole. To date, few studies exist on language acquisition in Nigerian languages and Yoruba in particular. Furthermore, very few researches on the acquisition of Yoruba syntax have been carried out. This study is also predicated on the fact that to date, as far as we know, no comprehensive study on the acquisition of Yoruba argument structure has been undertaken.

The study focuses on the acquisition of the argument structure by Yoruba-speaking children. We adopt the generative theory approach and we precisely use the

Minimalist Programme (Chomsky, 1993 1995, 1998, 1999, 2000) as our framework. The study deals with the nature of developmental sequence leading to linguistic competence in Yoruba argument structure. From a broad range of data, this study shows that verbs have highly different argument structure properties. The study examines how children acquire predicate argument structure in the Yoruba language. The research also examines the development of verb meaning and syntax. The study looks at the acquisition of transitive (TR) and intransitive (INTR) verbs in Yoruba. We also undertake the study of the acquisition of null arguments and complex predicates. What follows is an exploratory study of the acquisition of Yoruba argument structure.

1.1 Statement of the Research Problem

Language is a complex skill learnt by children. The ultimate goal of any theory of acquisition and research on acquisition in particular, is to explain how the child, within a very short period of time and without any formal tutoring, acquires mastery of his native language. Despite the Chomskyan position that certain aspects of language, such as basic semantic categories, might be 'innate', and that this might facilitate the acquisition of syntactic structure (Demuth, 1998:2), each language has its own peculiarities captured by the parameters. This brings out the need to study the acquisition of Yoruba argument structure.

We set out to investigate how Yoruba argument structure are acquired by children between the ages of fifteen (15) to sixty (60) months. We intend to find out how Yoruba

children move from a state of no verb, no arguments and no argument structure to a state of mastery of verbs and the argument structure.

1.2   Objectives of the Study

To investigate the stated research problem in 1.1 above, the study relies on the following objectives:

1. To examine the composition of early lexicon of the Yoruba child.

2. To examine the order of acquisition of Verb-Noun argument structure by the Yoruba child.

3. To examine acquisition of null arguments in Yoruba.

4. To examine how children acquire transitive and intransitive verbs in Yoruba.

5. To examine the nature of overt arguments acquired by the Yoruba child.

6. To know the stage at which the Yoruba child acquires complex predicates.

1.3   Research Questions

Through careful analysis of the data collected, the study provides answers to the following research questions:

1.   What is the composition of the early lexicon of the Yoruba child?

2.   What is the order of acquisition of Verb-Noun argument structure by the Yoruba child?

3.   How are null arguments acquired in Yoruba?

4.   How do children acquire transitive and intransitive verbs in Yoruba?

5.   What is the nature of overt arguments used by the Yoruba child?

6.	At what stage does the Yoruba child start to acquire complex predicates?

**1.4	Justification of Study**

This study is an investigation into the acquisition of the argument structure of Yoruba children. The acquisition of argument structure has long been a topic of interest in the language acquisition literature, and has continued to be one hotly debated today (Demuth 1998). However, not much has been done on this area of research as it affects Yoruba language. To the best of our knowledge, only few studies have been carried out on the acquisition of Yoruba as a first language. Such earlier studies include Ajolore (1974), Onidare (1983, 1985) and Oyebade (1990). Furthermore, to the best of our knowledge, no documented or coherent study on the acquisition of Yoruba argument structure exists. It is this gap that we intend to fill through the present research work.

The verb constitutes a universal and very important lexical category (Robins 1966, Hopper & Thompson 1984, Langacker 1987, Uziel-Karl 2001). Awobuluyi (1979:114) says that verbs play a central role in sentences and that they are almost always present in sentences. Verbs especially play a very important role in language structure, in linguistics form-function relations, and in processes of language acquisition and language development (Uziel-Karl 2001). Argument structure is a very important aspect of verb knowledge. Since argument structure provides a good template for the understanding of how verbs relate with nouns in the process of language acquisition, we therefore consider it as the appropriate theme for this study.

The properties of each language influence the acquisition of the language and its argument structure in particular. According to Clark (2002:2) 'since languages differ, their acquisition might also be affected by the properties of each language'. The child that is acquiring Yoruba will have to learn the syntactic category of words in the language and also more importantly learn the sub-categorization of verbs in the language. A verb in Yoruba and its equivalent in English could be realized differently. The reason for this is that equivalent verbs in these languages would have different patterns in projecting their arguments. For example, the verb 'love' in English subcategorizes for its object as in *Olu loves you*. The closest equivalent to this form in Yoruba is *Olú fẹ́ràn rẹ* which may not have the same meaning as *Olu loves you.* This same sentence is rendered as *Olú ní ìfẹ́ rẹ* which translates as 'Olu has love for you'. Issues like these present good reasons for this study, as we cannot rely on studies in other languages to capture the peculiarities of the Yoruba language.

The study proposes an insight into the mental processes of the child acquiring Yoruba argument structure, as each stage indicates the level of cognitive development of the child. We hope the research work will shed more light on the processes of child language acquisition. It will also examine the influence that parental input has on the child's acquisition of argument structure. The work has implications not only for language acquisition and argument structure, but for the theory of grammar in general. For a linguist to have a full grasp of linguistic knowledge or competence, it is important to have a good knowledge of the processes associated with how it evolved.

The findings of this study will expose the development of argument structure of the Yoruba child and also the processes involved in language acquisition. Thus, we hope the study will have specific implications for the sequencing of structures in the preparation of language teaching materials. For instance, in preparing the language teaching syllabus, the curriculum designer would know how to sequence the topics, e.g. moving from simple to complex structures and from concrete to abstract concepts. We hope this study will therefore contribute to language learning and language materials development for the category of learners for which the study is intended.

Some of the other important contributions of this study will include among others the following:

a.   A contribution to the study of child language development using Yoruba as a case study and the contribution to the knowledge of language acquisition theories.

b.   An analysis of Yoruba child language development using the Minimalist Programme as our framework. A Contribution to wider issues in Linguistics and the Linguistic Theory of Language Acquisition in particular.

c.   The provision of both longitudinal and cross-sectional research data on Yoruba child language development.

1.5   Scope of the study

This study is primarily concerned with how Yoruba children acquire the argument structure in Yoruba. Since the study involves early acquisition of argument structure, pre-primary school children acquiring Yoruba as their first language in Nigeria will be

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studied. These are children within the range of fifteen (15) and sixty (60) months of age. The study is based on the analysis of two corpora collected through longitudinal and cross-sectional methods. The study examines the processes of child language acquisition. We also examine different classes of verbs and syntactic structures of these verbs. The acquisition of null arguments and complex predicates are also looked into. Due to the nature of our data, we will not be able to examine the influence that parental input has on the child acquiring argument structure, we will however look at how the experiences of each child affects language development. This study is limited to the sensori-motor and the pre-operational stages of Piaget's (1959) work. This is the period when the child would be acquiring the basic Yoruba structure.

1.6   The Yoruba Language

Yoruba is one of the three major Nigerian languages (the other two being Hausa and Igbo) spoken majorly in south western Nigeria. It is spoken as a first language in Oyo, Ogun, Ondo, Osun, Ekiti, Lagos and parts of Kwara, Kogi and Edo states. It is spoken by about twenty million people (Mosadomi, 2009). The Yoruba language is also spoken in several countries of Africa like Togo, Republic of Benin, Sierra Leone; and in Southern and Central American countries like Cuba, Trinidad and Tobago and Brazil (Akeem 2009).

The Yoruba language belongs to the Kwa family of the Niger Congo language family. The language has very many dialects with varying degree of mutual intelligibility. Varying degree of phonological, lexical and grammatical differences are noted in the

dialects. Awobuluyi (2001:15) lists some dialects of Yoruba. These include Ònkò, Òndó, Ijebu, Egba, Ibolo, Èkìtì, Owé, Ìyàgbà, Ìkálè, Ìgbómìnà, Standard Yoruba, etc. Standard Yoruba which is believed to be the Oyo dialect is the variety that every Yoruba understands and can speak. The standard variety cuts across all dialects and knits the Yoruba people together. The standard Yoruba is the dialect used for this research.

The language is widely studied and has a large body of literature. An abundant body of literature exists on the Yoruba both in the European languages and in the Yoruba language itselfʾ. Yoruba is a tone language with three level tones of high, mid and low. Tones basically perform lexical function in the language. The Yoruba clause structure is discussed in full in chapter two.

1.7   Definition of Terms

It is important to define the following terms which are significant to our understanding of the study.

Acquisition: refers to the process by which people acquire their first language; it is the process by which the ability to use language develops in humans; it enables man to develop language use.

Animate: refers to an expression that denotes a living being either human being or animal.

Argument: refers to the entities participating in the relation.

Argument structure: refers to what makes a lexical head to induce argument positions in syntactic structures

Bottom-up: syntactic structure is derived in a bottom-up fashion. The structure of a sentence is built up from bottom to top, with lower parts of the structure being formed before the higher parts.

Clitic: an item which is a reduced form of another word.

Cognition: study of human language

Ergative: verbs that occur in both transitive and intransitive structures.

Innateness hypothesis: the hypothesis assumes that children have a biologically endowed innate language faculty.

Instantaneous process: the principles of UG and the linguistic data are at the disposal of the child.

Interpretable features: a feature is interpretable if it has semantic content.

Language Faculty: Language Faculty is a set of procedures or programme which all human beings possess. It is required for the acquisition of the grammar of languages

Lexicon: mental dictionary containing a list of words and their idiosyncratic properties.

Minimalist Programme: It is a theory of grammar that is motivated not only by the search for explanatory adequacy, but also for a certain level of formal simplicity and elegance'. It sees language as being a perfect system of optimal design.

Predicate: a predicate is an expression denoting an activity or event.

Unaccusatives: they have only internal argument and do not assign accusative case.

Uninterpretable Features: phonetic and grammatical features like case are uninterpretable

CHAPTER TWO

LITERATURE REVIEW

2.0   Introduction

The main objective of the previous chapter was to introduce the research work. We tried to define what we mean by language acquisition and argument structure. We also defined some terms that we will be using in the course of the research. This chapter reviews literatures that are relevant to the study. The literature for this research work is drawn from related literature on language acquisition and argument structure. We look at the history of language acquisition and language acquisition studies in Nigeria. We also examine various theoretical issues connected with first language acquisition. This chapter also examines the workings of the Minimalist Programme and how it can be applied to the present study.

2.1   First Language Acquisition

In just a few years, children achieve a stable state of linguistic competence, making them effectively adults with respect to: understanding novel sentences, discerning relations of paraphrase and entailment, acceptability judgments, etc. (Crain and Pietroski, 2001:139). The development of language in children is guided by a set of "innate ideas and principles" (Akmajian, Demers, Farmer and Harnish, 2004). Language acquisition involves the processes that learners go through in order to acquire a language. First language acquisition is the development of language in children; it is the children's acquisition of their native language.

The child is actively involved in the language acquisition process. The language continues to develop and thereby change. According to Clark (2000:181) children naturally obtain a "communicative competence," intrinsically understand the rules of grammar, and gain knowledge of the rules of using language. Clark also believes that linguistic structure comes through the child's own cognitive and social activity.

Acquisition of syntax deals with how and when children acquire grammars of their native language. It is also concerned with stages they go through in the development of grammar and how much of this knowledge is innate and how much is learned during life? It is generally accepted that the meaning of words and the details of how they are used are learned. Research has also shown that there is a deep grammatical structure in place in the brains of newly born children. Radford (2000:1) sees children as "perfect language learners, perfectionists who seek perfection in the imperfect input they receive". Having the knowledge of the process of language acquisition helps in answering questions about why children have language disorders or how children and adults learn a second language; it also helps in explaining what happens when a stroke or a disease wipe out a person's knowledge of language, and also explain fundamental features of learning and the human brain.

2.1.1 Language Acquisition and Language Learning

Linguists make very important distinction between language acquisition and language learning. Krashen (1981:5) states that language acquisition is subconscious while language learning is conscious, he believes that the two systems are interrelated

however, language acquisition is more important. Unconscious knowledge is acquired. The grammar of a language is unconscious and so it is acquired by the child. It is believed that children acquire language through a subconscious process at a time when they are unaware of grammatical rules (Haynes, 2005). Language acquisition occurs in an unorganised way, there is no syllabus for children who are learning their first language. The data or source is the natural communication that they are exposed to. There is an innate capacity in every human to acquire language and by the time a child is five years old, he has become almost fully competent in his mother tongue.

Language learning is organised. It is a product of formal instruction; of direct instruction in the rules of language. Learners have a conscious knowledge of the new language. Language acquisition refers to the first language learning by children while language learning refers to second language learning by children and adults. While second language learning is highly influenced by need and strong impulses, children acquiring their first language need no motivation as language acquisition is a natural phenomenon and occurs in a natural environment. Every child except those with language impairment acquires a first language but not every body learns a second language.

2.1.2 Studies in Child Language Acquisition

Interest in how language is acquired has existed from time immemorial. According to Fromkin and Rodman (1983:21),

in the fifth century B.C., the Greek historian Herodotus reported that the Egyptian Pharaoh, Psammetichus (664-610 B.C.) sought to determine the most primitive 'natural' language by experimental methods. The monarch was said to have placed two infants in an isolated mountain hut, to be cared for by a servant who was cautioned not to utter a single word in their presence on the pain of death. …the first word uttered was *bekos*…. the word for 'bread' in Phrygian, the language spoken in the province of Phrygia (the northwest corner of modern Turkey).

The reason for this experiment was to find out the most ancient race. The Egyptian had thought that they were the most ancient of all the races in the world. This experiment ended the inquiry and made the Egyptians yield their claim of superior antiquity to the Phrygians. This experiment seems to suggest that the ability to acquire language is innate and does not have to be as a result of imitation or reinforcement. The capacity to acquire language we believe is innate and not a case of imitation or reinforcement. The data that children are exposed to only serve as input that triggers the language acquisition device.

Dale (1976) believes that the methodology of the experiment is scientifically and ethically dubious. We also support the view of Dale. The experiment has definitely denied the infants involved their basic human rights as they were left in an isolated place devoid of the care of their parents. It should be noted that in the course of carrying out any experiment, the welfare and self-esteem of the participants is of utmost importance. We cannot also be too sure that there is no external influence on the language spoken by the infants especially given the ethical violation of the rights of the infants. The experiment constitutes a case of child abuse.

Roman Emperor, Frederick II of Hohenstaufen (d.1250) and King James IV of Scotland (1437-1513) were also reported to have carried out investigations into the development of speech in children. Roman Emperor Frederick II of Hohenstaufen's research was not successful because the child died before uttering any word. In the case of King James IV of Scotland, the result was that the children spoke very good Hebrew. This experiment, according to Fromkin and Rodman (1983:21), provided scientific evidence that Hebrew was the language used in the Garden of Eden.

Detailed research and documentation on language acquisition date back to the 18th century (Surakat, 2007). It has been a topic of interest to parents, caregivers, philosophers, psychologists, educationists and linguists, among others. Dale (1976:2) reports that a long series of "baby biographies" focusing on language began with a German philosopher, Dietrich Tiedemann's diary of infant behaviour. Tiedemann (1787) chronicles the behavioural development of his child, which also includes the language development. Darwin (1877), as reported by Dale (1976), is one of the most famous parent-biographers. According to Surakat (2007), Taine (1877) and Preyer (1888) works are related to child development published before the birth of linguistics as an autonomous scientific discipline.

With the advent of modern linguistics, language acquisition also received more attention. According to Kessler (1971:9), the massive work of the Sterns begins a period of research spanning nearly half a century. The Sterns carried out an observational study within the framework of Traditional Grammar. Their studies and those after them gave

detailed accounts of the language development of their children. Their observation was concerned with the emergence of specific word classes characterizing adult language. These studies consist mainly of informal observation recorded in notes and diaries. They were all longitudinal studies on the researchers' children. Chamberlin & Chamberlin (1904), Ronjat (1913), Leopold (1949) are some of the works that studied language acquisition in the 20th century, these are also longitudinal studies.

Jespersen (1922) also studied language development. He emphasizes that children echo or imitate what they hear. Some of his claims about language development have been supported by facts in later research, while some have been disproved. His claim that "all children start by putting the words for the most important concepts together without connective words' (Jespersen, 1922:138) is supported by further research like Brown and Fraser, 1963; Brown and Fraser, 1964; Brown, Fraser and Bellugi, 1964, etc. However, the claim that 'the bilingual child has diminished powers of learning… and does not really command the fine points of both languages' is no longer tenable (cf. Kessler 1971).

From the beginning of the twentieth century to around 1950, most researches on language acquisition were carried out by behaviourists. Behaviourism is a movement in psychology that advocates the use of strict experimental procedures to study observable behaviour (responses) in relation to the environment or stimuli (Bijou, 2008). Behaviourists do not believe that innateness has any role to play in language development. To the behaviourists, the development of an individual is dependent almost wholly on environmental factors. The end of that era witnessed the emergence of

cognitive approach to language acquisition. It also witnessed the emergence of Noam Chomsky into the world of grammar and language acquisition in particular. This period, according to Surakat (2007:431), "marked the emergence of cross-sectional, experimental studies involving groups of children who vary in sex, age, birth position, and socio-economic background".

2.2   Language Acquisition Theories

Different theoretical orientations abound in the study of child language acquisition in general and the acquisition of syntax in particular. The central question, which distinguishes these orientations, according to Harris and Coltheart (1986), is the extent to which language acquisition is viewed as being similar to other kinds of learning. The acquisition of syntax is a central issue in both linguistic theory and in the branches of cognitive science devoted to the study of language (Van Valin, 2001). Three main theories that have implications for this study will be examined. These are Skinner's *Behaviourism,* Piaget's *Cognitive Theory* and Chomsky's *Nativist Theory.*

2.2.1   The Behaviourist Approach

B. F. Skinner (1957), a behaviourist believes that language learning should be seen as a conditioning process. He proposes in his (1957) work that language acquisition could be explained by extending the model of operant conditioning (i.e. how human behaviour is affected by its consequences) which he had used to account for learning in laboratory animals. He claims that the reinforcement provided by parents leads to improvement in the language learning rate of children (Harris and Coltheart, 1986).

Behaviourists believe that the child is endowed at birth with general learning abilities, but not with any language-specific knowledge (Akmajian, et al 2004). They view the child as coming into the world with a clean slate, 'a tabula-rasa', which according to Brown (1980: 18) is, "a clean slate, bearing no preconceived notions of the world or about language, and that this child is then shaped by the environment by being conditioned through reinforcement." This means that when babies are born into the world, they do not have any knowledge; they know nothing and they can do nothing. They are of the view that linguistic behaviour is externally reinforced. Children learn to speak by imitation; parents reinforce or correct their children's speech. Lewis (1959:48) states that "imitation is the one essential condition for a child's progress in language".

Behaviourists study the relationship between stimuli and responses. Jenkins and Palermo (1964:165) state that "child language begins with a form of imitation followed by the acquisition of a number of simple S-R connections between verbal labels and salient features of the environment to which they are attached." S-R, Stimulus-Response, means how environmental factors affect behaviour.

However, some researches have shown that the notions of imitation, reinforcement, parental correction cannot explain language acquisition. For example, Chomsky (1959) faults the submission of Skinner as regards language acquisition. He says that Skinner attempted to explain the process of language acquisition while ignoring the content being learned. He also points out that children seem to acquire language

easily and so do not depend on environmental conditioning. These are arguments that back up Chomsky's belief in the innateness of language.

The contributions of the Behaviourist school to language acquisition cannot be totally swept under the carpet. This is because of the importance of parental input to language acquisition. It is a fact that some elements of imitation and reinforcement are present in child language acquisition (Snow 1972, Sethuraman 2004, Ijaiya 2007). We believe that parental input has some role to play in the acquisition of argument structure. It serves as the source of data that the child is exposed to which is processed in the course of language acquisition.

2.2.2 The Cognitive Approach

Language acquisition is a very important area of cognitive science and every theory of cognition has tried to explain it (Pinker1994a). Piaget (1926), a cognitive psychologist, developed a theory of Cognitive Development. He discusses the place of language acquisition in cognitive development. He argues that it is impossible to isolate language from cognitive development, which he sees as developing the way for linguistic development (Harris and Coltheart 1986). He believes that children pass through four stages of cognitive development. These are the sensorimotor stage, the preoperational stage, the concrete-operational stage and the formal-operational stage. A brief description of these stages is given below as adopted from Huitt and Hummel (2003):

    a. Sensorimotor Stage (Infancy):   During the *sensorimotor stage,* which lasts from birth to about age 2, understanding is based on immediate sensory

experience and actions. Thought is very practical but lacking in mental concepts or ideas.

b. Preoperational Stage (Toddler and Early Childhood): In *preoperational stage,* which spans the pre-school years (about ages 2 to 6), children's understanding becomes more conceptual. Thinking involves mental concepts that are independent of immediate experience, and language enables children to think about unseen events, such as thoughts and feelings. The young child's reasoning is intuitive and subjective.

c. Concrete-operational Stage (Elementary and early adolescence): During the *concrete-operational stage,* from about 7 to 11 years of age, children engage in objective, logical mental processes that make them more careful, systematic thinkers.

d. Formal-operational Stage (Adolescence and adulthood): Around age 12 children attain the *formal-operational stage,* when they can think about abstract ideas, such as ethics and justice. They can also reason about hypothetical possibilities and deduce new concepts.

Piaget links language acquisition to child's maturation. As the child grows, he learns more about the world and in order to use linguistic structures, he must understand the concept. The child explores the world by touching, smelling, holding and putting objects in the mouth. He finds out the way objects and people behave. Children can only use certain linguistic structures when they understand fully the concepts surrounding

them. Piaget (1970) argues that child language appears at the completion of the processes involved in sensori-motor development.

Piaget believes that language can only appear after the capacity for symbolic action and symbolic representation has developed. A child cannot use comparison of size if the child does not understand the concept of size. He further points out that once language begins, the ability of the child to represent the world is greatly increased. He believes that language is a part of cognitive development (Harris and Coltheart, 1986). The understanding of how language works is intimately related to cognitive processes and the ways in which those processes affect language acquisition (Kessler, 1971:18). Any view of the acquisition of linguistic structures isolated from the rest of cognitive development is too narrow to be acceptable (Kessler 1971:16).

We are of the opinion in this research that language and cognitive development are intricately connected. As a child grows and matures, his world view begins to change. His experiences also increase. Normal speech and language development is seen as a cornerstone for successful outcomes later in life (Beitchman, 2005:1). This automatically has a direct influence on his language ability which also becomes more widened and matured. The stage that this research covers is the sensori-motor and pre-operational stages.

2.2.3 The Nativist Theory

Nativist scholars argue that children are born with an innate propensity for language acquisition which in turn makes the task of acquiring language easy. This is

because "the capacity to acquire language is a uniquely human talent" (Pinker 1994a:2).
The theory deals with the biological belief that language is an innate feature of the human
infant. The *Innateness Hypothesis* (IH) is the hypothesis that human beings have innately
specified, domain-specific knowledge in several areas, in particular language (Clark,
2001:7). Scholars in this field believe that language is a fundamental part of man and its
acquisition a natural part of maturation. Chomsky (1965), a nativist, believes that
children are born with a language faculty which he called 'Language Acquisition Device'
(LAD). This device allows children to process the input data they are exposed to.
Chomsky states that:

> Having some knowledge of the characteristics of the
> acquired grammars and the limitations on the available
> data, we can formulate quite reasonable and fairly
> strong empirical hypotheses regarding the internal
> structure of the language-acquisition device that
> constructs the postulated grammars from the given data.
> (Chomsky, 1968: 113).

Children discover the system of language from an unsystematic and small amount
of data. Crain and Pietroski (2001) argue that from the nativist perspective, children
acquire an adult language − *i.e.*, they achieve a stable state − by trying out various
linguistic options that are available in human languages. They do not have to be taught
formally before they acquire language. Language development in children occurs
spontaneously and does not require conscious instruction or reinforcement on the part of
adults (Akmajian et al, 2004:479). Chomsky (1965) argues that there are a set of innate

principles and adjustable parameters that are common to all human languages. This he calls *Universal Grammar* (Chomsky 1965).

Universal Grammar (UG) deals with Chomsky's view on first language acquisition. Universal Grammar is a linguistic theory that postulates principles of grammar shared by all languages; it provides all languages with the same general type of syntactic mechanisms (O'Grady 2004). Universal grammar, according to Nowak, Komarova and Niyogi (2001:114), specifies the mechanism of language acquisition and determines the range of grammatical hypothesis that children entertain during language learning and the procedure they use for evaluating input sentences. Language acquisition is innate to humans. Chomsky (1988:133) states that Universal Grammar consists of "fixed and invariant principles…and the parameters of variation associated with them". The theory attempts to explain language acquisition in general as against describing specific languages. It is a theory of knowledge that is concerned with the internal structure of the human mind. It proposes a set of rules to explain language acquisition. UG attempts to clarify the relatively quick acquisition of the child's first languages on the basis of minimum exposure to external input.

The "logical problem" of language acquisition, according to UG proponents, is that language learning would be impossible without "universal language-specific knowledge" (Cook, 1991:153). It is a proof that an infinite system like human language cannot be learned on the basis of observed data (Carnie, 2002:22). Chomsky (1968) believes that the kind of information that adult speakers of a language have could not

have been learnt from the language they hear around them. The main reason behind this argument is the input data which is believed to be often deficient and degenerate.

Cook (1991:154) says that "language input is the evidence out of which the learner constructs knowledge of language – what goes into the brain. Such evidence can be either positive or negative". Carnie (2002:15) states that there are an infinite number of possible sentences resulting in an infinite number of inputs. It is impossible to hear this infinite number of inputs in a lifetime neither is it possible for the child to hear all these in the four to six years it takes to master his native language. Carnie submits that "infinite systems are unlearnable because you never have enough input to be sure you have all relevant fact". UG provides a flexible blueprint that makes language learnable. Spada and Lightbrown (2002:116) state that "UG was described as a specialized module of the brain, pre-programmed to process language".

The environment is equally important to the nativists in child language acquisition. Nativists believe that exposure to language in the environment of the child will trigger his innate language acquisition device and thereby set the language acquisition on course. Another importance of the environment to language acquisition is that it provides linguistic data for the child. Nativists contend that language-learners project beyond their experience in ways that the input does not even suggest (Crain and Pietroski, 2001). In the view of Cook (1991:154) "the positive evidence of the position of words in a few sentences the learner hears is sufficient to show him the rules of a

language." Children's language development is a creative process that only needs a rich environment to thrive (Lindfors, 1991).

There is strong evidence that children may never acquire a language if they have not been exposed to a language before they reach the age of 6 or 7 (Clark, 2000:181). Nativists believe that there is a Critical Period for language acquisition. This is called the Critical Period Hypothesis. Lennenberg (1967) notes that the crucial period of language acquisition ends around the age of twelve (12). He claims that if no language is learned before then, it could never be learnt in a normal and functional sense. This means that there is a time frame during which environmental exposure is needed to stimulate an innate trait after which language acquisition might become impossible. A good example is the case of Genie (not her real name). Genie was kept in total isolation by her parents until she was discovered at the age of 13 years 7 months. Her father had kept her away from all human contact. There was no evidence of linguistic abilities when she was found. After about seven month period of rehabilitation, she was able to count to five, she knew some colour terms as well as some verbs. She was also able to name most objects in her environment. But she had problems with syntax. (Lennenberg, 1967).

The fact that a child at a very early age has acquired the grammar of his language and showing much competence gives credence to the theory. According to Foster (1990: 14) "since such sophisticated speech perception is possible for very young children, it suggests that the ability is innate". Children at a very early age when acquiring language do not make errors. They do not make use of fully formed sentences but they seem to be

following the rules of the language which shows that they start setting language parameters quite early. This fact, according to the nativists, shows that language acquisition is not a case of imitation or children learning from their parents. According to Chomsky (1965:200-1) "children acquire… language quite successfully even though no special care is taken to teach them and no special attention is given to their progress."

Chomsky's view on the innateness of language has been challenged (Harris and Coltheart, 1986:36). Putnam (1967:12), an empiricist, and Steinberg (1999:140), believe that Chomsky's claim on the ease and speed with which children acquire language might not be as he claims. They believe that the time put into language acquisition is much; hence, it is not so easy as he claims. Putnam believes that a child learning language is actually exposed to more hours and eventually more years of language learning than an adult learning a second language. He compares the number of hours spent by a child in acquiring language with that of an adult learning a second language. Steinberg in agreement with him, claims that a child by four years will have been exposed to language for about fourteen thousand, four hundred (14,400) hours at an average of ten (10) hours per day. However, an adult in a language class, will have an average of eight hundred and ten (810) hours per year, compared to three thousand, six hundred and fifty (3,650) hours that the child spends in a year. They do not believe that there is a language acquisition device that makes language acquisition easy.

Peng (1975:16) also does not believe that language is innate. He states that the fact that a four-year old child is able to "command a very complex system of

communication does not mean that the process was easy or justify that he has the system at birth". He believes that language acquisition is strenuous.

2.2.4   Appraisal of Language Acquisition Theories

No single theory of language acquisition can account for the acquisition of argument structure in language. "Any theory that posits too little innate structure, so that its hypothetical child ends up speaking less than a real language, must be false. The same is true of any theory that posits too much innate structure, so that the hypothetical child can acquire English but not, say, Bantu or Vietnamese" (Pinker, 1994a). An eclectic approach will be adopted for our analysis. We want to believe in this study that language acquisition is innate. It is strongly believed that the child has a mechanism in place that enables him to acquire his language. Children however, do need some kind of linguistic input to acquire a language; they need to hear an existing language for them to learn that language. Language acquisition is an active process; children process the input data they are exposed to. This approach will enable us to see the child as being actively involved in the process of language acquisition; since we believe that cognitive development is a prerequisite for grammatical development.

2.3   Studies on Language Acquisition in Nigeria

Child language research is an area very much in need of scientific inquiry in Africa in general and in Nigeria in particular (Ndahi 1982, Surakat 2007). This is because a good knowledge of the process involved in language acquisition helps scientists to

answer very many questions. Questions about features of learning and the brain, about what happens to people with speech disorders, etcs, would be answered. There are, however, a few studies that have been carried out. Ajolore (1974), Onidare (1983, 1985, 1988), Yusuf (1984), Oladejo (1989), Oyebade (1990), Mamman-Katsina (1992), Surakat (2001, 2007), Ojukwu (2006), and Ijaiya (2007) are some of the studies carried out on the language acquisition of some Nigerian languages. Some of the studies that have direct relevance to the present study will be examined briefly.

Ajolore (1974) is a three and a half year longitudinal study of the researcher's set of twins, Táyé and Kẹ̀ìn. The research is titled 'Learning to use Yoruba Focus Sentences in a Multilingual Setting'. He studied how the set of twins acquired focus constructions in Yoruba. He believes that the arrival of focus sentences in a child's language development marks an important point in his linguistic development. He assumes that the children learned by imitation, pattern copying and careful use of semantic cues since the rules through which adult focus are derived did not help in explaining how Táyé and Kẹ̀ìn learned the sentences. He suggests that an adequate theory of child language should integrate semantic notions with the use of imitation to produce a model. He argues that to produce such a theory, biologists, neurologists, speech experts, linguists, sociologists and psychologists will be involved.

Contrary to the belief in Ajolore's study, we assume that language input serves as linguistic data and that children do not acquire language by imitation but by proper processing of the data available to them. Ajolore (1974) is a research work that has

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spanned about three decades. Research into language acquisition now cuts across different domains just as he suggested and this has brought about varied and diverse approaches into the study of language acquisition.

Onidare (1983) studying the acquisition of Yoruba, also conducted a three-year longitudinal study on his son, Adebowale. He recorded the speech of the son weekly. He reports that the boy began by acquiring the intonation of Yoruba, followed by vowels, consonants, nasals, words, phrases and sentences. We like to point out that Yoruba is not an intonation language but a tonal language and so the child could not have acquired the intonation of Yoruba.

Onidare (1985) examines the role of the society in the acquisition of Yoruba communicative competence. He concludes that the macro-society establishes and perpetuates the components of the Yoruba communicative competence and that the micro-society decides on what the child is to acquire. We believe that language exists in a culture and for the Yoruba child to have communicative competence in the language; he needs to acquire the shared knowledge of the people.

After examining the role of the society in the acquisition of communicative competence, Onidare (1988) seeks to know the role that the child plays in the acquisition of Yoruba communicative competence. He seeks to know the innate capacity that makes it possible for the child to play the role. The study finds that the child is an active participant in the interactive process of acquiring Yoruba communicative competence. He assumes that the personality of the child makes it possible for him to play an effective

role in the interactive process of language acquisition. He concludes that the various stages of development are a clear reflection of the stages of cognitive and psychological development of the child. We agree with the submission of Onidare. We strongly believe that the child is an active participant in the language acquisition process and that there is a very strong correlation between cognitive development and language development.

Mamman-Katsina (1992) is also a longitudinal study of the researcher's child between the ages of 25 to 60 months. It is a doctoral dissertation titled "Language Acquisition Process: A Case Study of Syntactic Development of a Hausa Child". The research is on the acquisition of statements, interrogatives, commands and negatives. The data were written in a diary and complemented by 54 sixty-minute audio-recordings. The study compares the stages and strategies of language development in the Hausa child with those of other monolingual children reported in some studies in Europe and America (Surakat, 2007:435). The focus of the study is the acquisition of statements, interrogatives, commands and negatives in Hausa while this present study is on the acquisition of Yoruba argument structure.

Oyebade (1990) examines the phonological development of Yoruba children in a study titled "Language Acquisition: the Phonology of a Yoruba Child" while Ijaiya (2007) is a doctoral dissertation titled "Psycho-pragmatic Description of Performance in the English of some selected Nursery School Children in Kwara State, Nigeria". None of the works reviewed so far has done anything on the acquisition of Yoruba argument structure hence, the need to embark on the present study.

2.4   Developmental Models

The theory of UG, according to Hyams (1986), treats acquisition as an instantaneous process. This means that the child has all he needs, i.e. the principles of UG and the linguistic data, at his disposal. It is however clear that language acquisition is not an instantaneous process, hence the need to explain the developmental process of language acquisition, which begins with the child's grammar and ends in adult grammar. This is what is referred to as the logical problem of language acquisition. The task of developmental theory is to make explicit the factors that make language acquisition non-instantaneous within the Minimalist programme**.** In the subsequent sections, some of the relevant hypothesis like the Initial *State, Continuity and Discontinuity Hypotheses,* and M*aturational Hypothesis* will be discussed*.*

2.4.1   The Initial State

The initial state (G_o), according to Hyams (1986:3) 'is a set of principles which constitutes the child's *a priori* knowledge of the structure of human grammars- principles which allow for the development of a particular grammar (G_s) through interaction with particular linguistic data'. Proponents of the initial state believe that there is an initial value which is assumed a priori and which may later be altered on the basis of linguistic evidence (Hyams 1986:153).

At the initial state, the child is endowed with a set of universal principles which already come with predetermined set of possible values. Oiry and Roepper (2009:13-14) assume that Initial State Options appear 'spontaneously' in the acquisition process and

are direct indicators of the principles of interface economy. All the principles of UG are not necessarily present at the initial state. This means that some of the parameters of UG come preset and the input data serve to trigger the parameter depending on the language being acquired. For example, in terms of phrasal categories, the child acquiring Yoruba will recognize that Yoruba is a 'head first' language; the child acquiring English must also recognize that the language is a 'head first' language. This evidence is provided by the language data available to the child. For instance, a Yoruba child, based on his grammaticality judgement and parameter setting will respond positively to:

(1) a.   Olú jẹ isu
     Olu eat yam
     'Olu ate yam.'

  b.   Tolu mu tíî
      Tolu drink tea
      'Tolu drank tea.'

Rather than:

(2) a. ***isu Olu jẹ**
  b.   *Tolu tii mu

On the other hand, based on the same parameter setting, an English child will respond positively to:

(3) a. Olu ate yam.
  b. Tolu drank tea.

Rather than:

(4) a. *Olu the yam ate
  b. *Tolu tea drank

This has to do with word order parameter which happens to be fixed quite early by the child. Brown (1973) believes that word order is one of the earliest aspects of grammar to be fixed by the child.

2.4.2 Continuity Hypothesis

The continuity hypothesis does not require all principles of UG to be specified at the initial state (Hyams, 1986:169). According to Uziel-Karl (2001:27), proponents of continuous development like (Bloom 1970, Pinker 1984, Valian 1986) assume that children possess knowledge of grammatical categories from the onset of linguistic development. That is, children have an awareness of the principles of UG from the beginning. The continuous development hypothesis believes that grammatical development is constrained by principles and parameters of UG. Clark (1995) points out that the child's immature production capabilities at the beginning should not be taken to indicate lack of competence. The hypothesis, according to Hyams (1986:99) "provides a support for the hypothesis that the child grammar of a particular language may differ from the adult grammar of the same language with respect to the setting along a particular parameter". Child grammars naturally develop to become adult grammar. According to Legate and Yang (2007:318) the hypothesis assumes that children's competence system is not qualitatively different from adults. This means that the rules of the child's grammar are the same as those of the adult grammar.

Lust (1994:87) notes that *continuity* is theoretically preferable because it does not require additional mechanism for introducing functional categories into the grammar,

subsequent to the telegraphic stage. She believes that "there is no conclusive evidence that the functional category C^O is not continuously available through the course of first language acquisition". The hypothesis does not require that all the principles of UG be specified at the initial state. It is however expected that early grammar will be constrained by those principles which are specified. All principles are available from birth, but they need to be triggered by input data.

2.4.3 Discontinuity Hypothesis

Discontinuity hypothesis are grammars which entail that there exists a radical restructuring from a semantically based child grammar to a syntactically based adult grammar (Hyams 1986). Proponents of the grammars include Schlesinger (1971), Bowerman (1973), Braine (1976), MacNamara (1982) and Radford (1990). Herschensohn (2000:92) notes that "empirical studies have revealed the paucity of functional categories in early child grammars, a crucial point in the debate". The proponents of discontinuity assume that children's early word combination are not governed by adult-like grammatical rules and that adult grammar and early child grammar bear little relationship to one another, and their principle differs across development (Uziel-Karl, 2001). The Child's grammar in the discontinuous process is organized along principles which are quite different from adult grammar. The proponents argue that early grammars map underlying semantic categories directly unto a linear position in a surface expression (Hyams 1986).

Radford (1990) presents a detailed investigation of the telegraphic stage. He notes the absence of tense, possessive, auxiliary, determiner and preposition. He makes the assertion that once the child has begun to use inflection productively, other functional categories will also appear. He proposes that early syntax only contains lexical items which later mature to gain functional categories.

The analysis of child acquisition of argument structure proposed in this study supports the continuity hypothesis that grammatical development is continuous. Grimshaw (1990:3) notes that:

> the position taken in much earlier work that the lexicon is idiosyncratic and is acquired piece by piece simply cannot be maintained. It fails to explain the high degree of regularity of the lexical system as well as how children come to acquire lexical information.

The theory of grammar also provides an explanation for the various differences (and shared properties) which exist between child language and adult language (Hyams, 1986:99). The continuity hypothesis suggests that adult and child grammars are alike as they share the same structure (syntactic tree) and utilize the same principles (thematic hierarchy) throughout acquisition (Uziel-Karl, 2001).

Grimshaw (1994b) tries to harmonize the two hypotheses. She proposes a principle of Minimal Projection which allows variability of category projection. The principle states that "projections are legitimate only when they are motivated" (Grimshaw 1994b:76). She posits that Inflectional Phrase (IP) may suffice for a simple declarative sentence and that Complemetizer Phrase (CP) or *wh*-movement is only projected when

needed. This proposal, according to Herschensohn (2000), "retains the theoretical advantage of an initial grammar template that contains all potential categories predicated by UG, while providing the measures for suppressing projection of functional categories." This proposal which is also echoed by Safir (1993) and Chomsky (1995) obviates the Continuity/ Discontinuity debate in the Minimalist Programme.

2.4.4   Maturational Hypothesis

The maturational hypothesis was proposed by Borer and Wexler (1987). The maturation of language circuits during a child's early years may be a driving force underlying the course of language acquisition (Pinker, 1994a). It is assumed that cognitive maturation guides the course of acquisition. Chomsky remarks that

> there are many complicating factors: e.g., processes of maturation may be such as to permit certain unmarked structures to be manifested only relatively late in language acquisition, frequency effects may intervene, etc.
>
> (Chomsky, 1981: 9).

This implies that children at a particular stage will not acquire features encoding properties which their immature cognitive development makes them unable to construct mental representations of (Radford 2000). According to Hyams (1986), the maturation of the child's representational abilities enables him to consider data which were initially ignored. The child does not have access to all data at all points and those that are available may be irrelevant until a particular maturational level is attained. Some principles of grammar also need to mature.

Radford (2000) hypothesized that **Number** might be acquired before **Person** because **Person** is cognitively more complex than **Number**. He examines the speech of Allison at age 1;8 and 1;10 and find evidence that she has acquired Number but no evidence of the acquisition of Person. Borer and Wexler (1987) also propose that at the earliest stages of development, the grammar lacks the principle of Argument-binding. The A-binding principle matures at a later point. Certain aspects of grammatical development may be delayed because of factors relating to maturation. The maturation of cognition plays an important role in the acquisition of language; children will therefore not acquire features which is higher than the level of their cognitive development. This hypothesis makes it possible to account for the absence and presence of arguments at certain points in the development of the grammar of the child. It also accounts for the delay in the acquisition of complex verbs.

2.5   Developmental Sequences

A central question for the study of acquisition is how to account for children's transition from the initial state to adult-like knowledge of language (Uziel-Karl 2001). We need to know how Yoruba children move from a state of no verb and no argument to a state of mastery of verbs and its argument structure. It is a known fact that children understand more than they produce, and at a very early stage, their perception is very high. This is an indication that language is innate. Crystal (1987: 232), also observes that in child language acquisition "there is a simultaneous development of sounds, grammar,

meaning, and interaction skills; and significant progress can be made on several different fronts in a matter of days". This indicates that what the child learns at any point in time is a bundle, it cannot be measured.

Following the cognitive approach and in agreement with Uziel-Karl (2001), this study sees acquisition as a continuous and dynamic process involving a large number of transitions and changes affected by multiple factors. We will take the age of our participants into consideration in discussing developmental sequences. The age ranges from fifteen (15) months to sixty (60) months. Grammatical utterances are believed to begin around eighteen months when the child begins to put two words together (Cook, 1979). Our review will reflect the language development of children from the earliest stage, i.e. babbling stage but with particular emphasis on their performances at fifteen (15) months to sixty (60) months.

2.5.1 Babbling Stage

It is a stage when children begin to experiment with uttering sounds of language but they do not yet produce any recognizable words. This stage is prior to the development of language and it occurs between 4 and 6 months. Infants utter all known speech sounds, sound sequences and syllables. These are meaningless but they are recognizable. They are also more language-like than the infant cries. Fromkin and Rodman (1983:327) suggest that these children begin to distinguish between the sounds of their language and the sounds which are not part of their language.

2.5.2 The One-Word Stage (Holophrastic)

Children begin using recognizable words by late first year or early second year, between 09 and 18 months. This stage presents each 'sentence' as only one 'word' long (Griffiths 1979:108). There have actually been reports of children articulating their first words as early as four months (Cook, 1979). These words include names of familiar people, animals and objects in the child's environment. Ajolore (1974:269) says that the child starts his productive linguistic experience by using words that are autonomous and carry the full message of what the child has in mind. According to Fromkin, Rodman and Hyams (2007:333), adults listening to the one-word utterances often feel that the child is trying to convey a more complex message. The data in (5) and (6) are taken from the transcripts of Táyé and Kẹ́ìn at eight (8) months in Ajolore (1974) and Pinker (1995):

(5)   a.   [bàbá]
           bàbá
           "Daddy"

      b.   [adá]
           ajá
           "Dog"

      c.   [dèdè]
           ọ̀gẹ̀dẹ̀
           "Banana"

      d.   [ọntọ̀n]
           ọsọ̀n
           "Orange"

      e.   [dídí]
           Sídí
           "Name of a person"

g. [bóbò]
Olˊogbò
"Cat"

(6)   eye   nose
           car   boat
           dog   kitty
           dada   baby
           up   off
           open   peekaboo
           eat   go
           hot   allgone
           more   dirty
           cold   yes
           no   want

Words indicating certain actions which the child participates in and demands like *sùn* 'sleep'*, gbé,* 'carry' *gbá* 'play' *jẹ* 'eat', *wá* 'come', etc. are also used. The following examples were taken from the transcripts of Táyé and Kẹ̀in at eight (8) months in Ajolore (1974).

(7)   gbe   "carry"
       sùn   "sleep"
       jẹ   "eat"

Words at this stage are produced in isolation. The first sets of words of children are similar all over the world (Pinker 1995). These words as indicated above are words for objects like food, clothing, vehicles, toys, household items and people. They also include words for actions, motions, routines and modifiers.

2.5.3   Two-Word Stage

The two- word stage is a stage when children begin to put morphemes together. Radford (1990: vi) describes this stage as "of paramount importance for any attempt to construct a theory of language acquisition, since it represents the first point at which we have clear evidence that the child has begun to develop a grammar of the language being acquired". It is a stage that has been widely studied. Braine (1963a, 1963b), Miller and Ervin (1964) are among the first to study two-word utterances of children. Also included among these studies are Brown and Fraser (1963), Brown and Fraser (1964), Brown, Fraser and Bellugi, (1964). Brown and his colleagues observe the early language development of three children: Adam, Eve and Sarah over a period of several years. Brown and Fraser (1963) report from their experiment carried out on six children that "the younger children tended to preserve nouns, verbs, adjectives and pronouns and omit articles, prepositions, copular *be,* and auxiliary verbs".

Brown and Bellugi (1964) also report on the early sentences of Adam and Eve. They note the limit of length of utterances, presence of **contentives** and absence of functors and the presence of word order. These works have remained a reference point in any language acquisition study to date. All scholars report similarities among all the children studied at this stage cross-linguistically. This stage is called the telegraphic stage because the subjects studied all seem to be constructing rudimentary grammar (Brown and Fraser, 1963).

At the early telegraphic stage which is referred to as proto-syntax by Herschensohn (2000), the child begins to form elementary two-word structure. The child's Proto-syntax, according to Herschensohn (2000:91), is characterized cross-linguistically by the production of lexical items, an impoverished morphology, null and inverted subjects, sentence initial negation and the lack of determiners. The children begin to form elementary two-word structure which expresses a variety of grammatical and conceptual relations (Akmajian et al, 2004). At this stage, it is believed that the child can convey more complicated messages and also make the meaning more obvious (Cook, 1979). This stage marks the beginning of the building up of syntactic structures, of merging complements and heads via the process of merger. The data in (8a. and b.) are taken from Brown and Bellugi (1964) and cited in Brown (1973:105) while (8c.) are taken from Brown (1973:114).

(8)   a.   Baby highchair
             Mommy eggnog
             Eve lunch
             Mommy sandwich

       b.   Sat wall
             Throw daddy
             Pick glove
                         Brown and Bellugi (1964)

       c.   Bambi go
             Mail come
             See sock
             Want more
                         Brown (1973:114)

The following examples in (9) below are adapted from Ajolore (1974:270-271).

(9)   a.   [dádì àga]
dádì àga
Daddy chair
"Daddy is on the chair."   Táyé, 14.19 months

       b.   [dádì àga]
dádì àga
Daddy chair
"That's daddy's chair."   Kẹ́ìn, 14.15 months

       c.   [dádì àga]
dádì àga
Daddy chair
"Daddy leave my chair and go sit on your." Kẹ́ìn, 14.26 months

       d.   [ọntòn dẹ]
ọsòn jẹ
orange eat
"I want an orange"   Taye 13 months

       e.   [bàtà Táì]
Bàtà Toyin
Shoes Toyin
"These are Toyin's shoes."   Kẹ́ìn, 14.28 months

       f.   [bàtà Táì]
Bàtà Toyin
Shoes Toyin
"I want you to put on my shoes."   Kẹ́ìn, 15.21 months

       g.   [bàtà Táì]
Bàtà Toyin
Shoes Toyin
"Tosin has Toyin's shoes."   Kẹ́ìn, 15.13 months

       h.   [ùngun mọ́mì]
Ògùn mọ́mì
Medicine mummy
"Mummy drank her medicine."   Táyé, 15.06 months

i.   [ùngun mɔ́mì]
        Ògùn mɔ́mì
        Medicine mummy
        "Mummy, your medicine is yonder."   Táyé,   15.06 months

According to Fromkin and Rodman (1983:331), "the child's utterances are not simply words randomly strung together but, from a very early stage, reveal his or her grasp of the principles of sentence formation". Nomination, noticing, possession, location, requests and imperatives are some of the concepts expressed. Most of these concepts are present in the utterances of the children. Negative words occur at the beginning of expressions; they do not occur between other words. Negative words are also added to any lexical item as seen in the examples that follow:

(10)   a.   No eat
        b.   No pee

                            Goodluck 1991:76

(11)   a.   [únùn bɔ́nyɔ́n]   Táyé, 18 months
              n gbóná
              not hot
              "No, it's not hot."

        b.   n yàrá   Damilare, 20 months
              no room
              'I am not going to the room.'

        c.   n tîì   Damilare, 20 months
              no tea
              'I don't want tea.'

Looking at the data of Táyé from Ajolore (1974:270) and Damilare there is the addition *of negation plus nouns*. This cannot be found in the speech of adults in the language.

Radford (1999) studies the earliest clause structure produced by one-year-old children acquiring English as their first language. These earliest structures he calls *Children's Initial Clauses* (CICs). He adopts a version of the structure building approach and posits that syntactic structures are *minimal lexical projections (*MLP*)* of the lexical items they contain. He says that the verbal clauses produced by English acquiring children are headed by a non-finite verb. He gives the following examples:

(12) a. Mummy doing dinner (Daniel 1;10)

   b. Wayne taken bubble (Daniel 1;9)

   c. Machine make noise (Kathryn 1;9,) (from Bloom 1970)

He calls the structures Small Clause (SC) constituents which are simple projections of a head non-finite lexical V constituent. He gives the following structure as shown below:

(13)

```
                        VP
            _____|_____
           N                           V'
           |                     _____|_____
           |                    V               N
           |                    |               |
           |                    |               |
        Mummy                 doing          dinner
        Wayne                 taken          bubble
        Machine               make           noise
```
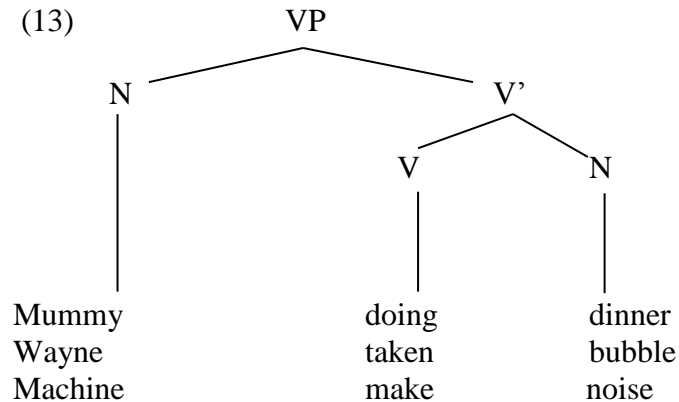
He claims that under the MLP analysis, the initial clauses of children are VPs which are direct projections of argument structure. He concludes that early child clauses have no functional architecture thereby lacking IP and CP projections.

The cross-linguistic similarity of proto-syntax and child initial clauses (CIC) gives credence to the claim that children acquiring language have the same blueprint reinforcing the fact that their language is not a case of lack of competence. Herschensohn (2000) also points out that the similarity supports the idea that 'there is a single computational system (C_{HL}) for human language and only limited lexical variety'. Variation of language is essentially morphological in character (Chomsky 1995:7).

2.5.4   Multi-word Stage

This stage begins from the second year of life and extends to the fifth year. We will broadly divide this stage into two to capture the period between 24 and 36 months and 37 to 60 months, respectively, i.e. development of two-year olds and three to four year olds respectively. The period between 24 and 36 months is known as the optional infinitive (OI) stage. Optional infinitive is also known as root infinitive. This is so called because uninflected root infinitives alternate freely with inflected verbs for a period of months (Herschensohn, 2000:95). Phillips (1995) defines Root Infinitives (RIs) as "default verb forms which young children use in root clauses, where they are generally not possible in the target language". Murasugi and Fuji (2009) also describe RIs as non-finite verbal forms which children at around two years old use in matrix clauses, where they are not possible in their adult grammar. Children optionally mark tense on verbs during this stage (Grinstead, Mora, Vega-Mendoza and Flores, 2009). During the optional infinitive stage, the child, depending on the language being acquired, produces root infinitives, null and VP internal subjects, determinerless NPs, preverbal negation,

lack of auxiliaries and lack of verb raising as seen in the following examples taken from

Ajolore (1974) and Pierce (1992).

Pierce (1992:64, 65):

    (14) a. Pas manger la poupée   (Nathalie, 1-9)
          Not to eat the doll
          'The doll isn't eating'.

        b. Pas la poupée dormir
          Not the doll   to sleep
          'The doll isn't sleeping.'   (Nathalie, 1-9)

        c.   Pas rouler en velo
          Not to ride on bike
          'Someone isn't riding a bike.'   (Philippe, 2-2)

Pierce (1992:57)

    (15) a.   Not Fraser read it   (Eve, 1-9)
         b.   No lamb have it   (Nina, 2-0)
         c. Don't Nina get up   (Nina 2-1)

    (16) a. [mọ́mì dẹ ọntọ̀n]
         mọ́mì jẹ ọsọ̀n
         mummy eat orange
          "Mummy, I want to eat an orange"   Taye, 13.28

       b. [Táì fẹ́ ọsọ̀n]
         Tóyìn fẹ́ ọsàn
         Toyin want orange
         'Toyin wants an orange.'   Táyé, 16.07

       c. [Báwú ó nọ́ mí]
         Bólú ó nọ́ mí
         Bólú he hit mi
         'Bolu hit me.'   Táyé, 16.18

    d. [Tásì dé họnyin]
        Tósìn jé éyin
        Tosin eat egg
        'Tosin ate egg.'   Táyé, 17.15

    e. [bíbì dẹ dẹ]
        bébì jẹ jẹ
        baby eat eat
        'Baby eat this, eat it.'   Kẹ́ìn, 18.19

The child at the optional infinitive stage also produces sentences containing inflected verbs, overt subjects, post verbal negation, auxiliaries and verb raising. This is also exemplified below with data from Pierce (1992).

Pierce (1992:65)

(17) a. Veux   pas lolo
         Want 1SG not the water
         'I don't want the water.'   (Nathatlie, 2.0)

      b. Ça tourne   pas
         That turns 3SG not
         'That isn't running.'   (Philippe, 2-0)

      c. Elle roule pas
         It FEM rolls 3SG not
         'It isn't rolling.'   (Grégoire 1-10)

Pierce (1992:103-104)

(18) a. We goed to the beach   (Eve, 2-)
      b. Could I sit down it chair   (Naomi 2-)
      c. You and I have some grape juice   (Eve-2)

At this stage, it is generally observed that the mean length of utterance of the child is highly increased but there is still the alternation between the different patterns. Cross-

linguistic evidence shows that the patterns are in complementary distribution (Pierce 1992, Wexler 1994, Clahsen 1996).

By the end of the second year into the middle of the third year, the language of the child increases very rapidly both in length and in fluency. The number of syntactic types increases, reaching thousands before the third birthday (Ingram, 1989:235; Brown, 1973; Pinker, 1984). The examples below taken from Pinker (1994a) show the development of Adam, one of Brown's longitudinal subjects from the age of 2:3 to 3:2:

(19)   2;3: Play checkers. Big drum. I got horn.

2;4: See marching bear go? Screw part machine.

2;5: Now put boots on. Where wrench go? What that paper clip doing?

2;6: Write a piece a paper. What that egg doing? No, I don't want to sit seat.

2;7: Where piece a paper go? Dropped a rubber band. Rintintin don't fly, Mommy.

2;8: Let me get down with the boots on. How tiger be so healthy and

fly like kite? Joshua throw like a penguin.

2;9: Where Mommy keep her pocket book? Show you something funny.

2;10: Look at that train Ursula brought. You don't have paper. Do you want little bit, Cromer?

2;11: Do want some pie on your face? Why you mixing baby chocolate? I said why not you coming in? We going turn light on so you can't - see.

3;0: I going come in fourteen minutes. I going wear that to wedding. Those are not strong mens. You dress me up like a baby elephant.

3;1: I like to play with something else. You know how to put it back together. I gon' make it like a rocket to blast off with. You want - to give me some carrots and some beans? Press the button and catch - it, sir. Why you put the pacifier in his mouth?

3;2: So it can't be cleaned? I broke my racing car. Do you know the light wents off? When it's got a flat tire it's need a go to the station. I'm going to mail this so the letter can't come off. I - want to have some espresso. Can I put my head in the mailbox so - the mailman can know where I are and put me in the mailbox? Can I - keep the screwdriver just like a carpenter keep the screwdriver?

The following data are taken from the transcripts of Táyé and Kẹ̀ìn between twenty-eight

(28) and thirty-six (36) months in Ajolore (1974:280-282).

(20)   a.   [mọ́mì ó nọ Tásì]

               Mọ́mì ó nọ̀ Tásì
               Mommy she hit Tosin
               'Mommy spanked Tosin.”   Táyé

       b.   dádì, Mọ́mì ó nọ̀ǒ
               daddy, mommy she hit him
               'Daddy, mommy she spanked him.'   Kẹ̀ìn

       c.   dádì Yọnmí nọ̀ mi
               daddy, Yomi she hit me
               'Daddy, Yomi hit me.'   Táyé

       d.   únùn, òun ló nọ̀ mí
               no   she be hit me
               'No, it was she who hit me.'   Táyé

       e.   Mo sọ fún ẹ mǎ sọ fún dádì mi o nọ̀ mi
               I   said to you I will tell to daddy my you hit me
               'I told you that I will tell my daddy that you hit me.'   Táyé

f.   èmi ló fọwọ́ kan ọmọ yẹn
      I   be touch child that
      'It was I who touched that child.'   Kẹ́ìn

g.   dádì èmi nó mu
      daddy i be she took it
      'Daddy, it was I who took it.'

As seen above, the sentences also become more complex as they can now begin to embed one constituent into another, giving away the earlier sentences lacking in function words and inflections. A full range of sentences begin to appear, nearing that of adult grammar. Children acquire all that they need know quite swiftly without any lag and by the time a normal child without any speech language impairment (SLI) turns four, he has acquired all parts of the language, including those parts that are difficult for the adult second language learner.

2.6   Argument Structure

This section attempts to capture the syntactic structure of the verb and its argument structure. Hale and Keyser (1999:453) see argument structure as "the syntactic configuration projected by a lexical item. Argument structure is the system of structural relations holding between heads (nuclei) and the arguments linked to them" Fromkin (2000:685) defines argument structure as 'the specification of the number of arguments that a lexical predicate (such as a verb) has, as well as the θ-roles associated with each of these arguments.' According to Grimshaw (1990:1) argument structure 'refers to the lexical representation of grammatical information about a predicate.' She further states that argument structure represents a complex of information that is critical to the

syntactic behaviour of a lexical item (Grimshaw, 1990:1). The argument structure of a lexical item is part of its lexical entry and this is predictable from its meaning. The argument structure of a verb determines the elements of a sentence that are obligatory (Haegeman, 1994:44). Argument structure is derived from meaning and the specification of the realization of the arguments. Bresnan (2001:304) says:

> argument structure is an interface between the semantics and syntax of predicators (which we may take to be verbs in the general case)... Argument structure encodes lexical information about the number of arguments, their syntactic type, and their hierarchical organization necessary for the mapping to syntactic structure.

The argument structure of a predicate provides the description of the set of arguments associated with the predicate (Radford, 1997). Argument structure determines the argument position to be induced by a lexical head in syntactic structure. According to Radford (1997:324), a predicate can be defined as "an expression denoting an activity or event". Carnie (2002:166) says that "the predicate defines the relation between the individuals being talked about and the real world – as well as with each other". The Encarta dictionary (2009) further defines the predicate as everything in a simple sentence excluding names, predicates express situations (states, events or actions). It also sees it as "part of sentence excluding subject"; it defines the relation between referring expressions.

This study is concerned with the acquisition of the argument structure of Yoruba. Argument structure involves the semantic relations that hold between the verb and the noun phrases that are involved in the state or event described by the verb. Argument structure specifies the number and kind of nouns that must accompany a verb in a

sentence. Every predicate has its argument structure i.e. each predicate is specified for the number of argument structure it requires. Simply, argument structure has to do with the predicate and its arguments. A proposition comprises a predicate and a set of arguments. The predicate assigns theta-roles to its complement while the theta-role assigned to the subject is compositionally assigned. The types of roles assigned and the ways and means of assigning these roles have been a subject of so much research.

There are different theories and hypotheses that have been posited either directly or indirectly to account for argument structure. Among them are: the theta criterion, Predicate-Internal Argument Hypothesis, Uniformity of Theta Assignment Hypothesis, Passive Thematic Hierarchy Condition, Thematic Hierarchy, etc.

2.6.1 Arguments

Arguments are NP participants subcategorized by the predicate; they are participants in an activity (Haegeman, 1994:43). Arguments describe the roles played by particular types of expression in the semantic structure of sentences (Radford, 1997). Argument refers to every participant that plays some role in a syntactic process. They are phrases selected by predicates. Arguments represent the participants in a proposition; Tallerman (2005:248) describes it as 'the set of obligatory dependents of a verb', while Radford (1997:324) defines it as an expression denoting a participant in the relevant activity or event. Argument slots are part of the meaning of the predicate (Kearns, 2000: 35).

The arguments of a verb are made up of subjects and complements (Radford, 1997:325, Spencer, 1991:190). They are the participants that are minimally involved in the activity or state expressed by the predicate (Haegeman, 1994:44). Arguments stand in different semantic relationships with the predicate. Each argument must have a role it is playing and this role is assigned by the predicate. Predicates have thematic structure, so they theta-mark their arguments. The example below illustrates the relationship between a predicate and its arguments:

(21)　a.　Olú gbá ilẹ̀
　　　　　Olu sweep floor
　　　　　'Olu swept the floor.'

　　　b　Tolú pọn omi
　　　　　Tolu fetch water
　　　　　'Tolu fetched water.'

The underlined words *Olu*, *ilẹ̀* 'floor', *Tolú* and *omi* 'water' are the arguments of the verb *gbá* 'to sweep' and *pọn* 'to fetch' respectively. The verbs assign roles to them.

2.6.2　Types of Arguments

Williams (1981) made a distinction between two types of arguments. These are the external argument and internal arguments. Internal arguments are complements of the verb that are positioned internally in the V-bar. External arguments on the other hand, are subjects (Spencer, 1991) and are positioned outside the V-bar. There can only be one external argument of a V-bar. For example:

(22)　Bólú ra ago
　　　　Bolu buy watch
　　　　'Bolu bought a watch.'

The example above is a proposition which consist of the predicate *rà* and its two arguments. *Bólú is* the subject and the external argument while *ago* 'watch' is the internal argument, the complement of the verb. There are other expressions in a proposition that are referred to as non-arguments. They do not function as arguments because they are not complements. They can be omitted without making the sentence ill-formed (Kearns, 2000:38). For example:

(23) a.   ó kú ikú èsín.
         he die death shame
         'He died a shameful death.'

      b.   Ó kú.
         He die
         'He died.'

(24) a.   Ó sun orun ìyà.
         He sleep sleep wretched
         'He slept a wretched sleep.'

      b.   Ó sùn.
         He sleep
         'He slept.'

(25) a.   Bólú ra ago ní ojà.
         Bolu buy watch at market
         'Bolu bought a watch at the market.'

      b.   Bólú ra ago
         Bolu buy watch
         'Bolu bought a watch.'

The predicates of the first two examples (23a,b) and (24a,b) are intransitive verbs and do not require any complement, therefore the noun phrases *íkú èsín* 'shameful death' and *orun ìyà* 'wretched sleep' are not arguments and can therefore be left out as seen in (23b,

24b) respectively. The verb in (25) is a transitive verb that subcategorizes for the noun phrase *ago*'watch'. This means that *ní ọjà* can be left out as illustrated in (25b) above. It shows that *rà* 'buy' is a two place predicate. These non-arguments are referred to as cognate objects (CO).

A cognate object is the verb's noun form. Awobuluyi (1979:124) describes cognate object as an objecr derived from the very verb for which it functions as object. It is a verb's object that is cognate with the verb. Cognate objects occur with unergatives, unaccusatives, as well as with denominal transitive verbs in English such as "shelve the books on the top shelf/ on the desk" Iwasaki (2004) says that intransitive verbs take COs whose head nouns are morphologically related. For example:

(26)   a.   She slept a restful sleep.

        b.   He laughed a hysterical laugh.

        c.   John smiled a happy smile.

        d.   They danced a slow, romantic dance.

In the examples above, *sleep, laugh, smile* and *dance* are the cognate objects of their respective verbs. In Cognate object constructions, the objects are not bare NPs, but have a strong tendency to occur with some kind of complement or modifier. Iwasaki (2004) after carrying out some tests concludes that the Cognate Objects of unergative verbs are arguments of verbs while Cognate Objects of unaccusative verbs are adjuncts. Massam (1990) sees cognate objects as "thematic objects."

2.6.3   Thematic Roles

Thematic role is the semantic relationship between a predicate (e.g. a verb) and arguments (e.g. noun phrases) of a sentence. Thematic roles are broad classes of participants in events (Kearns 2000:188), they are subtypes of participants. Dowty (1991:2) says theta role helps to keep track of identity and distinctness of NPs during the course of a derivation Linguists have had some means of classifying or counting the relations a verb bears to its arguments since the time of Panini (Williams, 1995). Panini, a Sanskrit grammarian who lived between 500-400 BC, established classes of NPs according to the broad interpretation of their grammatical forms (Kearns 2000:188).

There is an intrinsic relation between the verb and its arguments. Various scholars from the time of Fillmore (1968) have posited different numbers and kinds of *case roles* ranging from six to twelve. These include *agent, patient, theme, experiencer, benefactive, goal, instrument, location recipient, source, force,* and *stimulus.* They are briefly described below as adapted from Haegeman 1994, Kearns, 2000 and Platzack 2003:

2.6.3.1 Agent

Agent refers to the doer or actor in an event. It is the intentional initiator of the action expressed by the predicate. Agent according to Kearns (2000:189) is strongly connected to notions of decision, intent and responsibility. It is an active animate entity that voluntarily initiates an action. It is a DP that is externally merged in Spec-vP (Platzack 2003:330). The data in (27) illustrates agent hood in Yoruba:

(27) a. Olú gbá <u>ilẹ̀</u>
          Olu sweep floor
          'Olu swept the floor.'

      b. <u>Tolú</u> pọn <u>omi</u>
          Tolu fetch water
          'Tolu fetched water.'

Olú and *Tolú* are the agents in the data above. They are the participants that carried out

the actions.

2.6.3.2 Patient

Patient refers to the person or thing that undergoes the action expressed by the

predicate. It is the thing that receives the action. It is the DP that is internally merged in

the VP. Data (28) illustrates this:

(28) a. Olú gbá <u>ilẹ̀</u>
          Olu sweep floor
          'Olu swept the floor.'

      b. <u>Tolú</u> pọn <u>omi</u>
          Tolu fetch water
          'Tolu fetched water.'

ilẹ̀ 'floor' and *omi* 'water' are the patients in data (28a) and (28b) above.

2.6.3.3.   Theme

The theme is the person or thing affected by the action expressed by the predicate.

There are two types of theme, namely change of state theme and theme of motion.

Change of state theme undergoes a change of state in the course of the event while a

theme of motion is the thing which moves or is moved in an event. Theme is a DP

externally merged as the complement of V or as a part of this complement (Platzack 2003). This is illustrated in (29):

> (29)   a.   Sadé se isu
>   Sade cook yam
>   'Sade cooked yam.'
>
>   b.   Túndé gbá bóólù
>   Tunde play ball
>   'Tunde played ball.'

Isu 'yam' in (29a) above is a change of state theme while *bóólù* 'ball' in (29b) above is a theme of motion.

2.6.3.4 Experiencer

Experiencer is the entity that experiences some psychological state expressed by the predicate. The experiencer, human or animal, has an emotional or psychological state or experience. This is illustrated in (30):

> (30)   a.   Sadé mu inu bí Olú
>   Sade cause stomach annoy Olu
>   'Sade annoyed Olu.'
>
>   b.   Olú bèrù Sadé
>   Olu fear Sade
>   'Olu is afraid of Sade.'

Olú in the data above is the experiencer, the entity that has an emotional or psychological experience.

2.6.3.5 Benefactive/ Beneficiary

Benefactive or beneficiary refers to the entity that benefits from the action expressed by the predicate. For example:

(31) a. Olú fún <u>Sadé</u> ní owó
          Olu give Sade money
          'Olu gave Sade money.'

      b.   Bàbá ra isu fún <u>Adé</u>
          Daddy buy yam for Ade
          'Daddy bought yam for Ade.'

Sadé and *Adé* are the direct beneficiary of the expressed actions.

2.6.3.6 Goal

Goal refers to the entity towards which the activity expressed by the predicate is

directed. It is the DP that is externally merged in Spec-VP. This is illustrated in (32):

(32) a. Olú da omi sí inú <u>abọ́</u>
          Olu pour water inside bowl
          'Olu poured water inside the bowl.'

      b. Sadé rọ epo sí inú <u>mọ́to</u>
          Sade put oil into car
          'Sade put oil in the car.'

Abọ́ 'bowl' and *mọ́to* 'car' in (32) above are the goal. The movement of the predicate is

directed at them.

2.6.3.7 Source

The source is the entity from which something is moved as a result of the activity

expressed by the predicate. The examples below illustrate this;

(33) a. Sadé da omi láti inú <u>ike</u>
          Sade pour water from inside bowl
          'Sade poured water from the bowl.'

      b. Omi n da ni inú <u>ẹ̀rọ</u>
          Water PROG pour from tap
          'Water is running from the tap.'

The underlined words above, *ike* 'bowl' and *èrọ* 'tap' are the source, the thing away from which movement is directed.

2.6.3.8 Location

Location refers to the place in which the action or state expressed by the predicate is situated. For example:

    (34)   a.   Olú lọ sí <u>Èkó</u>
                     Olu go to Lagos
                     'Olu went to Lagos.'

            b.   Mo wà ní <u>ilé</u>
                     I   be   at home
                     'I am at home.'

Èkó 'Lagos' and *ilé* 'house' are locations in the examples given in (34). They express the place where the action took place.

2.6.3.9 Instrument

Instrument is the thing that is used as a tool or means, it is a resource that is not changed by an event. This is illustrated in (35):

    (35)   a.   Olú fi <u>òbẹ</u> gé isu
                     Olu use knife cut yam
                     'Olu cut the yam with a knife.'

            b.   Bàbá ro oko pẹ̀lù <u>okó</u>
                     Baba hoe farm with hoe
                     'Baba hoed the farm with a hoe.'

ọ̀bẹ 'knife' and *ọkọ* 'hoe' are the instruments used as tools to carry out the actions.

2.6.3.10   Recipient

The recipient refers to the entity that receives something which is transferred or transmitted; it is a special kind of goal. For example:

(36) a. Olúkọ́ kọ́ <u>Olú</u> ní ìwé
          teacher teach Olu book
          'The teacher taught Olu.'

      b. Tolú fún <u>mi</u> ní ìwé
          Tolu give me book
          'Tolu gave me a book.

2.6.3.11   Stimulus

Stimulus is the thing which triggers or the target of an experiencer's psychological response. This means that experience and stimulus always go together. Stimulus is illustrated in (37):

(37) a.   <u>Sadé</u> mu inu bí Olu
          Sade cause stomach annoy Olu
          'Sade annoyed Olu.'

      b. Olú bẹ̀rù <u>Sadé</u>
          Olu fear Sade
          'Olu is afraid of Sade.'

Sadé in (37a) is the stimulus that triggers the action of *Olú* while it is the target of Olu's fear in (37b).

2.6.3.12   Force

Force refers to inanimate entities responsible for some actions. These forces include natural force like flood, fire, storm or wind; machines which work on their own power and projectiles (Kearns 2000:240-241) as illustrated in (38).

(38)　a.　　Iná jó ilé náà pátápátá
　　　　　　　Fire burn house the completely
　　　　　　　'Fire burnt the house completely.'

　　　b.　　atẹ́gùn sí ìlẹ̀kùn
　　　　　　　wind open door
　　　　　　　'The wind opened the door.'

An argument could play any of the listed roles; however an argument can only play one

role at a time. This is the dictate of the theta criterion. The theta criterion states that

Theta criterion

> Each argument bears one and only one theta role and each
> theta role is assigned to one and only one argument.
> 　　　　　　　　　　　　　　　　　　　　　　　(Chomsky, 1981: 36).

The theta-roles assigned to the predicates must be assigned to arguments

(Haegeman, 1994:51). Arguments, especially referring expressions, must bear some

semantic relation to the predicate before the theta role can be discharged. The theta grid

encodes the thematic structure of a predicate. It envisages a representation which

specifies the type of semantic roles of the arguments. These roles are saturated when they

can be assigned to arguments. The theta roles are checked off in the thematic grid of the

predicate. Thematic gird is part of the lexical entry of the predicate. It is the schematic

representation of the argument structure of a predicate, where the theta roles are listed

(Carnie, 2002:178). A verb like *jẹ* 'to eat'' has the following lexical representation:

je: verb

1 NP	2 NP

Figure 1:   Thematic Grid

The thematic grid in figure 1 provides us with the information that the verb *je* 'to eat'

subcategorizes for two NPs. The numbers 1 and 2 represent the thematic roles that are

assigned by the verb. Haegeman (1994:54) states that it may not be necessary to refer to

thematic labels in syntax. We will try not to use thematic labels in the discussion of the

acquisition of argument structure as they are primitives that are rigid in their

classification.

2.6.4   The Verb

Verbs could be regarded as the most important part of the sentence; they are a

necessary component of all sentences. A verb is defined by the semantic roles that it

"takes", i.e. its case frame. This means that the lexical entry of a verb directly determines

its syntactic behaviour (Lin, 2004:15). Scherf (2005) states that verb involves identifying

events in the world being described by verbs; the essential participants in an event; the

specific role of each participant in an event and mapping between event characteristics

and the argument structure of the verb. The verb is the backbone of the sentence. Verbs

name events or states with participants, making them the organizational core of the

sentence, so their meaning is key to sentence meaning (Levin 2007:1). Verbs also describe relationships and organize sentences with argument structure (Scherf, 2005).

Verbs could be classified into one-place predicates, two-place predicates or three-place predicates, on the basis of the number of arguments they take (Haegeman 1994:41). These are traditionally referred to as *intransitive, transitive* and *ditransitive* verbs, respectively. A verb is either transitive or not depending on the type of action or state it expresses from its meaning. Verbs are majorly classified according to the types of complements they select. The argument structure of the verb determines which elements of the sentence are obligatory. It predicts the number of constituents needed and assigns thematic roles to them. The basic property that distinguishes verbs is the argument structure, i.e. the thematic roles assigned by the verbs (Merlo and Stevenson, 2001). The head verb has NP arguments which are its dependents.

2.6.4.1 Transitive Verbs

Transitive verbs are described by Tallerman (2005:37) as "predicates which have two participants". Transitive verbs have at least two arguments, a subject and an object to receive the actions described, as the following examples from Yoruba shows:

(39) a. Bàbá mi ra ilé
          Father my buy house
          'My father bought a house.'

      b.   Olú ta ata.
          Olu sell pepper
          Olu sold pepper.'

The underlined NPs; *Bàbá mi* 'my father', *ilé* 'house', *Olú,* and *ata* 'pepper' are the arguments of *rà* 'to buy' and *tà* 'to sell' respectively. There are some transitive verbs that allow object omission. Verbs like *lọ* 'go', *wá* 'come', etc. fall into this category. Example (39a) above is shown in the diagram in (40):

(40)

```
                        TP
                       /  \
                    DP      T^I
                    |      /  \
              Bàbá mi   T      VP
                             /    \
                          DP       V'
                          |       /  \
                          t     V     DP
                                |      |
                                ra    ìlé
              father my        buy   house
              'My father bought a house.'
```
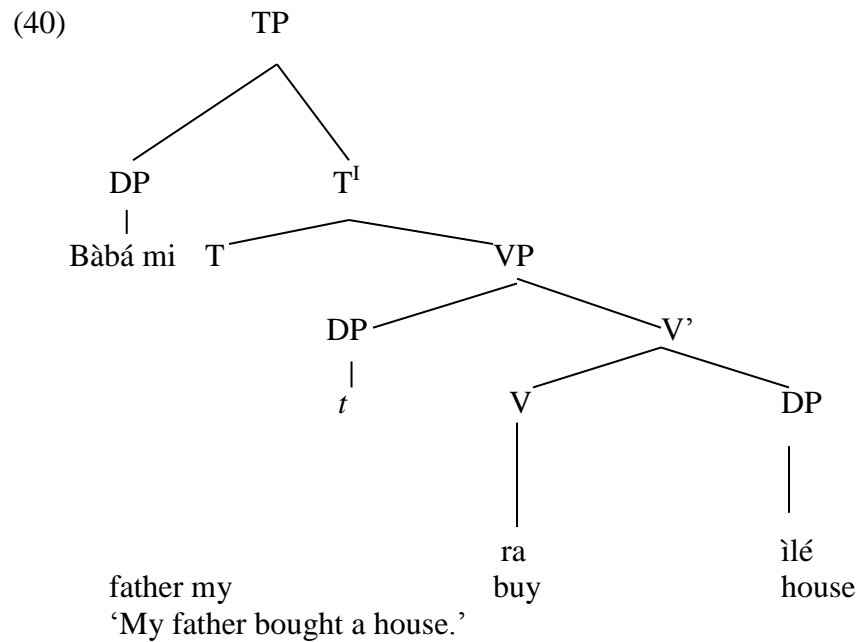
The diagram shows a transitive verb with its arguments. The subject is the AGENT while the object is the PATIENT. The subject which originates in Spec-VP where it is assigned the theta role moves to Spec-TP to check its case.

2.6.4.2   Intransitive Verbs

These are verbs with only one participant or argument (Tallerman 2005:36.), this argument is the subject. Intransitive verbs do not have direct objects as exemplified in (41):

(41) a. <u>Olú</u> sùn
     Olu sleep
     'Olu slept.'

    b. <u>Ilé</u> jó.
     House burn
     'The house got burnt.'

Olú and *ilé* are the arguments of *sùn* 'to sleep' and *jó* 'to burn' respectively. However, the status of the subjects differs. This is because the verbs are different. There are some verbs that are ambitransitive i.e. they can either be transitive or intransitive. These types of verbs are called ergative verbs. Most of the verbs that fall under this category in Yoruba are the verbs that fall under the causative / anticausative alternation. For example,

(42) a. Olú fọ́ ìgò
     Olu break bottle
     'Olu broke the bottle.'

    b. Ìgò fọ́
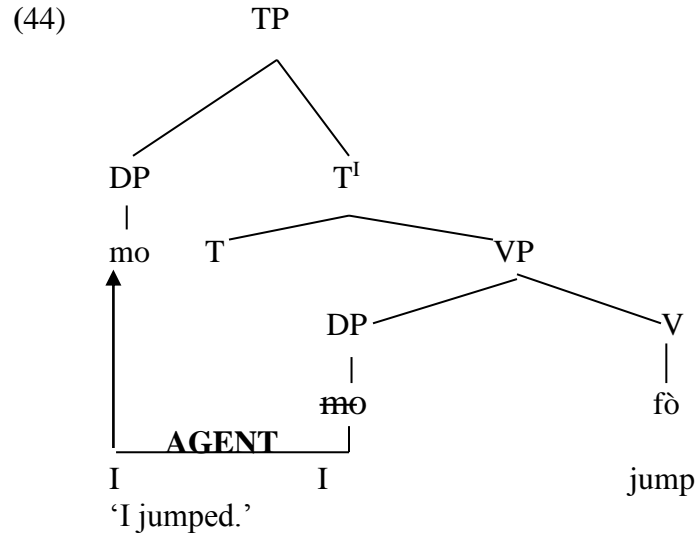   Bottle break
     'The bottle broke.'

In (42a), the verb *fọ́* 'break' is transitive while the subject *Olú* is the AGENT that carried out the action. The complement of the verb is *ìgò* 'bottle' with the THEME agent. In (42b) the verb has become intransitive and the subject *ìgò* 'bottle' is the THEME that is affected by the action. We can see that the THEME in (42a) is still the THEME in (42b). (42a) is an example of causative verb while (42b) is an example of anticausative verbs. Intransitive verbs can also be broadly divided into unergative and unaccusative verbs. Some intransitive verbs do take cognate objects (CO). Cognate Object Construction is a good way of making distinction between types of intransitive verbs; between unergative

verbs and unaccusative verbs. Types of intransitive verbs are discussed in the following sub-sections.

2.6.4.2.1   Unergative verbs

Unergative verbs are intransitives whose subject is base-generated in Spec VP. The subject of an unergative verb is assigned the theta role of an AGENT. With the development of the Predicate-Internal Subject Hypothesis in Koopman and Sportiche (1991), the subject of the unergative verb is adjoined to VP where it also assigned the AGENT theta role. Verbs like *fò* 'to jump', *tò* 'to urinate', *sùn* 'to sleep' *wá* 'to come', etc. are unergative verbs in Yoruba. This is illustrated in (43) and (44) below.

(43)   a.   Mo fò
I jump
'I jumped.'

b.   Olú sùn
Olu sleep
'Olu slept.'

c.   Tolú wá
Tolu come
'Tolu came.'

(44)

```
                         TP
                       /    \
                     /       \
                   DP         T^I
                   |         /   \
                  mo       T      VP
                           |     /  \
                         DP         V
                          |          |
                         mo          fò
                   |___AGENT___|
                   I          I            jump
```

'I jumped.'

Unergative verbs take CO and check its accusative case. For example the verb *sùn* 'sleep'

can take a CO and be rendered as (45) and the diagram given in (46) below

    (45)   Olú sùn oorun ìyà
               Olu sleep sleep poor
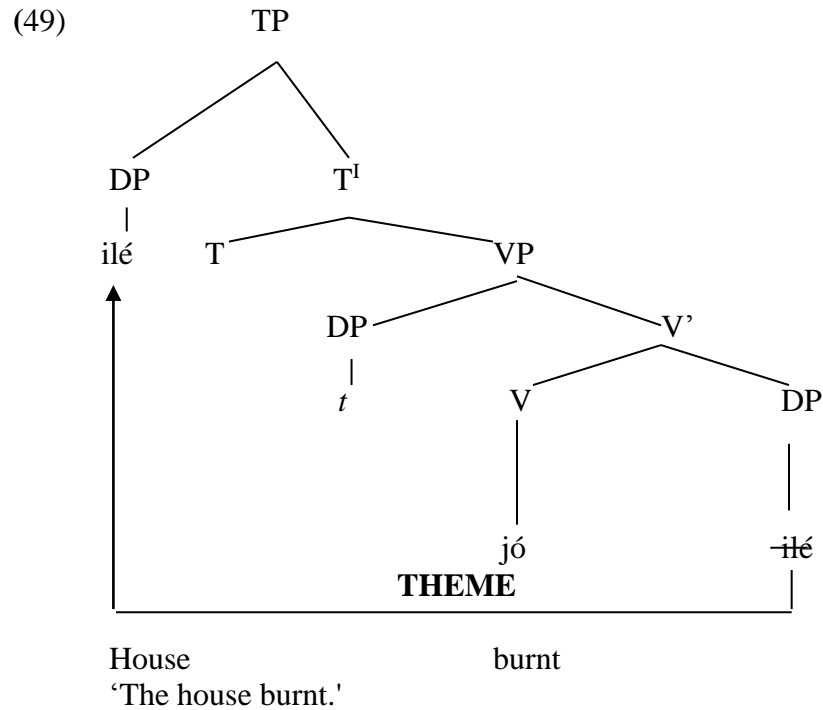   'Olu slept a useless sleep.'

(46)   TP

```
                       TP
                     /    \
                   /       \
                 DP         T^I
                 |         /   \
                Olú      T      VP
                               /  \
                             DP    V
                              |   / | \
                             Olú sun ACC DP
                                          |
                                       oorun ìyà
   Olu                        sleep     sleep poor
```

'Olu slept a useless sleep.'
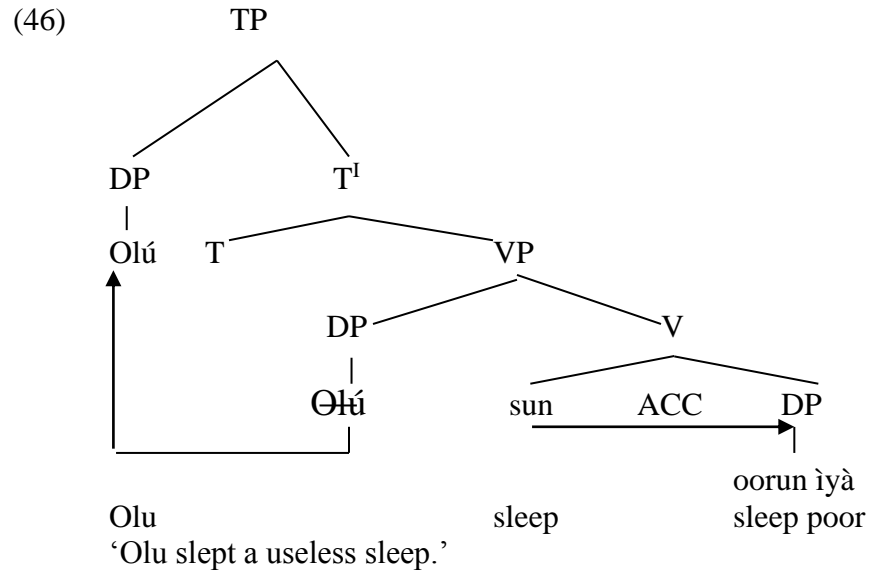
The unergative verb checks the accusative case of the cognate object *orun ìyà* 'useless sleep' as shown in the diagram.

2.6.4.2.2   Unaccusative Verbs

Unaccusative verbs are **intransitive** predicates whose subject is base-generated in the direct object position (Birger 2008:21). They are VPs that contain a verb and complement without a specifier and the complement of the verb now moves to spec-TP (Radford 2004:254). Subjects of unaccusative verbs are on the same level with direct objects (Burzio 1986; Levin and Rappaport-Hovav 1995, Biger 2008). They include verbs like *fall, break* in English and verbs like *jó* 'burnt', *mú* 'hold/catch' for example:

(47)   a.   The boy fell
        b.   The bottle broke

(48)   a.   Ilé náà jó
             House the burnt
             'The house is burnt.'

        b.   ọyẹ́ mú
             harmmatan catch
             'There is harmattan.'

(49)

```
                          TP
                    ╱           ╲
                 DP              Tᴵ
                  │          ╱        ╲
                 ilé       T            VP
                  ↑              ╱          ╲
                  │           DP              V'
                  │            │          ╱        ╲
                  │            t         V            DP
                  │                      │             │
                  │                      │             │
                  │                     jó            ̶i̶l̶é̶
                  │                   THEME
                  └──────────────────────────────────┘
```

House   burnt
'The house burnt.'

Unaccusative verbs do not check the accusative case to their complements hence the need for the complement to move to a position where case can be checked. The subject of the unaccusative verb has the THEME argument. The point of merger is the point when theta roles are assigned; this means that the theta role of the subject of the unaccusative verb is the one it has when it was merged to the verb before being moved to Spec-TP to have its case checked. For example *ìgò* 'bottle' in (49) above has the THEME role and when it moves to Spec-TP, it still maintains that role.

Unaccusatives do not take CO because they have an underlying object which moves to Spec-TP, that is, the subject of the unaccusative verbs. This object has to move because the verb cannot check its accusative case features. In this work, I assume that

unaccausatives lack an implicit external argument therefore their subjects are derived in the complement position of the verb and then raised to Spec-TP to have its case checked.
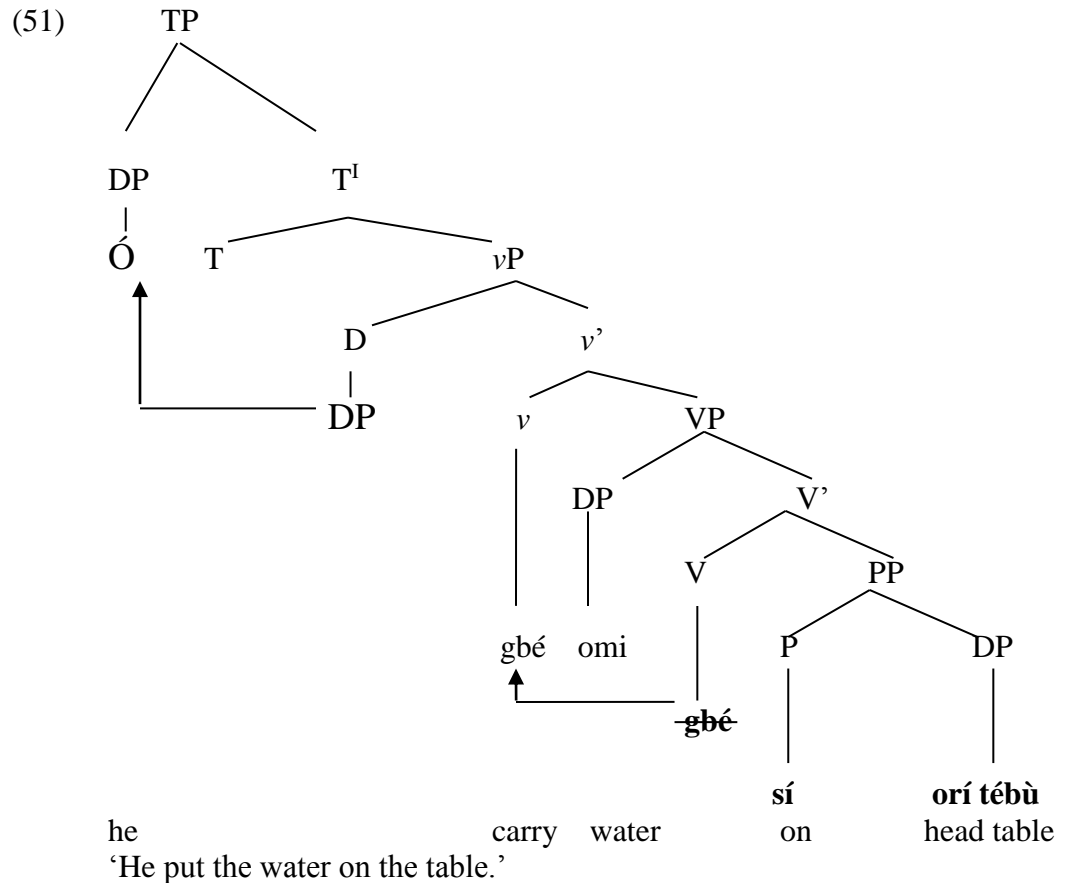
2.6.4.3 Ditransitive Verbs

These verbs take two complements, both an NP and a PP, or two NPs. Verbs like *gbé* 'to carry' and fún 'to give' etc. are in this category. For example:

(50)   a.   Ó gbé <u>omi</u> si <u>orí tébù</u>
             He carry water on head table
             'He put the water on the table.'

           b.   Ó fun <u>mi</u> ni <u>owó</u>
             He give me money
             'He gave me money.'

This is further shown in the diagram in (51):

(51)

```
                    TP
                   /  \
                  /    \
                DP      T¹
                |      /  \
                Ó     T    vP
                |        /   \
                |       D     v'
                |       |    /  \
                |      DP   v    VP
                |       |   |   /  \
                |       |   |  DP   V'
                |       |   |  |   /  \
                |       |   |  |  V    PP
                |       |  gbé omi |  /  \
                |       |        gbé P   DP
                |       |            |    |
                |_____|            sí  orí tébù
```

             he   carry   water   on   head table

             'He put the water on the table.'

The verbs *gbé* 'to carry and *fún* 'give' are ditransitive verbs. *Gbé* 'to carry' subcategorizes for *ó* ''he', *omi* 'water' and *tébù* 'table while *fún* to give' subcategorizes for *ó* 'he', *mi* 'me' and *owó* 'money' respectively. From the diagram above, we see that *gbé* 'carry' originates in the big VP and moves to the small *v*. They fall under the category of complex predicates.

2.6.5   Classes of Verbs in Yoruba

Awobuluyi (1979) classifies Yoruba verbs in terms of the constructions in which they operate. He classifies them into different classes, with some verbs belonging to more

than one class. Bamgbose (1990) also carried out an extensive study of Yoruba verbs. He then distributed them into different classes. Awoyale (1994:6) classifies Yoruba verbs according to the kind of objects they take. He classifies the verbs into five groups based on their relation to the object. Some of these verbs are examined briefly.

2.6.5.1 Adjectivisable Verbs

Adjectivisable verbs are verbs that can be turned to adjectives. Awobuluyi (1979:57) describes adjectivisable verbs as "verb phrases from which adjectives can be formed". These verbs are originally called adjectives. They include *pupa* 'red', *dúdú* 'black*', dára* 'to be good', *tútù* 'to be cold', *ga* 'to be tall', etc. as exemplified below:

(52) a.   Ọkọ̀ Adé <u>dúdú</u> bíi kóró isin.
              Car Ade black like seed isin
              'Ade's car is as black as the seed of isin.'

        b.   Ọmọ náà <u>dára</u> bíi egbin
              Child the good like egbin
              'The child is as good as egbin.'

        c.   Omi náà <u>tutu</u> nini
              Water the cold
              'The water is cold.'

These verbs are one-place predicates, they only take external arguments. From the examples above, *Ọkọ̀ Adé* 'Ade's car', *Ọmọ náà* 'the child' and *Omi náà* 'the water' are the external arguments of their various verbs. These external arguments serve as the head of the noun phrase when they function as adjectives. For example:

(53) a.   Mo rí ọkọ̀ Adé <u>dúdú</u> yẹn
              I see car Ade black that
              'I saw Ade's black car.'

b.   Mo mu omi tutu
I drink water cold
'I drank cold water.'

In the examples above, *ọkọ̀ Adé* 'Ade's car' and *omi* 'water' which head the noun phrase were the external arguments in (52a) and (52c) respectively.

2.6.5.2 Serial Verb Constructions

Verb serialization is a situation whereby two or more finite verbs are strung together. These constructions always contain at least two verbs and each of them functions as the predicate of an original full sentence (Awobuluyi 1982:234). Serial verbs occur in many African languages, Yoruba inclusive. Tallerman (2005:87) describes verb serialization as a strategy whereby verbs are strung together in a sequence in which no verb is subordinated to the other. Larson (1991) describes verb serialization as a phenomenon whereby notions that would elsewhere be expressed through conjunction, complementation, or secondary predication are rendered uniformly by means of a sequence of verbs or verb phrases. The verbs in a serial construction belong to the same clause and they sometimes share the same subject as illustrated in (54):

(54)   a.   Adé gbé e tà
Ade carry it sell
'Ade sold it out.'

b.   Olú gbé ọmọ lọ
Olu carry child go
'Olu took the child away.'

c.   Tolu fi ọ̀bẹ gé isu jẹ
Tolu use knife cut yam eat
'Tolu used knife to cut yam to eat.'

    d.   Dàdá gbé àkpótí lọ ilé ní àná.
               Dada took box went home on yesterday
               'Dada took the box home yesterday.'   (Stahlke (1974))

The examples above show Yoruba verbs in serial constructions. As illustrated above, each of the verbs has objects but they all have the same subject. The internal arguments range across different roles. There are also serial verb constructions whereby the object of the first clause functions as the subject of the second clause.

Argument sharing is a feature of serial verb construction (Gruber 1995). Argument sharing refers to the process whereby the semantic system combines at least two sets of arguments by matching as best as it can their independent properties (Pinango, Mack and Jackendoff, 2006). Baker (1989) describes argument sharing as a necessary occurrence in a serial verb construction; Collins (1997:461) also states that internal argument sharing is a necessary property of serial verb constructions in Ewe. The argument that is shared determines the meaning of the sentence. Using argument sharing as criteria for classification, we identify three types of serial verb constructions in Yoruba. These are subject sharing, subject and object sharing and subject-object alternation sharing. Subject sharing describes situations where the verbs share the same subject as illustrated in (55) below:

    (55)   a.   ó mú ìwé wá   (Bamgbose, 1974)
               He take book come
               'He brought the book.'

         b.   mo ka ìwé gba oyè ọ̀jọ̀gbọ́n
               I read book take chief learned
               'I studied to become a professor.'

As illustrated above, each of the verbs has objects but they all have the same subject. The internal arguments range across different roles. The second type of serial verb construction is characterized by subject and object sharing. For example:

(56)   a.   Adé mú ọ̀bẹ gé isu jẹ   (Yusuf, 1997)
            Ade take knife cut yam eat.
            'Ade used knife to cut yam and eat.'

       b.   Bọ́lá se ẹran tà   (Lord, 1974)
            Bola cook meat sell
            'Bola cooked some meat and sold it.'

We can see that the verbs share the same subject and the last verb shares the same object as the preceding verb. Subject-object alternation types are serial verb constructions whereby the object of the first clause functions as the subject of the second clause.

(57)   Olú ti ọmọ náà subú
            Olu push child the down
            'Olu pushed the child down.'

It is very clear in the example above that it is not *Olú* in (57) above that fell down but *ọmọ náà* 'the child'. *ọmọ náà* 'the child' is the object and subject of the first and second clauses respectively giving us (58).

(58)   a.   Olú ti ọmọ náà
            Olú push child the
            'Olu pushed the child.'

       b.   ọmọ náà subú
            child the down
            The child fell down.'

Argument sharing in serial verbs is consistent with the Uniformity of Thematic-Role Assignment Hypothesis (Baker, 1988, Gruber 1995). The fact is that a serial verb that is

involved in subject-object alternation sharing is often an intransitive verb. When the verb involved is an unaccusative verb, that subject actually originates as the internal argument before moving to the subject position. The case is checked by the first verb but the role assigned is the same.
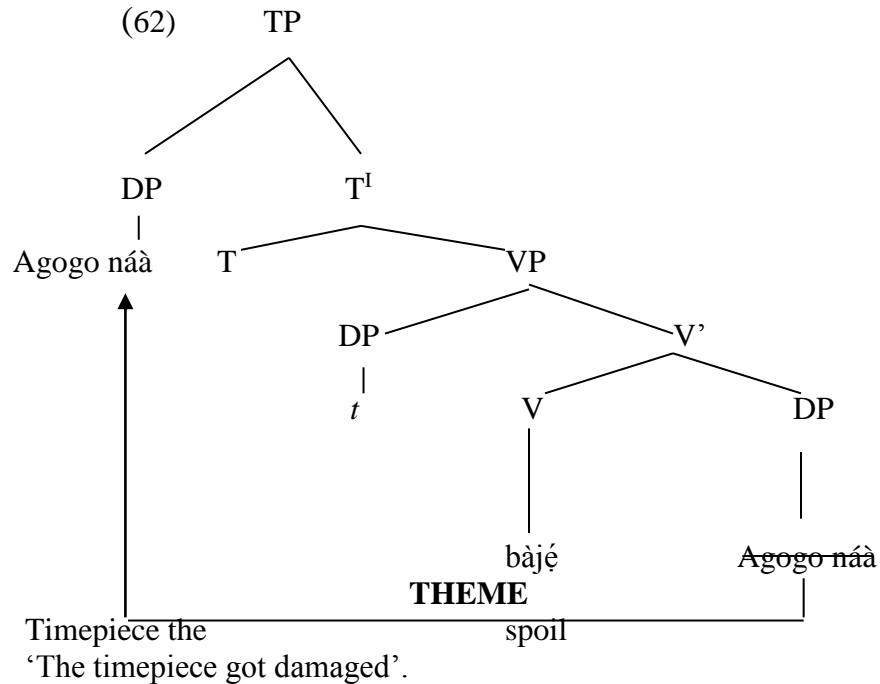
2.6.5.3 Splitting Verbs

Splitting verbs are idiomatic phrases formed from extant or obsolete items (Awobuluyi, 1982:234). They are sometimes split in two when they are used with objects, and the object is inserted between them (Awobuluyi, 1979). These verbs include: *báwí* 'to scold', *túnse* 'to repair', *bàjẹ́* 'damage or spoil', *yípo* 'to surround', *padé* 'to close', *túká* 'to scatter'. Some of these are used in sentences as follows:

(59) a.   Agogo náà bàjẹ́
          Timepiece the spoil
          'The timepiece got damaged'.

     b.   Adé ba agogo náà jẹ́
           Ade spoil clock the spoil
           'Ade spoilt the timepiece.'

(60) a.   Wọ́n túká
          they disperse
          'They dispersed'.

     b.   Ọlọ́pàá tú wọ́n ká
           Police scatter them
           'The police dispersed them.'

Splitting verbs are causative verbs. Looking at (59b) and (60b), we see that *agogo* 'timepiece', and *wọ́n* 'them' are internal arguments playing the role of theme. This is illustrated in (61):

(61)   TP
        /\
      DP   T^I
      | /\
     Adé T   VP
             /\
           DP   V'
           | /\
           t   V   V
              /\ |
             V DP jé
             | |
             ba agogo náà
    Ade   spoil clock the   spoil
    'Ade spoilt the timepiece.'
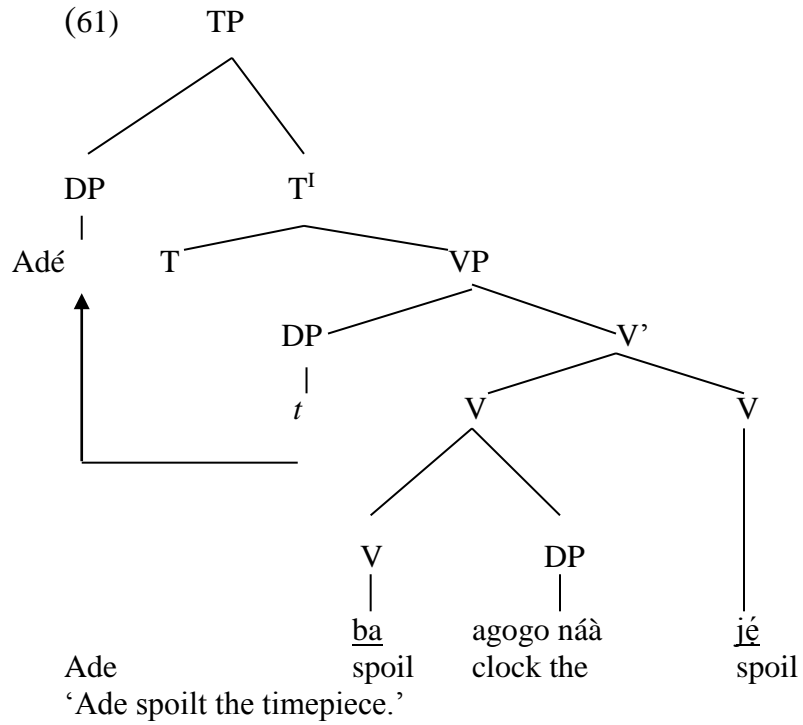
They however occupy the subject position as external arguments in (59a) and (60a) respectively. They also still maintain the role of THEME. This is illustrated in (62) below:

(62) TP

```
                    TP
                   /  \
                 DP    T^I
                 |    /  \
          Agogo náà  T    VP
              ↑          / \
              |        DP   V'
              |        |   /  \
              |        t  V    DP
              |           |     |
              |          bàjẹ́  A̶g̶o̶g̶o̶ ̶n̶á̶à̶
              |         THEME
              |_____|
```

Timepiece the   spoil
'The timepiece got damaged'.

Yusuf 1999:46 states that most often, meaning resides in the two components that make up the splitting verbs and that they cannot occur separately. One major difference between splitting verbs and serial verbs is that splitting verbs are made up of a verb split in two while serial verbs are a concatenation of different verbs.

2.6.5.4 Complex Verbs

Complex verbs refer to fixed combinations of verbs and objects (Awobuluyi, 1982:235). The complex verb already has an object fused into it. Awoyale (1994:12) groups complex verbs into two based on their internal structure. The first consist of a verb stem and a (bare) noun and the second are polysyllabic monomorphemic verbs. The polysyllabic monomorphemic verbs are loan words or words of ideophonic source. They include:

(63) a.   Wàhálà   (Hausa)
             'Worry'

      b.   fìtínà   (Hausa)
             worry

These verbs subcategorize object positions. For example:

(64)   Olú wàhálà mi
            Olu worry me
            'Olu troubled me.'

The complex verb with a verb and a noun structure include verbs like *rántí* 'to remember' *pàdé* 'to meet', *lajú* 'to be sophisticated', *subú* 'to fall', *síwọ́* 'to stop working'. Some of these verbs are derived from the following combinations respectively:

(65) rán + etí ⟶ rántí
      sew   ear   'remember'

      sí + ọwọ́ ⟶ síwọ́
      open hand   'to stop working'

      la+ ojú ⟶ lajú
      open eye   'to be sophisticated'

      jẹ́ + ọwọ́ ⟶ jẹ́wọ́
      release hand   'to confess'

Vowel elision applies to complex verbs because their components cannot be separated. Awoyale (1994:14) gives the diagram in (66) to represent complex verbs with a genitive reading:

(66)

```
                        V¹
                      /    \
                    V       NP
                  /   \      |
                V      N    rè
                |      |    his
               jẹ́    ọwọ́
            release   hand
            'his confession
```
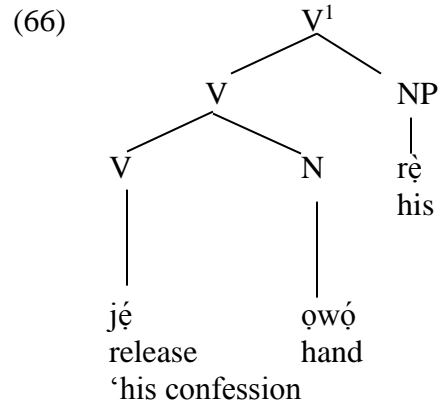
Complex verbs involve a kind of incorporation; a situation whereby a noun phrase becomes an inseparable part of a verb.

2.6.5.5 Causative Verbs

Awobuluyi (1982:235) describes these verbs as verbs that are used in situations where an agent induces some action on the part of another agent. The objects of causative verbs are sentences. Awobuluyi (1979) and Bamgbose (1990) list five verbs that belong to this category. They are: *fi dá, mú, kó, and se*.

(67) a. Adé <u>fi</u> ebi pa mí
          Ade use hunger kill me
          'Ade starved me.'

      b. Ó <u>dá</u> ẹ̀rín pa mí
          He make laugh kill me
          'He made me laugh.'

      c. Ó <u>mú</u> mi se bẹ́ẹ̀
          He make me do that
          'He made me do it.'

      d. ó <u>kó</u> ìyà bá mi
          he carry suffering meet me
          'He made me to suffer.'

e.　　ó <u>se</u> ikú pa á
　　　　he cause death kill him
　　　　'He killed him.'

The structure of causative verbs is complex. There are two verbs, the main causative verb

and the verb in the sentence. There are also three NPs; the external argument and two

other internal arguments. The second NP serves as the direct object of the causative verb

and also the subject of the sentence. It is very clear that its case features are checked by

the causative verb as shown in (67c) above repeated as (68) below:

(68)　　　　Ó mú <u>mi</u> se bẹ́ẹ̀
　　　　　　He make me do that
　　　　　　'He made me do it.'

Mi 'me' has ACCUSATIVE case which is checked by the causative verb *mú* 'make'.

2.6.5.6 Report Verbs

These verbs operate as main verbs only in indirect statements. They are used for

reporting or quoting thought, observations, orders, wishes, and requests (Awobuluyi,

1979:58). These verbs include; *sọ* 'to say' *gbọ́* 'to hear', *mọ̀* 'to know'. They are used in

the following sentences;

(69)　a.　　Mo gbọ́ pé Adé kọ́ ilé sí Èkó.
　　　　　　I hear that Ade build house at Lagos
　　　　　　'I understand that Ade built house in Lagos.'

　　　b.　　O sọ pé Olú ti dé
　　　　　　He said that Olu has come
　　　　　　'He said that Olu has arrived.'

The subjects of report verbs are AGENTS. They also take sentential complement that is

introduced by the complementizer, *pé* 'that'.

2.6.5.7 Verbs that Opaquely θ-mark the Object

The verbs that opaquely θ-mark their objects do not freely permit the object to move to another argument position (Awoyale, 1994:6). They are transitive verbs that do cannot form anti-causatives. According to Alexiadou (2006)**,** the subjects of these verbs are restricted to *agents* or *agents and instruments* while *causers* are disallowed. The verbs are described as been eventive and the objects are the theme. The following examples in (70) are adapted from Awoyale (1994:6):

    (70)   a.   Olú jẹ isu
                        Olu eat yam
                        'Olu ate yam.'

              b.   Olú kọ ìwé
                        Olu write book/ letter
                        'Olu wrote a boot.'

Moving the object to another argument position will give these ill-formed sentences as in (71):

    (71)   a.   *isu Olú jẹ

              b.   *ìwé Olú kọ

Examples (72) and (73) show a transitive verb that can become detransitivised.

    (72)   Olú fọ́ ìgò
              Olu break bottle
              'Olu broke the bottle.'

    (73)   ìgò fọ́
              Bottle break
              'The bottle broke.'

We can see that object movement is possible as shown in example (73). Awoyale states that only movement to a non-argument position can dislodge them. For example, these objects can be focused, moved to a non-argument position as in (74) below.

(74) a.   isu ni Olú jẹ t$_i$
           yam FM Olu eat
           'It is yam that Olu ate.'

       b.   ìwé ni Olú kọ t$_i$
            book FM Olu read
            'It is book that Olu wrote.'

The objects in the examples above has been focused and moved to the focus position. There is however a trace at the extraction site to show that movement has taken place.

2.6.5.8 Verbs that Anti-causativize without New Object

Anti-causative verbs are intransitive verbs that show event affecting the subjects without giving any semantic or syntactic indication of the cause of the event. These verbs anti-causativize their logical objects and do not create nor permit new ones (Awoyale, 1994:6). The anti-causative verb has a single argument, the subject which is the patient or theme. They are ergative (unaccusative verbs) verbs. Awoyale (1994) provides the following examples:

(75)   A   B

       a.   se isẹ́   :   isẹ́ se
            do work   work do
            did the work   'work gets done'

       b.   ta ọjà   :   ọjà tà
            sell market   market sell
            'sold wares'   'wares gets sold'

c. fọ́ ìgò   :   ìgò fọ́
    break bottle   bottle break
    'break the bottle' 'bottle breaks'

d. mú ọyẹ́   :   ọyẹ́ mú
    grip harmattan   'harmattan grips'
    gripped harmattan

Column A represents the causative interpretation while Column B is anti-causative/inchoative interpretation. The theme of ergative verbs occupies the object position in the original verb phrases as indicated in Column A above and shown in (76).

(76)
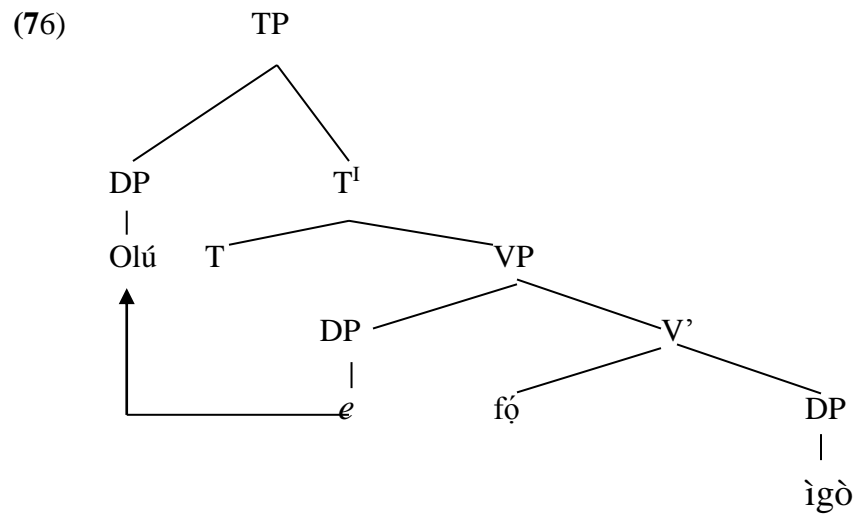
The themes of these verbs, as shown in Column B are moved to the subject position and the object position is left empty. This is shown in (77).

(77)

```
                TP
              /    \
            DP      T'
            |      /  \
           ìgò   T      VP
                      /    \
                     D      V'
                     |     /  \
                     e   fọ́    DP
                                |
                                t
```
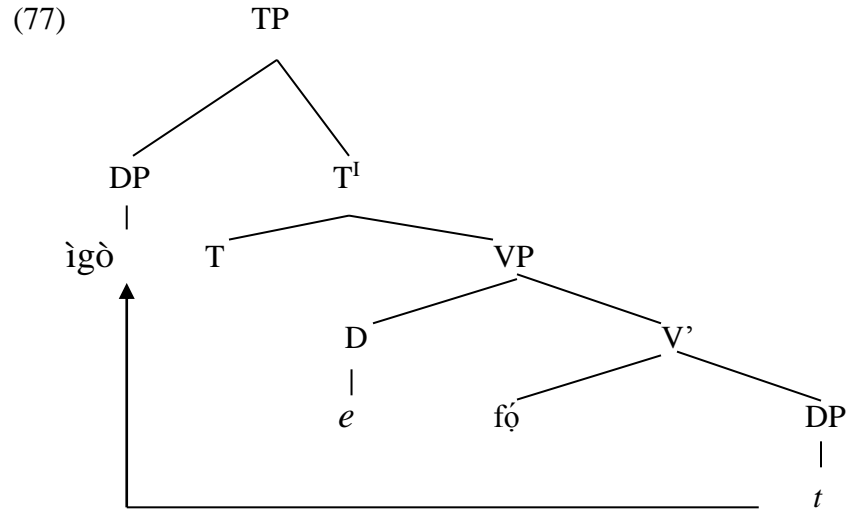
2.6.5.9 Complex Predicates

The complex predicate is also known as compound verbs. It is defined by Vahedi-Langrudi (1996) "as complex verbal structures made up of a preverbal element (PV) and a verb". The verbal element is normally a light, bleached, and / or backgrounded verb. Alsina, Bresnan and Sells (1997) believe that complex predicates are composed of more than one grammatical element, each of which contributes a non-trivial part of the information of the complex predicate. Müller (2006:697) also sees complex predicates as predicates which are multi-headed and composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information ordinarily associated with a head. Argument sharing is an important component of complex predicate. Chang (2006) describes argument sharing as a possible basis for complex predicate formation. It is described as being rooted in syntax and semantics; triggered by mismatch between semantic roles and syntactic arguments and is a

"recycling" process as no semantic roles are added (Wittenberg and Pinango, 2008).

Causative constructions, resultative constructions, ergative constructions, double object

constructions and *put* locatives are some of the complex predicates identified by Larson

(1988) some of which are also attested in Yoruba. Some of them have been examined in

2.5.3 above.

2.7   Argument Structure Theories

Many scholars have worked on the Argument Structure of different languages.

According to Grimshaw (1990), argument structure is a theory on its own. In this section,

we will examine Baker's Uniformity of Theta Assignment Hypothesis (UTAH) and the

Prominence Theory.

2.7.1   Uniformity of Theta Assignment Hypothesis (UTAH)

The Uniformity of Theta-Assignment Hypothesis (UTAH) was proposed by

Baker (1988). It is attempt to link thematic roles expressed by DPs to the verb. The

hypothesis assumes that principles of UG correlate thematic structure with syntactic

structure in a uniform fashion. The hypothesis states that identical thematic relationships

between items are represented by identical structural relationships between those items at

the level of D-structure (Baker, 1988:46).   An updated version of this hypothesis is

presented in Baker (1997). It states that:

> Arguments bearing similar thematic roles are expressed in similar
> initial structural positions both within and across languages […].
> [T]he alternations in the realization of arguments of a predicate
> that   one   does   find   are   either   the   result   of   different

conceptualizations of the event, or the result of syntactic movement processes.

<div align="right">Baker (1997:104-105).</div>

The account assume that there is just one underlying structure for a certain thematic relation.It states that each theta –role assigned by a particular type of predicate is canonically associated with a specific syntactic position. For example, spec-vp is the canonical position associated with an AGENT argument (Radford, 2004). In essence, it means that two arguments which fulfil the same thematic function with respect to a given predicate will occupy the same underlying position in the syntax. For example, Radford (1997**:**199) gave the following examples:

(78)   a.   We **rolled** the ball down the hill.

        b.   The ball **rolled** down the hill.

(79)   a.   He **broke** the vase into pieces.

        b.   The vase **broke** into pieces.

The ball in (78b) above clearly originates as the subject of *rolled*, then it must also originate as the subject of *roll* in (78a) as it occupies the position in the syntax. This is also exemplified in the following Yoruba examples in (80):

(80)   a.   Ó fọ́ àwo sí wẹ́wẹ́
                He break bowl into pieces
                'He broke the bowl in pieces.'

        b.   àwo fọ́ sí wẹ́wẹ́
                bowl break into pieces
                'the bowl broke into pieces.'

(81)   a.   Ó pọn omi kún inú péélì
            He fill water full inside bucket
            He filled the bucket with water.

       b.   omi kún inu péélì
            water fill inside bucket
            'The bucket is filled with water'

If *Àwo* in (80b) above originates as the subject of *fọ́,* then it also originates as the subject of *fọ́* in (80a). It should be noted that the theta role of these arguments do not change.for example, *àwo* 'bowl' has the THEME role in both positions.

Radford (1997, 2004) adopts UTAH in his analysis of predicates. UTAH has been used to analyse complex predicates (Müller 2006). Verbal particles incorporate into their matrix verb and this incorporation may take place either overtly or covertly (Müller 2006). According to UTAH, passive subjects must originate in the same position as active complements and are then raised in a successive cyclic fashion to become the subject. The analyses were carried out under the minimalist programme. This means that UTAH works well under the program as it imbibes the principles.

2.7.2   Prominence Theory

This is otherwise called Thematic Hierarchy Theory. Fillmore (1968), introduces the issue of hierarchy among syntactic relations. He introduced the idea of a subject choice hierarchy. According to him, (Fillmore, 1968:33), the *agent* is the most accessible expression as a subject followed by the object.

Another earlier work on thematic relations that suggested the existence of a thematic hierarchy is Jackendoff (1972). He argues that a number of constraints on

passive features can be accounted for in thematic terms. He believes that the ill-formedness of passive sentences like:

(82)   a.   *Five dollars are cost by this book

        b.   *Two hundred pounds are weighed by Bill

are as a result of the violation of the following condition (Radford, 2004:252).

Passive Thematic Hierarchy Condition:

The passive *by*-phrase must be higher on the Thematic Hierarchy than the

superficial subject

the hierarchy referred to above is as stated below:

AGENT > LOCATIVE/SOURCE/GOAL > THEME

Figure 2: Thematic Hierarchy

The prominence theory is also a proposal in Hale (1983) where he discussed Walpiri. The proposal has it that argument structure is a structured representation over which relations of prominence are defined. It sees the external argument as being higher in the Argument Structure than internal arguments.

The fundamental assumption of this theory, according to Grimshaw (1990) is that 'the argument structure of a predicate has its own internal structure, which affects the grammatical behaviour of the predicate in many ways'. Grimshaw (1990:4-6) outlines five basic assumptions of the theory. The first one is that 'A-structure is a structured representation which represents prominence relations among arguments.' These relations are jointly determined by the thematic properties of the predicate via the thematic

hierarchy and by aspectual properties of the predicate. According to her, the verb *announce,* for example, has an external Agent and an internal Theme and Goal. This is represented as follows:

(83)   a*nnounce* (Agent (Goal (Theme)))

This is illustrated with the following example:

(84)   He announced the arrival of the president.
         AGENT   GOAL   THEME

The agent is seen to be more prominent than the other arguments which are more deeply embedded in the representation; the Goal is also more prominent than the Theme (pg 4).

The second assumption is that 'internal organizations of a-structure result (in part) from the thematic hierarchy' (pg4). The prominence relations reflect thematic information of whether a given argument is higher or lower on the thematic hierarchy than another. The third assumption states that 'the concept of an external argument can be explicated in terms of a-structure prominence' (pg5). The external argument is the most prominent argument in the a-structure of a predicate. An argument is seen to be internal or external by virtue of its intrinsic relations to other arguments. According to Grimshaw, the status of an argument cannot be changed except when another argument is introduced.

The fourth assumption is that 'not all semantically relational lexical items have a syntactic a-structure and take syntactic arguments' (pg5.) A distinction is made between grammatical and semantic participants. According to this assumption, only nouns that have an internal aspectual analysis, referred to as complex nouns, have a-structure. These

types of nominals are referred to as *process* or *event nominals*. Process nominals name a process or an event (Grimshaw 1990:49). They have obligatory grammatical arguments that verbs have. *Destruction, destroying and felling* are examples of event and process nominals. They are illustrated below:

(85) a.   The enemy's <u>destruction</u> of the city was awful.

b.   The <u>destroying</u> of the city

c.   The <u>felling</u> of the trees

Source: Grimshaw 1990:50, 53.

From the examples above, we see that the underlined nominals take arguments, *of the city, of the city* and *of the trees* respectively. The verbal counterpart would have read:

(86) a.   The enemy <u>destroyed</u> the city.

b.   They <u>destroyed</u> the city.

c.   They <u>felled</u> the trees.

And the grammatical arguments of the event/ process nominals still serve as the arguments of the verbs respectively.

The fifth assumption is that 'argument structure and θ-marking properties of lexical items vary across syntactic categories' (pg6). Nouns of the right semantic structure have argument structure but never theta-mark directly, but through prepositions.

The central claim of the theory is that argument structure does not consist of just a set of arguments but is rather a structured representation over which relations of

prominence are defined. The external argument is the most prominent, and the internal arguments also have prominence relative to each other.

The prominence theory gives credence to the concept of external arguments. It is always the last to be θ-marked as θ-marking proceeds from the least to the most prominent. The external argument occupies the position of maximal prominence. This is also an evidence for the merge operation of the minimalist program which goes in bottom up fashion. The theory can account for the reason why the subject is missing at the initial state in the language of the Yoruba child.

2.8   Studies on Acquisition of Argument Structure

In the course of acquiring the syntax of a language, children master argument structure patterns. Acquisition of verb argument structure marks the transition from single words to word combinations (Uziel-Karl, 2001:173). Alishasi and Stevenson (2005) say that verb argument structure is a complex aspect of language for children to master, as it requires learning the relations of arguments to verbs and how those arguments are marked into valid expressions of the language.' Several studies make it clear that from a very early stage, children possess some rudimentary knowledge of argument structure; they grasp argument structure regularities at a young age (Alishasi and Stevenson (2005); Demuth et al., 2000; Macwhinney, 1995).

Pinker (1989) looks at how children go about the learning of verbs; he examines the acquisition of argument structure. He states that every verb has an "argument structure": a specification of what kinds of phrases it can appear with (Pinker, 1989). He

further explains that a familiar example of what children have to learn is the distinction between a transitive verb like *devour*, which requires a direct object, you can say: *'He devoured the steak'* but not **'He devoured'* and an intransitive verb like *dine*, which does not; you can say, *'He dined'* but not **'He dined the steak'*. He also examines the development of verb meaning and syntax.

Gropen, Pinker, Hollander, and Goldberg (1991) believe that children sometimes make errors with the argument structures of verbs that refer to the act of moving something to a specified location because they do not understand the meaning. They tested children aged between 3;4-9;4 in three experiments. In one of the experiments, they gave the pre-school children a task to select the picture that corresponded to the sentence '*she filled the glass with water'*. Most of the children in the experiment chose any pictures showing water pouring and not the ones depicting that the glass is full. In another task, Gropen et al. (1991) asked the children to describe in their own words what was happening in a picture showing a glass being filled. Many of the children used incorrect sentences like '*he's filling water into the glass.'* We agree with their findings as we discovered that children do not easily understand the concept of *filling* and *pouring*.

Naigles and Lehrer (2002) investigate language-general and language-specific properties of the acquisition of argument structure. They have two purposes for conducting the study. They want to assess how well language-general mechanisms accounted for the later acquisition of argument structure in French and to compare this

acquisition with that of English learners, to see if any language-specific factors were also operating.

Ten five-year old French children with a mean age 5;4 enrolled in day-care centers in Sainte-Maxine, France constitute the participants. The ten pre-school children enacted forty sentences containing motion verbs. The stimuli consisted of forty sentences which the children were asked to enact on a stage using a number of wooden characters in a Noah's Ark set. Four of the verbs were intransitive and six were transitive. A total of 32 test sentences were analysed for each child. The study finds that the level of verb compliance in French five- year olds mirrors that of English-speaking five year-olds. They conclude that the acquisition of argument structure is influenced by both language-general mechanism and language-specific properties.

Valian (1991) is an account of early argument structure acquisition. The study attempts to examine ways in which children's language is affected by early production limitations. Her data is drawn from twenty-one English-speaking children with age range 1;10-2;8. The children were divided into two groups based on their Mean Length of Utterance (MLU). Valian (1991) assumes that the child from the beginning has a full model of the adult grammar. She sees the pattern of early language use in terms of performance limitations which means that the child does not yet have full competence. This she claims affects the children's ability to acquire verb-argument structure and to produce a wide range of grammatical constituents like subjects, auxiliaries, etc.

Uziel-Karl (2001) is a comprehensive study of the acquisition of verb argument structure of the Hebrew child. The study consists of longitudinal samples of naturalistic speech output of four children, one boy and three girls, between age 17 and 36 months, collected at intervals of 10-14 days. The samples were already transcribed, coded and analysed, using the CHILDES methodology. Her findings show that a lot of factors, which include the verb being acquired, the language being acquired, pragmatic and communicative factors and also morphological and syntactic considerations, all combine to explain how children move into verb-argument acquisition and mastery (Uziel-Karl, 2001).

We assume in this study that the chronological age that a child begins to acquire verbs, like other lexical categories, may vary from child to child. The nature and emergence of different word meanings in early speech differs and this has also been widely studied. Several studies believe that verbs are not among the first words acquired (Gentner 1982; Goldin-Meadow, Seligman, and Gelman 1976; Huttenlocher, Smiley and Charney, 1983, Smiley and Huttenlocher, 1995). We, however, assume in this research that verbs constitute the first set of lexical items to be acquired and that certain verbs are acquired before others (Gopnik and Choi, 1995, Ninio (1999), Uziel-Karl, 2001). We assume that acquisition is a process that requires continuity and that the Yoruba child moves from a stage of no verb at all to a perfect command of the grammar of Yoruba.

2.8.1 Acquisition of Transitive and Intransitive Verbs

Valian (1991) claims that intransitive frames are easier for children to produce early in language development than transitive frames because they do not require direct object arguments. According to Valian (1991:70) '…one way the beginning speaker can lighten the burden of producing objects for verbs is to produce more verbs that do not require objects'. We do not believe that children set out to produce intransitive verbs or particular types of verbs. We assume that Yoruba children in the course of language acquisition produce the utterances they require not minding whether the verb is transitive or intransitive.

Tomasello and Brooks (1998) also find that children's early productivity with syntactic constructions is highly limited. They exposed two to three year old children to a novel verb '*tam*', used to refer to a highly transitive and novel action in which the agent was doing something to the patient. In the key condition, the verb was used in an intransitive sentence frame '*the sock is tamming'*. The result is that very few of the children were able to produce a transitive utterance with the novel verb. In the control condition, the children heard another novel verb used in a transitive frame and almost all of them were able to use the verb in a transitive construction. Tomasello and Brooks (1998) also state that four to five-year old children are good at using novel verbs in transitive utterances creatively demonstrating that once they have acquired more abstract linguistic skills, children are perfectly competent in these tasks. We agree with these

findings because by the children are of the age of the children in this study, they have acquired the necessary features they need to become competent users of the language.

O'Grady and Whan Cho (2004**:**331) state that 'children learning English are able to associate thematic roles with particular structural positions at a very early point in the acquisition process'. According to them, by the time the average utterance of the child is two words, he is able to respond correctly about 75% of the time to comprehension tests involving simple active sentences. In consonance with O'Grady and Whan Cho (2004) we believe that the comprehension of is Yoruba children far higher than what they produce from a very early stage and that they are able to associate thematic roles with particular structural positions at a very early stage.

Ninio (1999) shows that children use a variety of verbs first in the transitive and they continue to use a particular set of verbs before adding other verbs. These are verbs she refers to as path-breaking verbs. She analyses the early uses of SVO and VO patterns in English and Hebrew. She finds that the more verbs children used in SVO pattern, the faster they add new verb patterns. Ninio (1999:646-647) finds that this early set of verbs 'represent the most appropriate prototype for the relevant syntactic information'. These verbs break the path for other verbs to follow without having to undergo the same difficult process of learning everything from scratch. We assume that children start by using verbs that they need. However, these verbs could also be seen as path-breaking verbs as they will cut across different classes of verbs.

Allen (1996) examines the acquisition of three morpho-syntactic mechanisms of transitivity alternation in Inuktitut. The data for the research were drawn from naturalistic longitudinal speech of four Inuit children collected over a nine-month period. The study finds out that Inukttitut-speaking children productively use both basic and advanced forms of the passive at an early age. The study also finds that lexical causatives appears much earlier than morphological causative which appear much later in the acquisition sequence. He also finds that the use of morphological causatives reflects unanalyzed routines. Findings also show the early productive use of noun incorporation by Inuktitut speaking children. The findings were considered using the continuity versus maturational hypothesis. Data presented supports the continuity hypothesis and suggests that all functional categories may be accessed by the Inuktitut speaking children in the acquisition process. We agrre with the findings that children use basic forms of passive but we believe that advanced forms of the passive would come at a later stage following the *continuity hypothesis.*

To test these claims, we examined the "early verbs" of Damilare, Temiloluwa and Tolu. These are the different verb forms found in the naturalistic speech of the children at the one-word stage and in transition to early word combinations (Tomasello 1992, Berman & Armon-Lotem 1996). We assume that there are some sets of verbs (see Ninio, 1999) that form the first sets of the children's' verb acquisition. We also predict that as the children move from one stage to the other, other new verbs are added.

2.8.2 Acquisition of Null Arguments

Finite clauses in Yoruba with the exception of imperative clauses require overt subjects. Hausa, Igbo and English also belong to this group of languages. There are however a number of languages that do not require overt subjects in finite clauses; those languages are called *pro*-drop languages. A very good example of such languages is Italian. It has however been observed that well-known characteristic of early grammars is null arguments; that is the omission of subjects and objects. Several studies have discovered that children acquiring *non-pro*-drop languages allow non-overt subjects in finite clauses and that they also elide objects (Hyams 1986, Sano and Hyams 1994, Radford, 2000, Lorusso, Caprin and Guasti 2004, Cabré Sans and Gavvaro, 2006, Gruter, 2006, 2007). Arronof (2003) says that null subjects appear to be a universal phenomenon in language acquisition.

Hyams (1986) investigates the acquisition of null and overt subjects in English and Italian. The work is an innatist approach following the principles and parameters account of language acquisition. She argues that subjects of the matrix clause in English must be overtly expressed, while in Italian, it may be null, as shown in the examples that follow taken from (Hyams 1986, p31):

(87)   a.   He speaks Italian.

        b.   *speaks Italian

(88)   a.   La (e) mangia una mela.
               'He (she) eats an apple.'

b.   Mangia una mela
        'eats an apple'

Hyams (1986) observes that children acquiring both English and Italian do omit the matrix subjects of their sentences. She also argues that the proposed pro-drop parameter could account for the ellipsis of pronominal subjects in child language. She proposes that the initial setting of the Null Subject Parameter allows matrix null subjects. She proposes that early subject drop results from a mis-setting of the Null Subject Parameter.

Sano and Hyams (1994) assume a relationship between pro-drop in child language and the use of root infinitive structures and the development of inflection by children. They propose that early null subjects should be identified as PRO. They believe that the presence of root infinitives in early child language leads to pro-drop. The PRO analysis, according to Rohrbacher and Vainikka (1994), maintains that subjectless non-finite matrix clauses are full-fledged CPs which lack AgrS-features. As a consequence, the verb does not have to move to AgrS at LF and AgrSPSpec remains ungoverned, thus constituting a possible site for PRO. Lee (2000:101) states that 'if children's main clauses can be non-tensed, the subject position of theses clauses will be ungoverned, and PRO will be licensed, hence the possibility of null subjects in root clauses'.

Null arguments according to Radford (2000:8) "are null nouns which are given a null spell-out by virtue of representing *given* information[1]". He examines the transcripts of Allison at 1;10. He states that Allison produces a large number of sentences with missing arguments. He provides the following data:

(89)   Eat cookie
           Open box
           Baby eat
           Mommy open
           Put on
           No eat

He finds that 76% of the verbs she produced had a null subject while 51% of the transitive verbs she produced had a null object. He opines that those sentences involve 'syntactically projected null arguments' which are directly theta-marked by the verb. He gives the structure for *baby eat* as follows:

(90)   [vP [N Baby] [[V ø] [VP[[V eat] [N Ø]]]]

He assumes that null arguments are null nouns which are given null spell-out by virtue of representing *given* information. He states that the overt nouns and the null nouns that Allison uses is φ-incomplete and lacks person and case properties. He concludes that the merger of a verb with a null φ-incomplete noun involves θ-marking relation between V and N which by implication means there is no case or agreement.

Cabré Sans and Gavarró (2006) also study the acquisition of subjects in Catalan, a null subject language. They used the longitudinal data of three Catalan-speaking, Pep, Gisela and Júlia, with age ranging from 1;6 to 2;8 children and the speech of the adults interacting with them. They observe that there is no period in which subjects are banned from the speech of children. They state that the early emergence of subjects witnesses not only the availability of mechanisms of the computational system, but also sensitivity to the pragmatic interface which dictates use of overt subjects.

Uziel-Karl and Berman (2000) examine the learning of word-order constraints under conditions of object ellipsis. The paper sees acquisition as a stepwise process. The data for the research is a longitudinal corpus collected from four children between the ages of 17 and 28 months and also supplemented by other data. The authors propose different explanations of argument ellipsis at different ages. The authors believe that both grammatical and discourse factors would account for the null arguments in the Hebrew child language. They discuss three factors that influence argument ellipsis. These factors are: permissibility, recoverability and syntactic function. They conclude that pragmatic factors will account for the ellipsis of subject for the younger children while subject ellipsis of the older children is conditioned by morpho-syntactic rules of the language.

Allen (2000) examines the factors that contribute to the inclusion or omission of arguments in the longitudinal speech of four Inuktitut children aged between 2-3;6 years. Allen shows that young children are sensitive to the dynamics of information flow (Bavin 2000). She believes that null arguments in child language cannot be accounted for only

by grammar-based theories. She argues for an integrated approach of theories of grammar and of discourse pragmatics. In agreement with Uziel-Karl and Berman (2000) and Allen (2000), we also believe that an integrated approach to the study of language acquisition could help to bring out other factors that are involved in language acquisition.

Sano and Hyams (1994) propose that the acquisition of finiteness will mean the end of the null subject period for the English-speaking child. Lee (2000) studies the development of Chinese. He states that finiteness has no effect on the occurrence of empty elements. According to Huang (1982) as quoted from Lee (2000:110), if a sentence takes aspect marking or contains a modal, then it should be considered finite. Rohrbacher and Vainikka (1994:13) who examine German verb syntax under age 2, state that similar results are reported for older children acquiring German, Flemish, Dutch, and English in Poeppel and Wexler (1993), Kramer (1993), Hageman (1994), and Sano and Hyams (1994). As stated earlier, Yoruba does not attest tense morphology, there is no built-in distinction between past and present (Rowland, 1969). We use the presence of modal in a sentence to indicate that a child has acquired finiteness. As Lee (2000) assumes, we also assume that finiteness has no effect on null arguments.

Stromqvist and Ragnarsdottir (2000) investigate the use of subject arguments and distribution of spatial arguments by a child acquiring Swedish in the age range 22-24 and 24-26 months respectively. They also study a child acquiring Icelandic at 24-26 months. Stromqvist and Ragnarsdottir (2000) believe that both input and pragmatic factors influence the distribution of arguments in the early stages of acquisition. Unlike Uziel-

Karl and Berman (2000), they do not believe in a processing explanation for subject ellipsis. They argue that there are constraints that govern the ellipsis of these arguments. They also state that these constraints are mastered gradually. They conclude that input factors and pragmatic play important role in explaining the structure of the earliest phases of the acquisition of verb arguments.

Demuth, Machobane, and Moloi (2000) is an analysis of null objects in Sesotho ditransitive applicative constructions. The aim of the study is to determine the age that Sesotho children begin to show awareness of animacy restrictions on the ordering of double objects. They examine spontaneous speech from two two- to three-year-olds and the adult speech directed to the children. They also designed a forced-choice elicited-production task of children and a group of adults. A total of eighty (80) participants took part in the experiment in the following order: twenty (20) three to four year olds, twenty (20) five to six year olds, twenty (20) eight year olds and twenty (20) adults. The three- to six-year olds were drawn from several preschools in Maseru (the capital city) and Roma while the eight-year olds were from standard two and three pupils at Roma primary school. The adults on the other hand, were students and employees at the university while others were parents of the participating children. They were asked to produce sentences using applicative constructions. They propose discourse bootstrapping for children to learn the argument structure of Sesotho verbs.

Grüter (2006) studies direct object clitics and object omission in the acquisition of French, a non-null object language as a first language. The study is in two parts. The first

study investigates object omission in the spontaneous speech of the child French aged three and above. The study finds that French-speaking children object omission is high. Comparing the English children and Chinese-speaking children of the same age, she discovers that French-speaking children omit objects at higher rate than English-speaking children but a lower rate than Chinese speaking children which is a null object language. It is a fact that some languages allow the omission of subjects more than others and this could be an explanation for these findings.

The second study of Grüter (2006) wants to know whether French-speaking children would accept null objects on a receptive task using a truth value judgment tasks. Results show that the children consistently reject null objects. She finds this as rejecting the proposal that object omission in child French is sanctioned by the grammar of the child. She proposes a minimalist adaptation of Sportiche (1996) analysis of clitic constructions which she calls *Decayed Features Hypothesis* (DFH). The hypothesis "locates the source of object (clitic) omission in child French in a specific language-external domain, namely the capacity of working memory" (Grüter, 2006:v).

With empirical evidence from child Yoruba, we believe that the Yoruba child acquires null arguments during early language development we also assume that null subjects are more prominent than null objects in the early utterance of the Yoruba child. We also assume that null objects occur infrequently in the speech of child Yoruba. This study also predicts that the rate of usage of null arguments decreases with language

development and there is a co-relational increase in overt arguments in the child Yoruba. Finally, we assume that argument ellipses are not dependent on finiteness.

2.8.3   Acquisition of Complex Predicates

There are many studies that discuss the process of the acquisition of complex predicates in L1 and L2 (Snyder, 1995, Snyder and Stroswold, 1997, Sarkar, 2002, Cabrera, 2005). Snyder (1995) investigates the acquisition of complex predicates and compounds by English-speaking children. He examines the relationship between the ages of the first acquisition of complex predicates and compounds in English. He reports a significant relationship in the ages of acquisition of Noun-Noun compounds and the ages of acquisition of various "complex predicate" constructions. They are assumed to share some property regarded as a general prerequisite for the acquisition of complex predicates and small clauses (cf. Snyder and Stromswold (1997)). Snyder further argues that there is a tight connection between the availability of complex predicates and compounds. He also claims that there is a global parameter that determines the availability of complex predicates and compounds. He makes the generalization that a language allows (English-style) complex predicates only if it freely allows compounding of open-class lexical items. The prediction reached by Snyder is that English-speaking children would acquire compounds as early as, or earlier than, complex predicates.

Snyder and Stromswold's (1997) investigate the acquisition of various complex predicates in English. They observe that English-speaking children acquire some complex predicate constructions at around the same time, claiming that they are a family

of constructions acquired as a group by fixing a value of a single parameter. These complex predicates include double object constructions, *to* datives, *make* causatives, *put* locatives, V-NP-Particle constructions and V -Particle-NP constructions They discover a significant correlation in the emergence of some complex predicates in English.

They therefore argue that these complex predicates are acquired as group by English-speaking children and that the complex predicates belonging to this group share some peculiar property called *Property A*. *Property A* serves as a general prerequisite for the acquisition of resultative and small clause constructions. Following their predictions, we need to know if there is any significant correlation in the acquisition of various complex predicates by the child acquiring Yoruba i.e. if *Property A* is relevant for the acquisition of Yoruba complex predicates (cf Miyoshi, 1998, 1999).

Demuth (1998) examines the early acquisition of applicative constructions in the Southern Bantu language, Sesotho. Demuth studies the spontaneous speech of two Sesotho-speaking children between the ages of two and three. She believes that for children to use the applicative construction correctly, they must have some knowledge of both semantic verb classes and thematic roles. She looks at how the children would recognize and acquire the applicative morpheme. Her findings indicate that by the age of 2:6 (two years and six months), the two children are already using the applicative productively. She also states that by age 2-3, Sesotho-speaking children are using the applicative in appropriate syntactic and semantic contexts.

With empirical data from our longitudinal and cross-sectional sources, we assume that the Yoruba child acquires the argument structure of complex predicate at a later stage of grammatical development. We also believe that before the children can begin to use complex predicates, they must have a good knowledge of the semantic classes of verbs and of thematic roles.

2.8.4   Role of Input

The role of input in determining the acquisition of language is one of the fundamental debates in language acquisition theories. This debate forms part of the division between nativist and non-nativist theories; between the nature and nurture debate. Valian (1999:497) states that three metaphors illustrate different conceptions of how input influences language acquisition. She calls the first a copy metaphor whereby the child copies what she hears. The copy theory believes that the child has little linguistic knowledge at the initial state and a "fairly shallow linguistic knowledge at the end state". Input plays a vey significant role in these hypotheses, and thus reducing the need for innate knowledge. The second is the hypothesis-testing metaphor where the child forms and tests hypotheses. These hypotheses may be innate or they are developed and the input serves as the evidence that will either confirm or disconfirm the hypotheses. The trigger metaphor is the third and here the child innately set to choose between two alternatives, and input helps in making the choice. The trigger metaphor is tipped to the innatist side and like that approach; it has a restricted role for input.

Sethuraman (2004) discusses the influence that parental input has on the learning of argument structure constructions. The study, using the *Constructional Grammar,* examines 'changes in maternal input which may help children learn light verbs and constructions' (pg 1). She states that child-directed speech is suggested to provide information to children in ways that make learning argument structure constructions easier. She examines the vocabulary development of two groups of children, 20 months old and 28 months old, and their mothers. She believes that parents modify their language to suit the particular stage of the children; simple or complex. She submits that the children's vocabulary size and verb size increase over time. Interestingly, the mother's speech also increases over time. She also states that consistency of verb use in syntactic patterns may help children to learn argument structure patterns.

Goldberg, Casenhiser, and Sethuraman (2004) show that the most frequently used verbs by parents to their children are *go* and *put. Go* is used most frequently in the [Subject Verb Oblique $_{location}$] pattern and *put* in [Subject Verb Object Oblique $_{location}$] pattern. They argue that children can use this information to learn constructional meaning of other verbs.

Theakston, Lieven, Pine and Rowland (2001) investigate the role of performance in children's early acquisition of verb-argument structure. They examine data from nine children aged between 1;10 (twenty-two months and 2;0 (twenty-four months). They find that children do not select argument structure on the basis of syntactic complexity but rely on verb frames used by mothers (to these children). They highlight that the most

important determinant of children's use of verb frame is the patterns of verb used in the input and not any abstract grammatical knowledge constrained by performance limitations. The study suggests 'that children may learn verbs and their argument structure on the basis of relative frequencies in the input' (Theakston et al. 2001:149).

Naigles and Hoff-Ginsberg (1995, 1998) believe that using verbs in diverse syntactic environments help children learn the meaning of those verbs. The diversity in use, they believe, may help the child key into the meaning of the verb and thereby help the child in understanding the central meaning of the pattern. They examine the verb *'put'* which occurs in [Subject-Verb-Object-Oblique $_{location}$] pattern but will also occur in other patterns.

The effects of input in this study are discussed in relation to cognitive development and discussions on language development. Child characteristics, such as gender and birth order have been linked to early measures of language acquisition (Tamis-Lemonda and Rodriguez, 2008). It is also believed that, girls tend to have a slight advantage over boys in the early stages of vocabulary development (Bornstein, Haynes and Painter, 1998, and Fenson, Dale, Reznick, Bates, Thal, and Pethick (1994). This we intend to find out in this study from our participants, a boy and two girls.

Empirical data from the three longitudinal studies shows that input has positive effects on the acquisition of argument structure. Language input makes available to the children a wide range of constituents in the process of language acquisition; it also provides them with different contexts of usage. Johnston (2005:3) opines that children's

prior experience with the material and social world provides the early bases for interpreting the language they hear. Children who hear an unusually high proportion of examples of a language form learn that form faster than children who receive ordinary input (Nelson, Camarata, Welsh, Butkovsky and Camarata 1996). The differences in the chronological age in the acquisition of the three longitudinal participants have a lot to do with the input which they are variously exposed to.

2.9   Theoretical Framework

The importance of linguistic theory to the research on language development cannot be over-emphasized. Hence, various grammatical theories have been used to account for the development of children's speech. Kessler (1971:13) states that the development of a theory of grammar is a necessary pre-requisite to any serious investigation of language acquisition. Any theory of grammar must have issues of language acquisition underlying it, as acquisition of language is seen as "the principled build-up of grammar" (Kessler 1971:13). Theories of grammar and language acquisition in particular want to know what we know and how we know what we know i.e. the grammar of language.

A generative grammar is an algorithm for specifying, or generating, all and only the grammatical sentences in a language. Generative grammar is interested in not only the description of languages but also in how languages are created or generated. It is concerned with adult language as well as how language is acquired. Generative grammar aims at building a simple and invariable system of rules formulated as *principles and*

parameters which defines the grammatical sentences of the language. This theory has moved through different phases and the most dominant of all has been the P*rinciples and Parameters Theory.*

The theory assumes that there is an innate capacity (Universal Grammar) that makes language acquisition possible. This theory is reviewed continually and has continued to be developed. It has undergone many changes in its rules and representations from the time of *Standard Theory (*1957-1965) through *Extended Standard Theory (EST)* (1965-1973) to *Revised Extended Standard Theory (REST)* (1973-1980). The latest effort within this theory is the Minimalist Programme (MP) (Wilson, Fox and Pascoe, 2008).

According to the earlier versions of generative grammar, there are two distinct levels of syntactic structure for every sentence, namely deep structure and surface structure. These levels are linked by transformational rules. Lyons (1995) states that,

> the deep structure of a sentence is the output of the base component and the input to both the transformational component and the semantic component; the surface structure of a sentence is the output of the transformational component and the input to the phonological component.

> (Lyons 1995: 212)

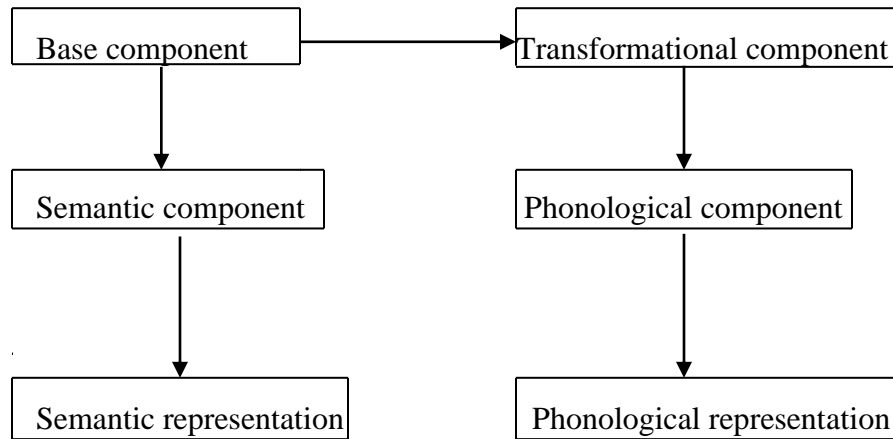The diagram in figure 3 adopted from Lyons (1995) shows the relationship:

```
┌─────────────────────┐         ┌──────────────────────────────┐
│   Base component    │────────▶│  Transformational component  │
└─────────────────────┘         └──────────────────────────────┘
          │                                    │
          ▼                                    ▼
┌─────────────────────┐         ┌──────────────────────────────┐
│ Semantic component  │         │   Phonological component     │
└─────────────────────┘         └──────────────────────────────┘
          │                                    │
          ▼                                    ▼
┌─────────────────────┐         ┌──────────────────────────────┐
│Semantic representation│       │  Phonological representation │
└─────────────────────┘         └──────────────────────────────┘
```

Figure 3: Syntactic Component   (Lyons 1995:212)

The Deep structure is mapped unto the Surface structure through transformation. Sentences are derived by phrase structure rules and transformational rules. In phrase structure rules, the hierarchy proceeds from the largest constituent downwards until only a single item is left, each constituent consisting of other constituents.

The model of grammar used in accounting for child language acquisition must be one which allows for generalization and predictions within a comprehensive and unified theory of language (Kessler 1971:3). This study discusses the acquisition of Yoruba argument structure within the confines of the Minimalist Programme developed by Chomsky (1993, 1995, 1999, and 2000). In the following subsections, we will explain how the Minimalist Programme accounts for the description of adult language. We will also describe the relevance and appropriateness of the Minimalist Programme to language acquisition as well as describe the application of the operations of MP to Yoruba data.

2.9.1   An Overview of the Minimalist Programme

The Minimalist Programme was developed in the 1990s by Noam Chomsky. It is Chomsky's boldest and most radical approach to language. As the name suggests, the requirement to minimize the theoretical and descriptive apparatus used to describe language and the desire to minimize the acquisition burden placed on the child and thereby maximize the learnability of natural language grammars, led to the beginning of the programme (Radford, 1997:7). The Minimalist Programme takes language to be part of the natural world (Chomsky, 1995: 166). It introduces a new concept of language and adds new content to the innateness position concerning our linguistic capacity (Longa and Lorenzo, 2008:541).

The idea behind minimalism is that grammars should be as simple as possible. Chomsky is of the opinion that linguistic theory should provide grammars which make use of the minimal theoretical apparatus required to provide a descriptively adequate characterization of linguistic phenomenon. This is a clear departure from the ealier phases of generative grammar with its phrase structure rules and transformational rules. The essential spirit of minimalism is to reduce the theoretical apparatus which we use to describe syntactic structure to a minimum (Radford, 2004:73).   The Minimalist Programme, according to Carnie (2002:315), 'is motivated not only by the search for explanatory adequacy, but also for a certain level of formal simplicity and elegance'. Longa and Lorenzo (2008:541) state that:

the emergence and development of the minimalist program provoked a change in how we judge the explanatory adequacy of the principles attributed to the human faculty of language. We no longer consider these principles good candidates for inclusion in the linguistic capacity a child makes use of in constructing a grammar from an opaque and fragmentary stimulation; rather we look at their adequacy as optimal solutions for the needs imposed by the cognitive systems that language is supposed to serve as a sort of bridge.

Minimalist Programme recognizes two interface levels, Logical Form (LF) and Phonetic Form (PF). The Logical form is an abstract representation of meaning while the phonetic form is an abstract representation of sound. These interfaces, PF and LF, are the only levels of linguistic representation we need to posit; there is no Deep-Structure (D-Structure) and no Surface Structure (S-Structure) as contained in the earlier version of Principles and Parameters theory.

LF and PF are regarded as interface levels because they are levels which grammar connects with other systems which lie outside the domain of the theory of grammar (Radford, 1997:171). Language has to interface with the perceptual/articulatory system (PF—*signs*) and the conceptual/intensional system (LF—*meaning*). According to Chomsky (1995:131) "the level of PF is the interface with sensori-motor system, and the level of LF, the interface with systems of conceptual structure and language use."

At the point of *spell-out,* derivation splits and heads towards the two interface levels of PF and LF. This point determines which movements will affect the pronunciation of a sentence and those that will not. Movements that occur before *spell-*

out do affect pronunciation while those that occur after *spell-out* on the way to LF will not affect pronunciation. The following diagram from Radford (1997:172) illustrates this:
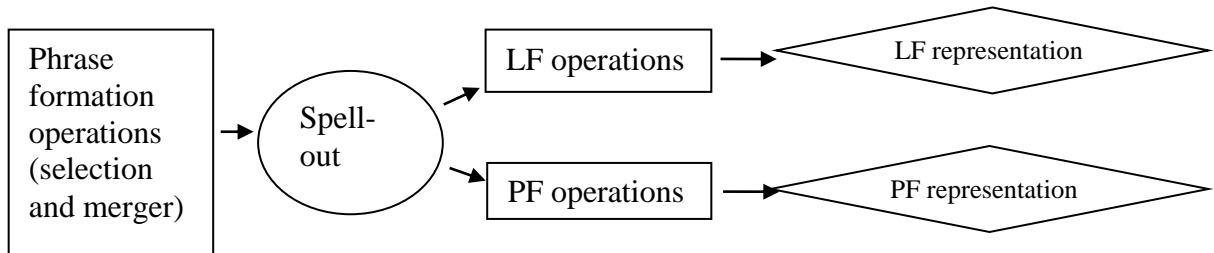

Figure 4: Spell-out

Principles apply only at the interface levels of PF and LF or everywhere (Marantz, 1995:354). A structure that fails to meet an interface condition at PF or LF is said to have "crashed", while a derivation that crashes at an interface level has "failed to converge" at that level.

The programme adopts minimalism or simplicity to achieve descriptive adequacy and explanatory adequacy. Language acquisition within the Minimalist Programme is seen as a matter of learning vocabulary, we all speak the same language differing only in vocabularies (Cook, 1996). According to Chomsky (1995:131) there is only one human language, apart from the lexicon, and language acquisition is in essence a matter of determining lexical idiosyncrasies. The aims and ambitions of the Minimalist Programme lie at the centre of the enterprise to understand how the human faculty of language operates in the mind and is manifested in the world's languages. The programme, according to Longa and Lorenzo (2008:541) 'redefined the meta-theoretical role of the theory of acquisition within generative grammar'.

Radford (2000:1) states that "the revised model of *Minimalism* presented in Chomsky (1998, 1999) raises interesting questions about the nature of language acquisition." Chomsky (1999:7) says that the Language Faculty specifies a universal set of features; these features the child acquiring language has to learn. The major task, therefore, facing the child acquiring the syntax of his language is assembling features into lexical items. Language Faculty is a set of procedures or programme which all human beings possess. It is required for the acquisition of the grammar of languages (Radford 2004). There are the assumptions of the MP captured in the endtnote[2]. In the following subsections, we will look at the various Operations of the Minimalist Programme.

2.9.2 Syntactic component

The syntactic component is the part of the mind devoted to language, the language faculty. The formal characterization of language, the grammar, consists of two components: the Lexicon and the Computational system (Martinez-Ferreiro and Mata-Vigara 2007).

2.9.2.1 The lexicon

The lexicon is a part of the language faculty. It is the human mental dictionary or list of words and their properties. It is a set of grammatical objects formed by a subset of features out of the total set of features that are universally possible (Martinez-Ferreiro

and Mata-Vigara 2007). Every piece of information about a word is stored in the lexicon. It contains the meaning of the word, the category, the pronunciation, exceptional information like morphological irregularities and the theta grid- the argument structure. Lofti (1999:10) sees the lexicon as a network of concepts and categories with some phonetic labels and formal features that characterize grammatical limitations on their use. The lexicon feeds the computational component. Developing the lexicon is an important step in language acquisition. Wilson, Fox and Pascoe (2008:2) believe that in the Minimalist model, the lexicon plays a greater role in the grammar than in earlier models of generative grammar, according to Amfani (2006:162) analysis begins in the lexicon in the Minimalist Programme. The reason is that in the Minimalist approach words emerge fully derived with their inflectional features.

2.9.2.2 The Computational System

The computational system combines words and generates sentences. According to Chomsky (1995: 7), 'there is a single computational system C_{HL} for human language and only limited lexical variety'. It contains all the rules and constraints. The C_{HL} is the part of the mind that builds up sentences and filters out ill-formed sentences. It requires access to information about theta roles. This information is stored in the lexicon. The computational system relates the semantic and the syntactic features of the items selected from the lexicon (Martinez-Ferreiro and Mata-Vigara 2007). In MP, the C_{HL} generates sentences from a lexical array in a principled and economical fashion. The computational system consists of two operations: Merge and Move/Attract. These operations are used in

mapping lexical information into interface representations at PF and LF (Chomsky 1995:387)

2.9.2.2.1   Operation Merge

The programme focuses on the process of building up syntactic structures. A phrase is formed by *merging* two words. Merge is an operation by which two words are combined. Chomsky (1995:396) says it is "an operation that forms larger units out of those already constructed". Chomsky (1999:2) further describes merge as "the indispensable operation of a recursive system"; he further states that this operation "comes free". It is always a binary relation; it combines two partial trees to form something new. Merge operation is formulated as:

Merge (a, ß):= [$_\lambda$ α β] (where λ is the label of the resulting tree)

(Lechner, 2006:4)

Merge does not impose any restrictions on the output order of the combining elements. According to Lechner (2006), it doesn't matter whether *read* is merged with *the book* resulting in[$_{read}$ *read the book]* or *[$_{read}$ the book read]*. This fact makes it easy to account for early development of language by children. As there are points when there seems to be no restriction in the way they merge elements in their utterances. Following Chomsky (2004), merge can apply in two types of configurations leading t two types of operations. These are the *external or root merge* and *the internal merge*. The *external merge* is the classic merge operations that lead to structure building and extension while the *internal merge* refers to *Move.*

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Sentences are structured out of constituents. The units of languages are morphemes and words organized into larger units with hierarchical structure. Complements are joined to heads via the process of merger. The merger operation forms phrases by combining pairs of constituents into successfully larger phrases (Radford 1997:91).

Theta-roles are also assigned through the process of merger. Arguments are θ-marked by merger with a lexical θ–assigning category (Radford, 1997:329). In the Minimalist Programme, a complement is θ-marked by merger with a verb while the subject is θ-marked by merger with the V-bar. This is following the Predicate-internal Argument Hypothesis whereby the subject is generated in the V-bar and then raised to the Spec of Tense Phrase (henceforth Spec-TP) to check its *case features*. The following Yoruba sentences are derived via the process of merger.

(91)　a.　　Olú jẹ isu
　　　　　　Olu eat yam
　　　　　　'Olu ate yam.'

　　　b.　　Adé pa ewúrẹ
　　　　　　Ade kill goat
　　　　　　'Ade killed the goat.'

　　　c.　　Bàbá mi gé isu
　　　　　　Father my cut yam
　　　　　　'My father cut the yam'

The verbs, *jẹ 'eat', pa 'kill'* and *gé 'cut'* are merged with the DPs, is*u 'yam' ,ewurẹ 'goat'* and *isu 'yam'* to form V-bar respectively. The DPs are also assigned θ-roles by the verbs. The subjects, *Olu,, Adé* and *bàbá mi 'my father'* are merged with the V-bar and

assigned θ-roles by the V-bar. Figure 5 below as adapted from Radford (2004:249) illustrates the merger operation and the θ-role assignment involved in the derivation of (91a) above:
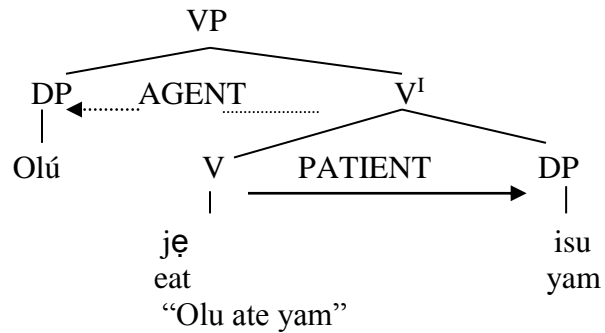
```
                        VP
                  _____|_____
               DP◄·····AGENT·····   Vᴵ
               |                  __|__
              Olú          V ‾‾PATIENT‾‾► DP
                           |              |
                          jẹ            isu
                          eat            yam
                      "Olu ate yam"
```

Figure 5: Merger Operation and θ -role Assignment

The subject which originates in spec-VP is subsequently raised to spec-TP for two reasons. According to Radford (1997:329), one plausible reason might be to satisfy Rothstein's (1995) *predication principle* which stipulates the presence of subjects for syntactic predicates. Another reason for the raising to spec-TP is because subjects carry strong NOM features which need to be checked and can only be checked when they are raised to that position. The VP is then merged with T-bar which carries the *checking features* while the subject *Olu* moves to spec-TP thereby resulting in TP. This is illustrated with the following diagram in figure 6:
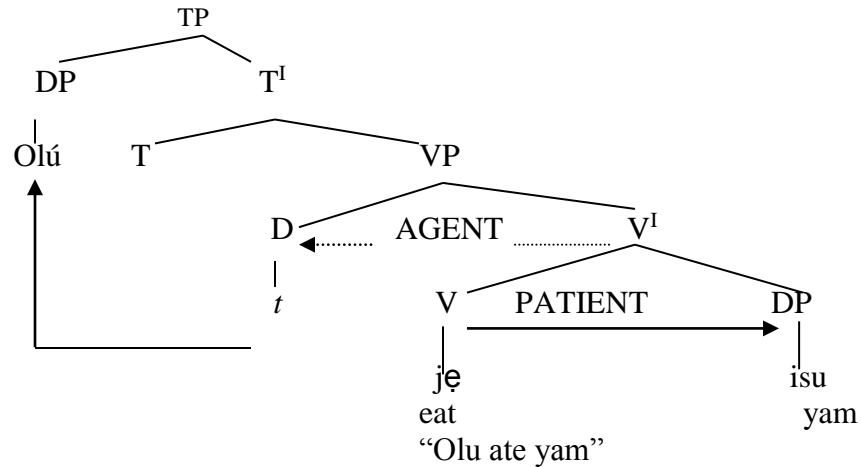
```
                    TP
        ╱────────────╲
      DP              T\u1d35
       |         ╱──────────╲
      Olú      T              VP
                       ╱──────────╲
                     D⇠⋯ AGENT ⋯⋯ V\u1d35
                     |           ╱────╲
                     t         V  PATIENT   DP
                               |            |
                              jẹ           isu
                              eat          yam
                         "Olu ate yam"
```

Figure 6: Structure of TP

In the speech of children acquiring language, they produce a wide range of structures in which verbs are merged with nominal arguments. Radford (2000:7) analysed data produced by Allison by age 1;8 and 1;10 (in the Bloom files on CHILDES). The data include structures in which verbs are merged with nominal arguments. These include:

(92)　　　　Baby eat
　　　　　　Mommy open
　　　　　　Pig ride
　　　　　　Eat cookie
　　　　　　Get diaper
　　　　　　Get toys
　　　　　　Hurt knee
　　　　　　Wiping baby chin
　　　　　　Walk school
　　　　　　Buy store
　　　　　　Get mommy cookie
　　　　　　Baby eat cookie
　　　　　　Baby ride truck
　　　　　　Man drive truck

Radford assumes that these structures involve a projection of argument structure mediated by operation *Merge* and 'involve perfect structures in which a verb *directly* q-marks its argument'.

Radford (2000:8) assumes that there is no indirect theta-marking of arguments by verbs at this initial stage. For example, from the Allison data, she says *Go school* rather than *go to school* omitting the preposition *to* which should indirectly q-mark school. *Baby eat cookie* will have the following argument structure: the bare verb *eat* will merge with *cookie* and also assign the q-role THEME, to form the VP *eat cookie*. The VP will then merge with an abstract agentive light verb *v*, which will further merge with and assign the q-role AGENT to the bare noun *baby* deriving *baby eat cookie*.

2.9.2.2.2   Operation Move

The most casual inspection of output conditions reveals that items commonly appear overtly "displaced" from the position in which they are interpreted at LF interface (Chomsky, 1995:403). Horsey (1998:26) states that 'movement is driven by the requirement that some feature F must be checked.' Ura (2001:350) says that Operation Move forms a new syntactic object Λ from two already formed syntactic objects κ and α, where κ is a target and α is the affected, by replacing κ with $\{\Gamma\ \{\alpha,\ \kappa\}\}$ $(=\Lambda)$. In Chomsky (2004), Operation Move is re-interpreted as an instance of *Merge.*

Movement in the Minimalist Programme, according to Marantz (1995:361), is equivalent only to copying. Chains formed by movement consist, then, in a sequence of copies of the "source" constituent. A moved constituent exists at its source locations as

well as at the head of the chain of movement. In the Minimalist Programme, there must be an indication at LF of the position in which the displaced item is interpreted and that is through chains at LF. Head Movement, Wh-Movement and Argument-Movement (henceforth A-Movement) are the movement operations in MP. We are concerned with A-Movement in this research.
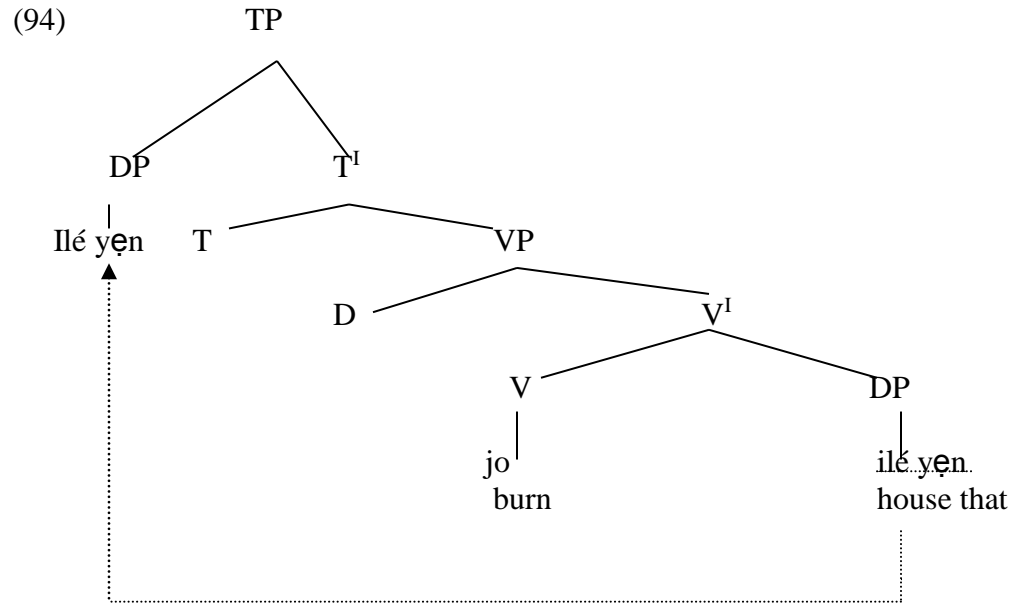
A-Movement is primarily concerned with the syntax of *subjects.* A-Movement is the operation by which subjects are moved into spec-TP while spec-TP is an argument position i.e. a position which is occupied by argument expressions (Radford, 2004:241). According to the *Predicate-internal Argument Hypothesis*, the subject is generated in the V-bar and raised to the Spec-TP to check its *case features.*

A-Movement involves structures like raising predicates, passive predicates, ergative predicates, unaccusative predicates, and control predicates. All these operations involve movement of an argument expression out of one clause to become the subject of another clause (Radford, 2004:266). These are structures containing a verb and a complement but no specifier, thereby forcing the complement of the verb to move to spec-TP. Constituents move for a reason and not freely. This is illustrated by the example of an unaccusative predicate that follows:

(93)   ilé   yẹn   jó
        House that burnt
        'That house burnt'

Unaccusatives are intransitive change-of-state verbs that do not assign Accusative Case to their complement. They behave like passive predicates. The subjects of unaccusative

predicates do not originate as the subjects of their associated verbs at all, but as their complements (Radford, 2004). This means that *ilé yẹn* 'the house' originates as the complement of the verb *jó* 'burnt'. This is then moved to spec-TP to fulfil the Extended Projection Principle (EPP) which states that 'every T constituent must be extended into a TP projection which has a specifier'. This is illustrated with the diagram in (94):

(94)

```
                        TP
                       /  \
                     DP    Tᴵ
                      |    / \
                  Ilé yẹn T   VP
                      ▲      /  \
                      ┆     D    Vᴵ
                      ┆        /    \
                      ┆       V      DP
                      ┆       |       |
                      ┆      jo    ilé yẹn
                      ┆      burn   house that
                      ┆........................┆
```

This diagram shows the movement of *ilé yẹn* 'that house' to spec-TP to satisfy the EPP requirement. According to Radford (2004:258) 'in accordance with the Attract Closest Principle, T will attract the closest nominal within the structure containing it'. Attract Closest Principle is a principle of grammar that requires a head H which attracts a particular type of constituent also attracts the closest constituent of the relevant type which it c-commands (Radford 2004). In this case, it is *ilé yẹn* 'that house'.

2.9.2.3 Checking Theory

The Minimalist approach posits inflectional morphology in the lexicon. Chomsky claims that words emerge fully derived and inflected in syntax, i.e. a lexical item is inserted with its inflectional features (case, agreement, tense, etc.) where they must be 'checked' against the functional categories at Logical Form (LF) within their 'checking domain', generally, the specifier-head relation. Lexical items are fully inflected for the morphological features of tense, case, agreement, etc. (Amfani 2006:162) Checking theory makes sure that the necessary features agree. It postulates that every lexical head has head features (its own features) and requires other features to be met by its specifiers and its complement (Schneider, 1998). The specifier-head relation is one that allows for features to be *checked* (Carsten, 2000). Feature and feature checking are fundamental to the theory. Differences between languages are attributed to differences between the features of lexical items in the languages. Grammatical features are checked in the course of a derivation.

Features are used to describe grammatical properties. Words carry three grammatical features (Phi-features). These features are; Head features, Complement features, and Specifier features. Head Features describe intrinsic grammatical properties like tense, number, person, aspect, etc. Complement Features describe the complement selection properties. A word requires as its complement an expression whose head word carries the head features. Specifier Features describe kinds of specifier subject feature they can have (case feature, agreement features).

Grammatical features play a role in grammatical processes (Radford, 1997:171). These features include number, gender, person, case, and inflectional features of verbs. Case features and inflectional features of verbs only determine the morphological form of items; they play no role in semantic interpretation. These features are mostly involved in the syntax of *agreement.* For example:
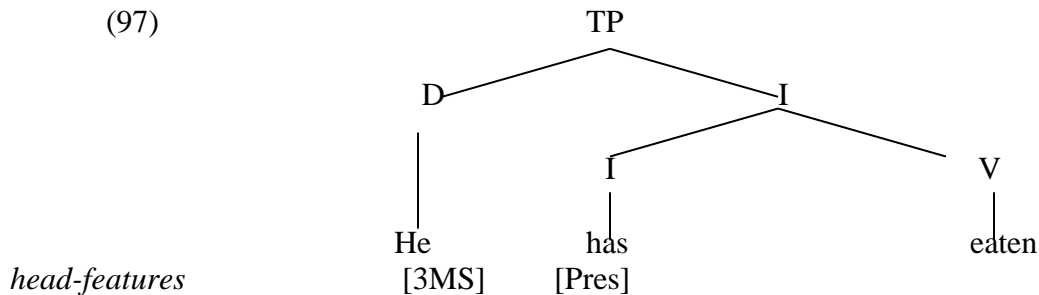
(95)   He has eaten

The grammatical feature of *he* indicates that it is third person masculine singular, *has* indicate that it is third person singular present-tense, while *eaten* indicates that it is an n-participle. *Has* is the head while *he* is the specifier and *eaten* is the complement. The sentence in (95) above has the following structure in (96):

(96)   TP

                          D   I

                                        I   V

                         He   has   eaten

head-features   [3MSNom]   [Pres]   [+n]
specifier-features   [3SNom]
complement-features   [+n]
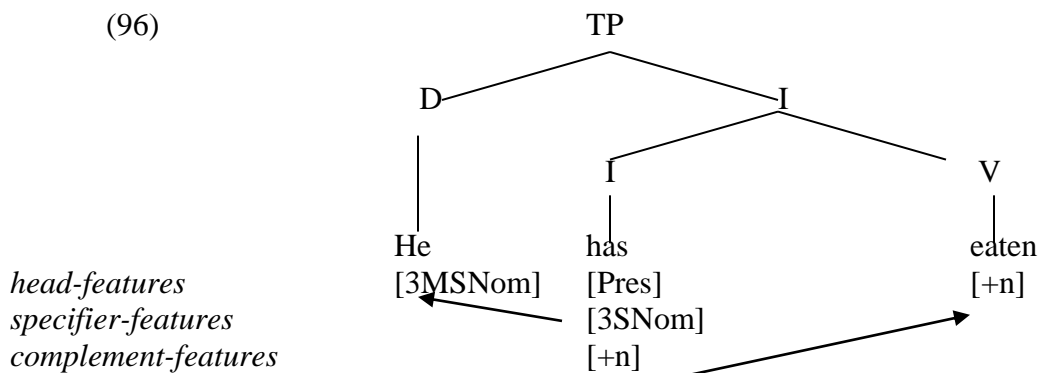
Specifier features of a head must be checked against the head-features of the specifier. Complement feature of a head must be checked against the head features of its complement. This is indicated by the arrow. If there is compatibility between checker and checked, the relevant specifier and complement feature is erased and the corresponding head feature is also erased. The [3SNOM] (third person Nominative) *head-feature* of the

specifier match the *specifier-feature* of the *head*. The [3S] *head-feature* of *he* plays relevant role in the interpretation so it is not erased, but that of the *head* is erased. The [Nom] feature of both *he* and *has* is erased as case plays no role in semantic interpretation. The *complement-features* of *has* are checked against the *head-features* of *eaten.* It is assumed that inflectional properties of verbs have no semantic interpretation, so the features are also erased. The only grammatical features left are those [3MS] of *he* and [*pres]* of *has.* These are the interpretable features that survive in the LF representation. The diagram below illustrates this:

(97)

```
                              TP
                    ┌─────────────────┐
                  D                     I
                  │              ┌──────────────┐
                                 I                V
                  │              │                │
                 He            has              eaten
head-features    [3MS]        [Pres]
```

Kwa languages, and Yoruba in particular have a simplified morphology; they are not inflectional, which makes the issue of agreement not too relevant. The features as outlined above play a very little role in grammatical processes. For example, personal pronouns inflect for number and person only, gender is not marked. Case is only morphologically marked in personal pronouns too. There are no inflectional features for the verb and the auxiliary is invariable; it does not inflect for agreement at all. For example, in the following sentences:

(98) a.   Mo ti dé
              I have come
              'I have arrived.'

       b.   A ti dé
              We have come
              'We have arrived.'

       c.   ó   ti dé
              he/she/it has come
              'He/she/it has arrived.'

       d.   wón ti   dé
              They have come
              'They have arrived.'

Number and person features are marked, case features are also marked. The auxiliary t*i* is invariable so it does not inflect for agreement at all neither does it require any type of participle form of the verb. The verb too is invariable. The diagram below indicates this:

(99)

head-features [3SNom]   [Pres]
specifier-features   [Nom]
complement-features
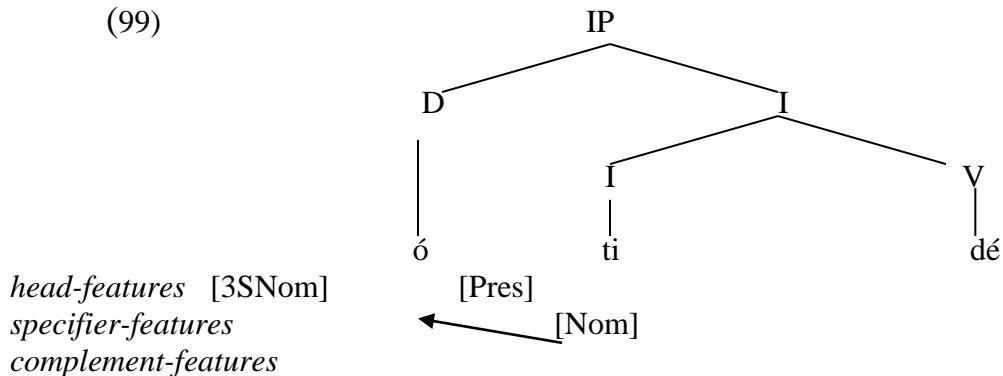
Since the auxiliary is invariable, the only feature that can be checked against the *head features* of specifier, *ó,* is NOM *feature* and both *NOM features* are erased. This is represented in the diagram:

(100)   IP
                    ┌────────────┴──────────┐
                    D   I
                    │   ┌─────────┴─────────┐
                                   I   V
                    │   │   │
                    ó   ti   dé

head-features   [3S]   [Pres]
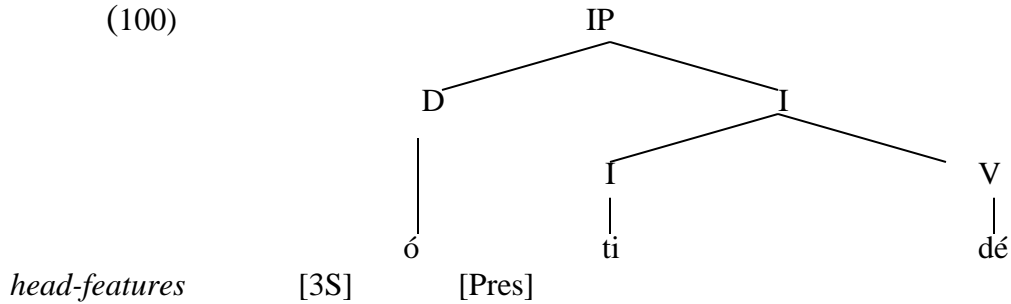
Both *specifier features* and *complement features* have been erased as indicated above. According to Radford (1997:182) the features erased are uninterpretable features; they play no role in semantic interpretation. Some grammatical features are interpretable at LF by virtue of having semantic content, while others are uninterpretable by virtue of not having semantic content. Specifier and complement features are uninterpretable. Uninterpretable features are erased once checked. The language of children especially at the early stage is devoid of uniterpretable features. It is devoid of redundant features as they only make use of the minimal items necessary for communication.

2.9.3   Clause Structure

Phrases and sentences are built up by a series of merger operations, each of which combines a pair of constituents together to form a larger constituent (Radford, 2004:66). In MP, verbs and nouns are taken from the lexicon fully inflected, and the functional nodes are not associated with affixes but with certain features like Tense, Case, Agreement, Negation, etc. The structure of Complementizer Phrase (CP), according to Marantz (1995:364), will look like the structure in figure 7:

CP
│

C'
C   AGR_SP
         AGR_S'
       AGR_S   TP
                  T'
               T   NEGP
                        NEG'
                    NEG   AGR_OP
                              AGR_O'
                         AGR_O   VP
                               Subject   V'
                                       V   Object
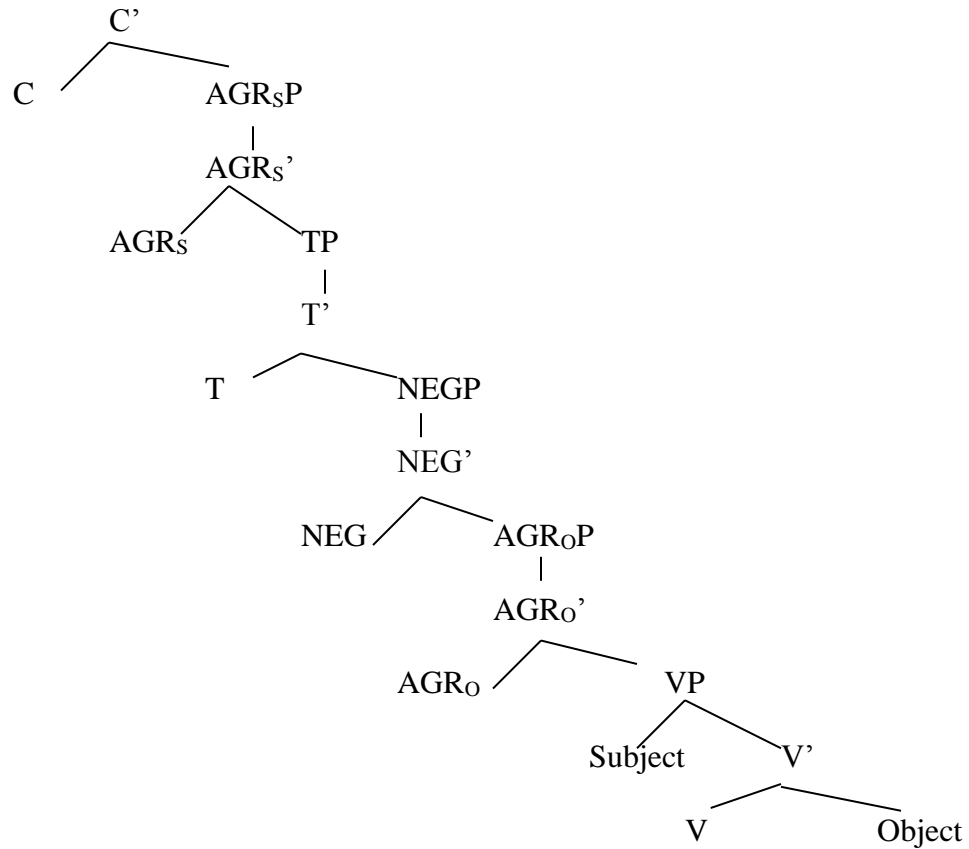
Figure 7: The Structure of CP

AGR-SP is for subject agreement, the position that the subject moves into, while AGR-OP is for object agreement, a position that the object moves into. AGRs licenses NOM Case while ACC Case is licensed by the AGRo. The V is raised to AGR, NEG and to Tense in order to check its AGR and Tense features. The presence or absence of NEGP depends on the particular type of derivation.

2.9.4   Appraisal of Theoretical Framework

The programme sees θ-relatedness as a property of the position of merger and its configuration. Base position is θ –related and is able to assign or receive a θ –role. An argument must be assigned a θ-role and a θ-assigning head must assign its θ-role. A violation of this results in the violation of the *θ–criterion* and, in effect, the violation of *Full Interpretation* too, thereby causing the derivation to crash.   The *θ-criterion* is a condition which an LF representation must meet in order to be well formed. It is only when an argument is assigned a θ-role that it can enter into a checking relation. Θ-theory and checking theory are complementary, θ-relatedness is a 'base property' while, feature checking is a property of movement (Chomsky 1995:312-313).

Armon-Lotem (1997) studies the early acquisition of functional categories by Hebrew children using the minimalist framework. She used a longitudinal data of three children aged 1:6 to 3 years and supplemented by diary data of three other children at the one-word stage. She believes that the child builds trees in a bottom-up fashion; which is the only way to build well-formed trees with limited evidence. The bottom-up approach "begins with the child and assumptions about the cognitive capacities children bring to the language learning task" (Bloom, 1991: 5). Following this approach, Crystal (1987: 234) believes that "language acquisition must be viewed within the context of a child's intellectual development". The bottom-up acquisition makes it possible to account for null subjects, root infinitives and the order for the acquisition of verbal morphology in the Hebrew language.

Radford (2000) also examines child language from the minimalist perspective. He sees the child language as being perfect. Radford opines that innate architectural principles determine the nature of children's initial grammars. He argues that a perfect grammar would project a given formal feature only when necessary. He concludes that even though adult languages are imperfect systems, the acquisition process itself is perfect as it maximizes perfection. He also states that the initial grammars developed by children are perfect (Radford 2000:13).

The minimalist hypothesis, according to Uziel-Karl (2001), is that UG provides children with full knowledge of phrase structure right from the start, but at each point in the process of acquisition, they construct the smallest convergent trees that their grammar requires, based on the evidence at their disposal. Radford (2000) assumes that children's initial arguments structures are a pure projection of thematic structure i.e. a merger operation that involves direct θ-marking. He states that 'merger of the verb with their arguments *must* of necessity be based purely on θ-marking in child grammars also' (Radford, 2000:8). This is because merger of a verb with an argument always and only involves θ –marking not case or agreement marking. He finds evidence for this in adult grammar. He concludes that there is no indirect θ-marking, no case, no agreement and no uninterpretable ɸ –features in the initial structure that children produce.

2.10   The Yoruba Clause Structure

Yoruba is an SVO language and to a large extent isolating, hence, the absence of inflectional morphology. Chomsky (1999) posits that propositions require a tense/event

structure. This implies that all clauses must contain a Tense Phrase (TP) which is headed by T carrying the tense features. Yoruba, however, does not attest tense morphology. Rowland (1969:18) notes that "the Yoruba verb does not contain any built-in distinction between past and present". Rowland (1969:8) also states that "it is the situation in which a phrase is used or some accompanying word which fixes time as present or past". Awobuluyi (1982:241) in his own view believes that tense is basic. He argues that every Yoruba sentence carries an indication of tense either overt or not. Awobuluyi identifies two tense types in the language; *future* and *non-future*. He states that *non-future* is not overtly marked while pre-verbal adverbs like *yóò, óò, màá,* 'will' etc. are used to mark future.

    (101) a.   Olú <u>yóò</u> lọ
                         Olu will go
                         'Olu will go.'

             b.   Olú lọ
                         Olu go
                         'Olu went.'

             c.   Olú lọ
                         Olu go
                         'Olu goes.'

The example in (101a) above indicates future with the use of *yóò* 'will'. Examples (101b) and (101c) indicate non-future with no overt marking. Time reference in Yoruba is also contextually determined in relation to the immediate linguistic context or in relation to discourse context (Radford, 2000). Examples (101b) and (101c) above can be disambiguated with the use of a time reference:

(102) a. Olú lọ ibẹ̀ ní àná
           Olu go there at yesterday
           'Olu went there yesterday.'

       b.   Olú lọ lójoojúmọ́
            Olu go everyday
            'Olu goes everyday.'

The absence of tense morphology in adult languages like Yoruba indicates that tense is a

redundant feature. Radford (2000) opines that innate structural architectural principles do

not require the syntactic projection of tense and therefore, there would be no violation of

the principles, especially in child language where this is absent. With the following

sentence in Yoruba, we see how the simple transitive sentence is derived

(103) Túndé ra   ilé
       Tunde buy house
       'Tunde bought a house.'

The two Determiner Phrases (DP), *Túndé* and *ilé* 'house' are inserted within the VP.

(104)

"Tunde bought a house"
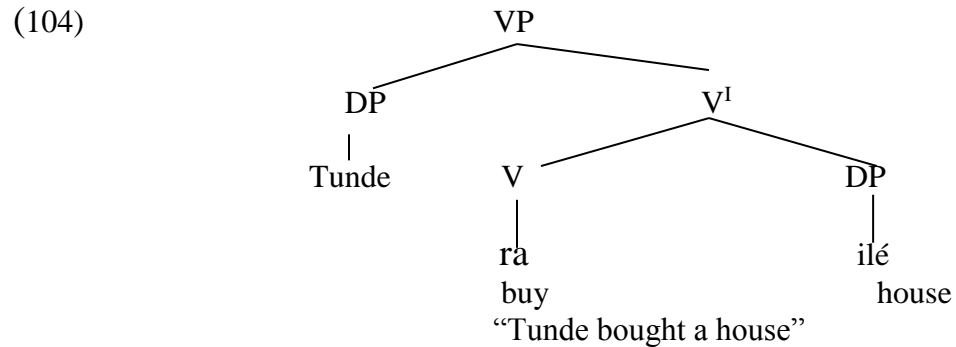
This diagram is a reflection of the early speech of the Yoruba child when it is still devoid

any form of finiteness. However, the DP has to move to the Spec of TP in order to have

its checked, so we have the following structure:

(105)

```
                        TP
                   ╱          ╲
              DP              T^I
              │           ╱        ╲
           Túndé    T              VP
                              ╱         ╲
                         DP              V^I
                         │           ╱        ╲
                         t          V           DP
                                    │           │
                                    ra          ilé
                                    buy         house
```

"Tunde bought a house."
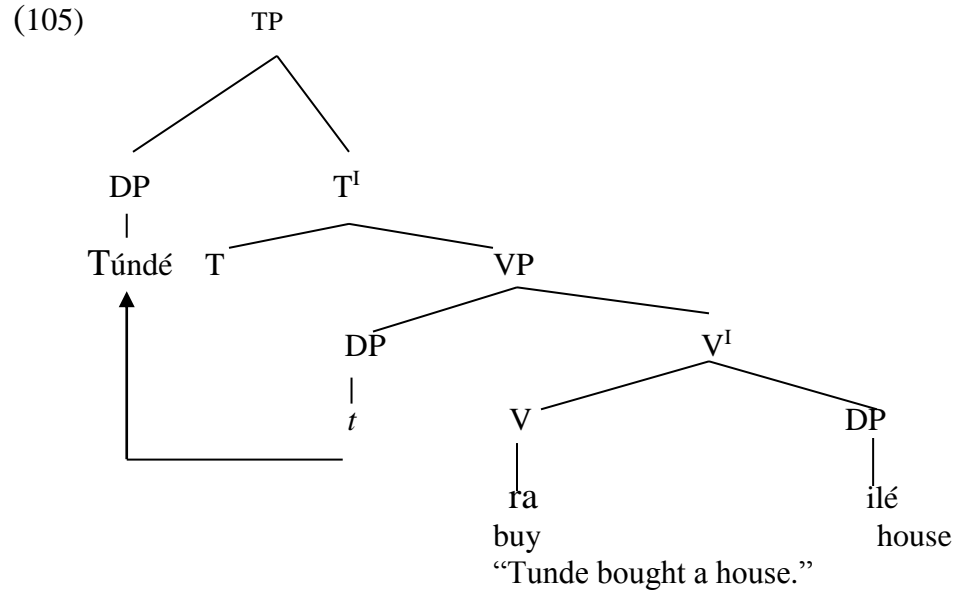
In the diagram above, *Tunde* has moved to the Spec of TP. It is a *non-future* proposition with no overt tense marking. The tree diagram presents a perfect adult Yoruba clause structure.

Aspect is another important component of the Yoruba clause, unlike tense, it is not basic. Aspect refers to the inherent nature of verbs, to the kind of situation denoted by the verb, such as state or activity (Uziel-Karl 2001:148). They serve to express grammatical meaning in Yoruba (Odunuga 1982:269). There are two subclasses of aspect in Yoruba; *perfective and imperfective* (Awobuluyi 1982:241). Perfective is made up of *ti* 'already'; *tìí* 'yet', while imperfective consists of *máa / á, m* or *ń, a. máa / á*. It shows that an action takes place after the moment of speech; in the future while *m* or *ń,* shows an action taking place at the moment of speech (Odunuga 1982:269-270).

2.10.1   The Structure of VP

All phrases are formed through a process of merger and all phrases are a projection of the head word (Radford, 1997). A verb phrase is therefore a projection of the verb. The head word is merged with the complement and eventually merged with the specifier, depending on the type of verb. A verb, as stated earlier, differs depending on its argument structure. The forms in Figure 8 below illustrate this:

8a.   VP   8 b.   VP

V   complement   specifier   X
head
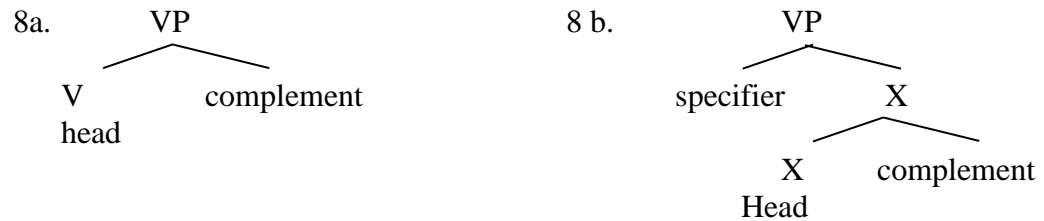
                                                          X   complement
                                                         Head

Figure 8: The Structure of VP

The schematic form in figure 8a represents a transitive verb and a complement without a specifier while figure 8b is a transitive verb with its specifier and complement.

If a verb has more than one internal argument, a Larsonian shell is proposed as in the following example:

v^{max}

v VP

V
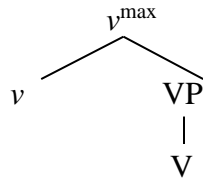
Figure 9: Larsonian Shell

In the example above, v is a light verb to which V overtly raises. Internal arguments occupy the positions of specifier and complement of the verb.

2.10.2 Grammatical Relations

Grammatical relations represent how an NP/DP is functioning in the sentence syntactically (Carnie 2002:233). They are represented by the position of the noun in the sentence. The three most important grammatical relations are *subject*, *object* and i*ndirect object.* These are argument positions in Yoruba. This is also true cross-linguistically.

2.10.2.1   The Subject

The subject is the NP that appears before the verb or the auxiliary in Yoruba. Saito (2006:172) describes the subject of a sentence as [NP, TP], that is, the NP immediately dominated by TP. But with the introduction of the predicate-internal subject hypothesis, there is another candidate, namely, [NP, *v*P]. As mentioned earlier every sentence in Yoruba requires a subject with the exception of some imperative sentences. The selection of subject depends on the properties of the particular verb involved. The NPs that could function as subjects include bare nouns, generic nouns, singular nouns, plural nouns possessor NPs, pronouns, etc.

2.10.2.2   The Object

The object is an argument position of either a verb or a preposition in a syntactic structure (Awoyale 1994); it is a subcategorized position of the verb or preposition. Objects can be classified into direct object, indirect object and object of preposition respectively. Direct objects and indirect objects are subcategorized by the verb while the indirect object is subcategorized by the preposition. According to Awobuluyi (1979), every verb in Yoruba with the exception of *dà* 'where is?' and *ǹkọ́* 'where is?' can be

used with an object. As discussed above, the NPs that could function as object include bare nouns, generic nouns, singular nouns, plural nouns possessor NPs, pronouns, etc. Examples of objects are the underlined below:

(106) a. Mo ra <u>epo</u> sí <u>mótò</u>
I buy fuel inside car
'I bought fuel for the car.'

b. Adé fún <u>Olú</u> ní <u>owó</u>
Ade give Olu money
'Ade gave Olu money.'

When an object is moved from its logical position, there is a trace to show that there was an extraction.

2.10.3 The Yoruba NP

Bamgbose (1967:8) defines a noun as 'a word which can occur independently or with qualifiers in the nominal group' while Stockwell (1977:48) defines it 'as symbols for entities, abstract or concrete, countable or uncountable (mass), animate or inanimate, human or non-human, etc. Nouns are classified into the classes of animate, inanimate, concrete, abstract, countable and uncountable nouns. Stockwell (1977:55) defines Noun Phrases as 'clusters of words in surface strings of which the nuclei are nouns'. According to Yusuf (1997:8), 'the Noun Phrase (NP) is the category that orders the participant in the event or state described by the verb', it is headed by a noun. The noun phrase typically functions as subject, object and complement of sentences, and as complements in prepositional phrases (Quirk and Greenbaum 1973:59).

The Yoruba NP has received extensive attention in the overall inquiry into the Yoruba syntax. Some of the works on Yoruba NP include Awobuluyi, 1979, Bamgbose 1966, 1967, 1990, Yusuf 1999; Ajiboye 2007. The Yoruba Noun Phrase is divided into lexical NPs and pronouns (Yusuf, 1999).

2.10.3.1 Yoruba Lexical NPs

A lexical NP gets its meaning by referring to an entity in the world; it selects its referent from the universe of discourse (Haegeman 1994:204, Carnie 2002:90). It is a full noun phrase that has independent reference. This NP type can appear in any position in the sentence and they include bare NPs, generic NPs, existential NPs, singular NPs, plural NPs, possessor NPs, etc. The Yoruba NP can occur independently without any satellite as in (107)

(107)   a.   <u>Adé</u> ti dé
                Ade PERF come
                'Ade has arrived.'

        b.   mò rí <u>Olú</u> ní <u>Èkó</u>
                I see Olu
                'I saw Olu.'

Ade, *Olu* and *Èkó* are NPs in the examples above functioning as subject, object and object of preposition. They are proper nouns occurring without satellites. The Yoruba NP could also occur with various modifiers. Yusuf (1999:25) states that the modifier could be one, two or more words. It could also be a sentence. A Noun Phrase, pronoun or an Adjectival Phrase can function as the modifier in a Noun Phrase. These are illustrated in (108).

(108) a.   <u>màma</u> Olú
mother Olu
'Olu's mother'

b.   <u>iyàwo</u> Kúnlé
wife Kunle
Kunle's wife

c.   <u>ọ́kúnrin</u> gíga
man   tall
'The tall man'

d.   <u>ẹja</u> títóbi
fish big
'Big fish'

e.   <u>omo</u> yìí
child this
'This child'

f.   <u>omi</u>   inú   àmù
 water inside water pot
'The water in the water pot'

g.   <u>iwè</u>   ti mo ràa
book that I buy
'The book that I bought'

h.   <u>ọ́kúnrin</u> tí ó ra ilé   yẹn
man   that he buy house that
'The man that bought the house'

i.   <u>màmá</u> mi
mother my
'My mother'

j.   <u>omo</u> wọ̀nyí
child these
'These children'

The noun heading the various NPs in (108) are underlined. A fact to be taken from the examples above is that Yoruba is a head first language i.e. a language where the heads are positioned first in the structure.

2.10.3.2   Yoruba Pronominal System

Pronouns are words that do not select a referent from the universe of discourse. A pronoun may get its meaning from another word in the sentence. Pronouns are the only NPs in the language that can be recognised as either singular or plural. Person and number features are marked on Yoruba pronouns while the forms vary depending on their case (Adesola and Safir 2009). Yoruba pronouns are classified into two classes; strong forms and weak forms. Awobuluyi (1979) identifies two classes of pronouns; emphatic and un-emphatic pronouns. These classes are attested with morphologically distinct forms. The emphatic or strong pronouns are analyzed as nouns by Awobuluyi (1979). These classes are attested with morphologically distinct forms in Yoruba.

2.10.3.2.1   Yoruba Strong Pronouns

Awobuluyi (1979) describes them as a class of human nouns that are differentiated for number and person. Strong pronouns are assumed to be the least deficient forms as they behave like NPs, i.e. having some distributional liberty: they can surface in argument positions functioning as subject and object, they can be used in isolation, and they can be coordinated and modified. Strong pronouns can introduce a new referent in the clause and can appear in all syntactic positions available to full noun phrases. Strong pronouns in Yoruba are listed below.

Table 1: Strong Pronouns in Yoruba

	SINGULAR		PLURAL	
1ST PERSON	èmi	'I'	àwa	'we'
2ND PERSON	ìwọ	'you'	ẹ̀yin	'you'
3RD PERSON	òun	'he, she'	àwọn	'they'

For strong pronouns in Yoruba, distinction is not made in the form of subject/ object asymmetry or nominative/ accusative asymmetry as the case is in weak pronouns. This means that you have the same form for subjects and objects. This is a characteristic shared with other human nouns. There is only number and person distinction.

2.10.3.2.2   Yoruba Weak Pronouns

Weak pronouns are described as polymorphic and un-emphatic pronouns. They have both [+human] and [-human] references and can function both as subjects and objects in a sentence. The table below lists the various weak pronouns in Yoruba.

Table 2:   Weak Pronouns in Yoruba

Person	Number	Nominative	Oblique	Possessive	
				Post-nominal	Absolute
1		Mo	Mi	mi	Tèmi
2	Sg	o	ọ/ẹ	ẹ	tìrẹ
3		ó		ẹ̀	tirẹ̀
1		a	wa	wa	Tiwa
2	Pl	ẹ	yin	yín	Tiyín
3		wọ́n	wọ́n	wọ́n	tiwọ́n

These pronouns take another form when they appear as genitival qualifiers. These forms are listed under possessive in the table above.

2.11   Conclusion

This study assumes a phase-based process oriented account of the study of the acquisition of argument structure of Yoruba. The child moves from a state of no verb to a state of complete mastery of the verb by building up the structure in a bottom-up hierarchical fashion. At the initial state, the child comes in with a set of universal principles which gets matured as he grows and as his experiences increase, thereby increasing the amount of data he is exposed to. In the following chapter, we will examine the methodology adopted in collecting the data to be used to examine how Yoruba children acquire a complete mastery of Yoruba argument structure.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0   Introduction

In the previous chapter, we carried out the review of literature and also examined the workings of our chosen theoretical framework. The knowledge garnered from that chapter sets the stage for us to proceed in our data collection. This chapter examines the methodology adopted for this research work. The research design, procedure for the collection of data, the participants and their distribution are discussed. We also looked at the research instruments and transcription. Finally, ethical issues involved in psychological experimentation are discussed.

3.1   Research Methodology

The two major research techniques in first language acquisition are (i) naturalistic longitudinal and (ii) experimental cross-sectional methods. The first one is observational whereby the child is recorded in a natural environment without any interference to the normal activities of the child. The second method is experimental, requiring direct elicitation of corpus from the participants.

Observational corpuses are recorded regularly; it could be daily, weekly, or biweekly. It involves the recording, transcribing and analyzing either by note taking or tape recording or both of the spontaneous utterances of the children. The study could involve one child or more. Ronjat (1913), Burling (1959), Murrel (1966), Leopold (1949), Celce-Murcia (1978), are some longitudinal studies that involve one child

studying either one language or two languages (bilingual studies) and all of them are the researchers children. Brown (1973), Allen (1996), Uziel-Karl (2001), Stromquist and Ranarsdottir (2000), Uziel-Karl and Berman (2000) are some other longitudinal studies involving more than one child. Observational studies are carried on for a long time, sometimes for as long as six years. They are seen to be time-consuming and there are times when data collection is cut short due to some unforeseen circumstances like 'lack of motivation, relocation or, in the most extreme case, death' (Rasinger 2009:40).

Experimental methods involve the testing of a large number of participants at a particular point in time in their development. Tests are designed to test a particular subject matter. Gropen, Pinker Hollander and Goldber (1991a) test children aged between 3;4-9;4 in three experiments while Naigles and Lehrer (2002) study ten five-year children enrolled in day-care centres in Sainte-Maxine France. Tomasello and Brooks (1998), Brooks and Tomasello (1999), Childers and Tomasello (2001) are also studies that rely on experimental corpus. It is also very clear that it is not all data that can be elicited through experimental methods. Children who are less than two years old have been recorded to perform poorly in elicitation techniques.

There have been studies which combine the two methods. Demuth, Machobane and Moloi (2000) based their analysis of null subjects in Sesotho ditransitive applicative constructions on two sets of data. They examine the spontaneous speech of two two-year olds. They also designed an elicited production task for twenty three-four year olds, twenty five-six year olds, twenty eight-year olds and twenty adults respectively.

Lorusso et al. (2004) also based their analysis of overt subject distribution in early Italian children on two corpora collected through longitudinal and cross-sectional methods. Four children between the age of 18 and 36 months were involved in the longitudinal corpus. The speech of adults was also examined. For the cross-sectional study, there were 59 children made up of 25 males and 34 females with age raging from 22 to 35 months. The children were attending a public day care centre.

This present study is based on the analysis of two corpora collected through longitudinal and cross-sectional methods. Three children between the ages of fifteen (15) and thirty-six (36) months took part in the longitudinal study. Damilare's data is the primary data while Temiloluwa and Tola's data are supplementary data. The cross-sectional study is made up of forty participants made up of twenty three-year olds and twenty four-year olds.

Research on language acquisition in advanced countries has been made easy with advancement in technology. The world of computer and the internet has made it possible to access data on languages from the web. There are different databases where data are stored and from where researchers can retrieve data. Most first and second language acquisition studies get their data from these sites; they rely on computerized corpora and methods. Some of the databases include Child Language Data Exchange System (CHILDES), Cross-linguistic Language Acquisition Project (CLAP), British National Corpus (BNC), Brown Corpus, etc. Most of these sites are also free and accessible.

The CHILDES database seems to be the most popular in language acquisition studies. It is a computerized tool designed for storing and analysing talk, it was established in the early eighties and the research team were headed by Brian Macwhinney and Catherine Snow. The program is language neutral as it can be adapted to any language; it can also be used to store and share transcribed data with other scholars for evaluation and further research (Uziel-Karl 2001). This has been tested cross-linguistically. Despite efforts made by the researcher it was not possible to use the tool for our analysis as we could not get a software engineer that understood our need. The search however continues as we sincerely hope to make the corpus for this study available to others who might be interested in studying other areas of Yoruba language acquisition.

3.2   Research Design

Speech production tasks were designed to see how children acquire the argument structure of Yoruba verbs. Picture judgment and video tasks were designed. A picture verification method fulfilling the falsification condition (Crain and Thornton 1998) was used. The task is an interpretation of pictures for sentences. Each picture has one true sentence with two other possible interpretations. In the production tasks, the children were asked to utter sentences to describe pictures or scenes shown to them. Some pictures illustrate verbs in transitive situations while others show intransitive verbs. The video clips were constructed which show change of state verbs dramatized. Participants saw a total of fifty

(50) pictures and 6 video clips. The pictures were arranged at random in order to prevent rote responses.

3.3   Participants/ Population

We examined the corpus of children's early speech. Two sets of data were used for analysis. There were forty-three (43) participants in all. All participants were Yoruba children between fifteen (15) and 60 months. The first set of data consist of a set of spontaneous longitudinal speech of children produced during interactions with parents, siblings, caregivers and other family members. The longitudinal data is collected from three children, Damilare, Temiloluwa, and Tola who were recorded at home from 18 months to 36 months. Two basic criteria were used for the selection of the children. These are:

(a) the children must be native speakers of Yoruba

(b) the parents must be native born Yoruba

The second sets of children making up the cross-sectional study were drawn from middle-class and low-class day-care centres and pre-Nursery schools in Ilorin metropolis. This choice is made in order to see if there is any significant difference in the language development of the two sets of children as a result of social classification. They are divided into sets of twenty (20) three-four-year olds and twenty (20) four-five-year olds respectively. The children were selected through simple random sampling for this study.

3.3.1   Longitudinal Participants

Damilare is the first child of educated middle class parents. The parents live and work in Ilorin, the Capital City of Kwara State, Nigeria. The data presented for him covers a period of fifteen (15) to thirty-six (36) months. The data were collected by the mother (the researcher) on a daily basis. Damilare's data consist of questions, responses and utterances between him and the parents and other members of the family. It also included his utterances while playing alone. We could safely say that the exercise made it possible to know at each point he has acquired anything linguistically significant. The best form of longitudinal data collection should be between a child and any of the parents or someone who lives with the family. This enables close interaction with the child which aids easy data collection. This also removes most possible constraints that may arise.

Temiloluwa and Tola are a set of female twins of educated middle class parents. The parents live and work in Ilorin. They have two older siblings, a brother and a sister. The data presented for them in this study cover from fifteen (15) months to thirty-six (36) months. The data were collected by their father daily at home and in other possible situations. The data consist of utterances, responses, questions between the two of them, with their parents and siblings and other members of the family

3.3.2   Cross-sectional Particpants

The forty children that took part in the cross-sectional experimental methods are drawn from two Nursery and Primary Schools and Two Day Care Centres in Ilorin the Kwara State Capital. Ilorin is a metropolis where different dialects of Yoruba as well as

other peoples and languages in Nigeria are found. These children are all in the pre-Nursery ages of three and four years respectively. This makes it a good representation of the Yoruba people.

Methodist Nursery and Primary School, Taiwo Isale and Aminat Nursery and Primary School, Irewolede, New Yidi Road were the schools the children attended. The children in these two schools are children of mid-income earners but majorly low-income earners. The Day Care Centers are located at Popo Giwa and Ita-kure areas of Ilorin. These areas are the main Ilorin hinterland where the indigenes of the city live. The children in these day-care centres are all Ilorin indigenes. They are children of mostly uneducated people who only want a place to put their children and keep them off the streets. They are also taught too. These Nursery Schools and Day-care centres were chosen in order to have a good representation of the Yoruba people.

3.4   Research Instruments

Data were collected via elicited production using pictures, images and video clips for the cross-sectional experimental group. A digital camera was used to collect the data by filming each interaction with the participants. Each participant was recorded while the session lasted using the digital camera to capture both voice and vision. The images and video clips were shown to the children using HP 510 Laptop. Other materials used are notebooks and pens which the researcher used to record some of the utterances of the participants.

For the longitudinal data, the instruments primarily used are pen and paper to record the utterances of the children. The longitudinal data on Damilare were also collected using digital camera and phone to capture both sound and video. The digital camera used is a *Kodak Easyshare C713 Zoom Digital Camera with the Kodak Easy Software* while the phone used is *Nokia E71i* series. The digital camera is very sensitive and can easily pick up utterances from a longer range than the phone. The phone is more portable but not as sensitive as the camera. So it is used for close range recordings like on the bed, especially early in the morning and at bed time and also during meals, a time when children are really loquacious. An advantage that these recorders have is their multi media capabilities. All the recorded speech and videos are transferred into the computer for further profiling.

3.5   Procedure for Data Collection

The naturalistic data were collected on a daily basis right from fifteen (15) months. This is done in order to get enough information. We believe that giving particular time for collection of data will lead to the loss of significant data, hence the need for daily recording of the children. The recordings serve as secondary means of data collection.

All the children exposed to the experimental method experienced the same procedure. All were exposed to a training session and one testing session. Each session lasted about 25minutes and was videotaped. The children were fully informed about their task. The children were asked to describe in their own words what was happening in the

pictures and video clips. All the sessions were completed within a two-week period. At the Day-care centres and at Aminat Nursery and Primary School, Irewolede, New Yidi Road, the children were tested in an open space just away from the others while at Methodist Nursery and Primary School, Taiwo Isale the children were tested in a store-room. They were tested by two experimenters. One experimenter was introducing the images and video clips to the children and also eliciting responses while the other handled the camera, recording the data.

Our aim was to eliict data from an equal number of children in each age group but this is almost impossible for some practical reasons. We tried to make substitutions where possible. Some of the problems we faced in the course of data elicitation include equipment failure; incorrect stated age of some children; too much background noise and disturbances from people curious to know what was happening and some children not speaking clearly enough thereby making transcription difficult. Some three year old children did not respond outrightly.

3.6   Transcription of Data

For the longitudinal method (see Appendix A), the data were transcribed immediately after recording into a notebook. Thereafter, the data is typed and stored in the computer for further analysis. The cross-sectional experimental data (seeAppendix C) were transcribed immediately after the sessions. Every sentence of the participants was transcribed and was recorded as part of the data. There are two samples in the experimental data; the three year-olds and the four year-olds. In the longitudinal data,

each occurrence of the verb is written out. These are dated and classified in chronological order and also according to subtype.

3.7   Data Analysis Procedure

In the remaining part of this chapter, we present the procedure followed in our data analysis. The importance of this cannot be overemphasized because using the wrong procedures could lead to wrong findings, results and claims.

We carry out a quantitative and qualitative analysis of data. The quantitative analysis use simple mathematical calculations with the aid of tables and charts. The tables show the percentage of observed phenomena. The charts consist of bar charts and line charts drawn from the tables. The bar charts are used to show comparison between different items at a particular point in time. The line charts on the other hand show progressive or regressive changes and trends over a period of time in the language development of the children.

The syntactic analysis is carried out using the *Minimalist Programme*. The desire to minimize the acquisition burden placed on the child and thereby maximizes the learnability of natural language grammars led to the beginning of the program (Radford, 1997:7). The program focuses on the process of building up syntactic structures. A phrase is formed by *merging* two words. The use of two-word utterance by children is believed to be the beginning of grammar. It is from the earliest stages that children begin to merge constituents and thereby build up hierarchies. The data is examined to find out the

developmental features of each age group. The following sub-sections examine the various procedures followed in the data analysis.

3.7.1   Lexical Coding

All the utterances of the three children in the longitudinal study were coded for their lexical composition. We took into consideration the bottom-up fashion of building up structure by the children. There are very many instances where nouns function differently; we however rely on the primary description of nouns to make the classification. For example, there are situations when a child uses a noun but with a verbal reference; there are also structures where there are only nouns without verbs making up an utterance. Prepositions are very often used merged with nouns. These are separated for analysis. The various pronouns found in different position attested in the language are also coded. We did not do lexical coding for the cross-sectional participants. The reason is that their language development is at a more advanced stage than the longitudinal participants; their result is representative.

3.7.2   Coding of Argument Structure

Every verb has its argument structure. This means that a verb will be used with all its obligatory arguments. A transitive verb will have two arguments; an intransitive will come with only one while a ditransitive will appear with three arguments. This is an idealized, fully spelled-out set of arguments referred to as meta argument structures (Uziel-Karl 2001:66). In order to code the argument structure of the speech of all the children (longitudinal and cross-sectional), all the utterances containing verbs were

coded. Table 3 gives some of the attested argument structure combinations for the different structure in the children's utterances.

Table 3: Attested Argument Structure Configurations in the utterances of the Children

Argument structure	Verb	Example
V	wá 'come'	wá come
VO	mu 'drink'	mu omi drink water 'Drank water.'
VL	sùn	sùn yàrá Sleep room 'I want to sleep in the room.'
SV	sùn 'sleep'	dádì sùn Daddy sleep 'Daddy slept.'
SVL	sùn 'sleep'	dádì sùn yàrá Daddy sleep room 'Daddy slept in the room.'
SVO	jẹ	Lará jẹ ẹ́ Lara eat it 'Lara ate it.'
VocV	jòkó 'sit down'	dádì, jòkó Daddy, sit down.'
VocVO	nà 'beat'	mọ́mì, nà á 'Mummy, beat her.'
VocSVO	nà' beat'	mọ́mì, dádì nà á 'Mummy, daddy beat me.'

V stands for verb, S stands for subject, O stands for object, L stands for Location while Voc stands for vocative. In order not to lose significant linguistic information of our longitudinal participants, utterances with nouns only were also coded for their argument structure or rather their arguments as seen in Table 4 below.

Table 4: Attested Noun Configuration in the utterances of the Children

SO	mọ́mì isu Mummy yam 'Mummy is eating yam.'
VocO	mọ́mì tíì Mummy tea 'Mummy I want to drink tea.'
OS	tíì mọ́mì tea mummy 'Mummy is drinking tea.'
VocSO	dádì Lará isu Daddy Lara yam 'Daddy Lara ate yam

For the cross-sectional participants, utterances without verbs and seemingly ill-formed sentences were disregarded. We believe that other factors are responsible for a child at that age not to have acquired those features.

3.7.3 Coding of Null Arguments

All verbs have obligatory arguments. However, we know that verbs may occur in actual discourse without all the obligatory arguments. This is possible in adult language and more so in the early speech of children. In analyzing the presence and decline of null arguments and development of overt arguments in the early speech of the three children,

we checked for obligatory contexts where there must be arguments. We focused on contexts where obligatory argments are overt or null. Amount of ellipsis is calculated out of the total number of obligatory contexts rather than out of the total number of verbs in the data. For example, an intransitive verb does not require an object. This means that this will not be calculated as a case of object ellipsis. Let us examine the following examples in (109).

(109) a.   wá
            'come'

       b.   wá!
            'come'

       c.   mu omi
            drink water
            'Drank water.'

       d.   dádì sùn
            Daddy sleep
            'Daddy slept.'

       e.   mọ́mì, nà á
            mummy beat it
            'Mummy, beat her.'

The examples above contain no case of object ellipsis. Sentences (109a) (109b) and (109d) contain intransitive verbs that do not require obligatory arguments while sentences (109c) and (109e) contain transitive verbs with their arguments. In calculating the amount of object ellipsis, we will have 0% rather than 50% if we calculated from the total number of outputs. As mentioned earlier, instances of object ellipsis is rare in the Yoruba language.

In calculating the amount of null subjects, we also look at the obligatory contexts. In Yoruba language, all sentences must have a subject. The only exception to the rule is when we have particular type of imperative sentences which do not require subjects (cf Awobuluyi 1979). Sentences (109a) (109b) and (109c) do not have subjects. However, sentence (b) does not require a subject because it is an imperative sentence. In imperative sentences, all other constituents are omitted except the word of command. Sentence (109d) has a subject while sentence (109e) does not attest a subject. It is NP in the vocative that is occupying the subject position. All these factors are taken into consideration in the analysis in order to have correct calculation and interpretation.

3.7.4 Coding of Thematic Relations

To evaluate the role that thematic roles play and to also know whether Yoruba children recognise thematic relations, all overt arguments in their utterances were coded for their thematic roles. Twelve adopted from different sources were used in this analysis. These are listed in the table that follows.

Table 3   Thematic Roles

Thematic Role	Description	Example
Agent	Initiator, doer, actor in an event	dádì jẹ isu Daddy eat yam 'Daddy ate yam.'
Patient	Entity which undergoes the action expressed by the predicate	Dàmọ́lá subú 'Damola fell down.'
Theme	Entity that is affected by an action	gbá bóólù 'Play ball'

Experiencer	The entity that experience a psychological state	Dàmọ́lá bẹ̀rù 'Damola is scared.'
Benefactive/ Beneficiary	The entity that benefits from the action that took place	dádì fún mi 'Daddy gave me.'
Goal	Entity towards which activity expresses is directed.	dádì ra epo mótò Daddy buy fuel car 'Daddy bought fuel for the car.'
Source	Entity from which motion takes place	Olú dé láti Èkó Olu arrive from Lagos 'Olu came from Lagos.'
Location	Place in which action or state is situated	jẹ́ á lọ office 'Let's go to the office.'
Instrument	Object with which an action is performed	Mo fi ọ̀bẹ gé isu I use knife cut yam 'I cut the yam with a knife.'
Recipient	entity that receives something which is transferred or transmitted, denoting change of possession.	Táyé fún mi ni owó Taye give me money 'Taye gave me money.'
Stimulus	Entity which triggers or is the target of an experiencer's psychological response.	petrol n rùn petro CONT smell 'Petrol is smelling.'

3.8 Ethical Issues

This research is based on the ethical principles and standards of the American Psychological Association (2002). It has to do with the welfare and self-esteem of the participants. These principles deal with how to conduct oneself ethically with participants. It deals with how to approach people and also encourage them to be a part of your study; how you respond if they decline to take part or wish to withdraw; what to

say to them after you are through; and how you look after and report the data that you have obtained from them.

A very important feature of the principles is that of informed consent. Harris (2003:143) says that informed consent has to do with telling people enough about your experiment to enable them to make an *informed* decision about whether or not to take part. *APA Publication Manual* (2001:391) states that psychologists should 'use language that is reasonably understandable to research participants'. APA Ethics Code (2002:7) also states that individuals' assent must be sought but when that is not possible, appropriate permission must be obtained from a legally authorized person. The consent of the proprietor, head teachers, teachers and aunties of the centres used were sought in person. They also helped in seeking the consent of parents of the children involved in the experiment.

The teachers and caregivers were debriefed about the experiment. They wanted to know what the experiment was all about and we took time to explain to them. We also answered their questions. This helped in increasing their interest and also encouraging the children to participate.

Since the data is based on unrelated samples, we do not need to know the participants individually, so their names are not needed. Finally, the data are kept safe, secure and confidential.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0   Introduction

One of the most important and remarkable achievements of children at the early stage of language acquisition is the development of the lexicon. Our purpose in this chapter is to explore the early acquisition of Yoruba argument structure and the order of emergence of arguments in the speech of the Yoruba child. We look at the types of verbs and the argument structure that the Yoruba child acquires at a point in time. We do this in order to be able to make claims about how and why children acquire particular types of verbs before others. The acquisition of null arguments also forms another very important part of our discussion in this chapter. We make proposal about how and why children omit arguments at the optional infinitive stage (OI). We also predict when null arguments begin to surface and eventually disappear from the speech of the Yoruba child.

The two sets of data i.e. the longitudinal and cross-sectional data are analyzed and the results presented. We rely more on the naturalistic longitudinal data for discussion on the order of acquisition of Yoruba argument structure, null arguments, order of acquisition of transitive and intransitive verbs and nature of overt arguments used by the Yoruba child. We decided on this because these are features common to children at the early stage of syntactic development, a period covered by the longitudinal data. For discussion on the acquisition of complex predicates, we will use the experimental data that cover between thirty six (36) and sixty (60) months. Most research on the acquisition

of complex structures are carried out on children of 3 years old and above. Children at the early period of syntactic development do not yet have these complex structures because they are still working on simple sentences. The research questions we set at the beginning of the study form the basis of the analysis. They will form the basis of our discussion from now on.

4.1   Early Lexicon of the Yoruba Child

The lexicon is the human mental dictionary or list of words and their properties and one of the most important tasks that the children acquiring language face is the development of this lexicon. Lexicon development comes at the early stage of language development right from the pre-grammatical stage. The composition of children's early lexicon has been the object of much investigation. The need to know whether verbs or nouns come first in the child's early lexicon form the focus of most of these studies. At the initial stage, the lexicon is very few in number but gradually it is built up. The acquisition of lexical items helps to build the lexicon of the children. According to Stoll, Bickel, Lieven, Banjade, Bhatta, Gaenszle, Paudyal, Pettigrew, Rai, Rai, and Rai (2009), children's early vocabularies display a large variety of parts of speech, and a large range of functions with which various parts of speech are used (Bloom, Tinker, & Margulis, 1994; Gopnik, 1988; Nelson, 1973; Tomasello & Todd, 1983).

This section presents data on the order that the Yoruba child follows in the acquisition of lexical items. We assume that the first sets of lexical items the child acquires are verbal and nominal items. Tables 4, 5 and 6 present in percentage the

occurrence of verbal items vis-à-vis other lexical items in the speech of our three children, Damilare, Temiloluwa and Tola.

To test these claims I examined the early verbs of Damilare and Temiloluwa from the one word stage to the early multi-word stage. The boundary for this stage is set at twenty-four (24) months i.e. two years. By this time, the naturalistic speech of the children has turned complex. The children moved from the one stage to the early word combination stage in the course of the taking the samples. In order to find the percentage of verbal items for each of the children, we counted the number of all the lexical items and then find the percentage of verbal items from the sum total of all lexical items i.e. the number of verbal items divided by the total number of lexical items multiplied by hundred as indicated in (110).

$$(110) \qquad \frac{\text{Verbal Items}}{\text{Total Number of Lexical Items}} \times \frac{100}{1}$$

To find the percentage of other lexical items, we counted the number of other lexical items and then find their percentage from the sum total of all lexical items i.e. the number of other lexical items divided by the total number of lexical items multiplied by hundred.

$$(111) \qquad \frac{\text{Other Lexical Items}}{\text{Total Number of Lexical Items}} \times \frac{100}{1}$$

We did not just subtract the percentage of verbal items from other lexical items or vice versa because we needed to be sure that every lexical item is accounted for. The tables 4,

5 and 6 show the distribution of verbal items in the early utterances of Damilare,

Temiloluwa and Tola respectively.

Table 4: Distribution of Verbal Items in the Early Utterances of Damilare

Age (in months)	Verbal Items	Other Lexical Items	Total No. of All Lexical Items
16	53%	47%	83
17	54%	46%	103
18	46.7%	53.3%	75
19	44.4%	55.6%	117
20	43.1%	56.9%	225
21	40.1%	59.9%	218
22	41.3%	58.7%	300
23	47.7%	52.3%	388

Table 5: Distribution of Verbal Items in the Early Utterances of Temiloluwa

Age (in months)	Verbal Items	Other Lexical Items	Total No. of All Lexical Items
16	47.8%	52.2%	47
17	30.7%	69.2%	52
18	30.67%	69.3%	75
19	31.0%	69%	29
20	30%	70%	60
21	28.6%	71.4%	84
22	21.4%	78.6%	56
23	27.6%	71.5%	123

Table 6: Distribution of Verbal Items in the Early Utterances of Tola

Age (in months)	Verbal Items	Other Lexical Items	Total No. of All Lexical Items
16	42.1%	57.9%	38
17	39.9%	61.1%	36
18	44.4%	55.6%	36
19	33.3%	66.7%	24
20	35.3%	64.7%	51
21	28.6%	71.4%	56
22	33.3%	66.7%	54
23	28.4%	71.6%	67

From the data as presented in the tables above, verbal items in the speech of Damilare was 53% at sixteen (16) months and reduced to 47.7% at twenty-three (23) months. In the speech of Temiloluwa, 47.8% of verbal items were recorded at sixteen (16) months and reduced to 27.6% at twenty-three (23) months. For Tola, her verbal items were 42.1% at sixteen (16) months and 28.4% at twenty-three (23) months. From the data above, we see that verbs constitute the first set of lexical items to be acquired. We could also deduce that the use of verbal items is high in their utterances. The reason for this is not far-fetched. The child at this stage just wants to make his needs known. This is achieved by simply using the verb which to a large extent serves his or her purpose.

The other major lexical items used by the child are the nominal items. Cross-linguistic studies have expressed the importance of nominal items in the early speech of children. In order to find the percentage of nominal items for each of the children, we counted the number of all the lexical items and then find the percentage of nominal items from the sum total of all lexical items i.e. the number of nominal items divided by the total number of lexical items multiplied by hundred.

$$(112) \qquad \frac{\text{Nominal Items}}{\text{Total Number of Lexical Items}} \times \frac{100}{1}$$

We did same for other lexical items. Tables 7, 8, and 9 present a paradigm of the acquisition of nominal lexical items vis-à-vis other lexical items by the three children.

Table 7: Distribution of Nominal Items in the Early Utterances of Damilare

Age (in months)	Nominal Items	Other Lexical Items	Total No. of All Lexical Items
16	45.8%	54.2%	83
17	45.4%	54.6%	103
18	45.3%	53.3%	75
19	35.04%	64.9%	117
20	41.3%	58.7%	225
21	46.7%	53.3%	212
22	**49.3%**	50.7%	300
23	50.8%	49.2%	388

Table 8: Distribution of Nominal Items in the Early Utterances of Temiloluwa

Age (in months)	Nominal Items	Other Lexical Items	Total No. of All Lexical Items
16	34.04%	75.6%	47
17	46.2%	53.8%	52
18	34.6%	65.3%	75
19	48.3%	51.6%	29
20	46.7%	53.3%	60
21	42.9%	57.7%	84
22	41.1%	48.9%	56
23	41.5%	48.5%	123

Table 9: Distribution of Nominal Items in the Early Utterances of Tola

Age (in months)	Nominal Items	Other Lexical Items	Total No. of All Lexical Items
16	36.8%	63.2%	38
17	27.8%	72.2%	36
18	44.4%	55.6%	36
19	33.3%	66.7%	24
20	47.1%	52.9%	51
21	39.3%	60.7%	56
22	22.2%	77.8%	54
23	34.3%	65.7%	67

From these tables, we discover that nominal items, apart from verbs, also constitute

one of the first sets of items acquired by the Yoruba child. We could also see that they

constitute a high percentage of the children's utterances. Nominal items range from

45.8% to 50.8% in the speech of Damilare while in Temiloluwa's speech, 34.04% of

nominal items were recorded at sixteen (16) months and 41.5% at twenty-three (23) months. For Tola, 36.8% nominal items were recorded at sixteen (16) months and 34.3% at twenty-three months. We could safely deduce that at the early stage, that they make use of verbal items more than nominal items. In order to find the percentage of verbs for each of the children, we counted the number of all the lexical items and then find the percentage of verbs from the sum total of all lexical items i.e. the number of verbs divided by the total number of lexical items multiplied by hundred.

(113) $\dfrac{\text{Verbs}}{\text{Total Number of Lexical Items}} \times \dfrac{100}{1}$

To find the percentage of nouns for each of the children, we counted the number of all the lexical items and then find the percentage of nouns from the sum total of all lexical items i.e. the number of nouns divided by the total number of lexical items multiplied by hundred.

(114) $\dfrac{\text{Nouns}}{\text{Total Number of Lexical Items}} \times \dfrac{100}{1}$

We did not just subtract the percentage of verbs from nouns or nouns from verbs because there are some other lexical items that make up the utterances of the children. Table 10 below shows the occurrence of nouns and verbs in the utterances of the children.

Table 10: Distribution of Nouns and Verbs in the Early Utterances of Damilare, Temiloluwa and Tola

Child	Damilare		Temiloluwa		Tola	
Age (in months)	Nouns	Verbs	Nouns	Verbs	Nouns	Verbs
16	45.8%	53%	34.04%	47.8%	36.8%	42.1%
17	45.4%	54%	46.2%	30.7%	27.8%	39.9%
18	45.3%	46.7%	34.6%	30.67%	44.4%	44.4%
19	35.04%	44.4%	48.3%	31.0%	33.3%	33.3%
20	41.3%	43.1%	46.7%	30.0%	47.1%	35.3%
21	48.6%	41.3%	42.9%	28.6%	39.3%	28.6%
22	49.3%	41.3%	41.1%	21.4%	22.2%	33.3
23	50.8%	47.7%	41.5%	27.6%	34.3%	28.4%

Looking at the distribution at sixteen (16) months of the children, verbs have higher percentages than nouns. For example, Damilare records 53% of verbs against 45.8% nouns. Temiloluwa records 47.8% verbs against 34.04% nouns, while the percentage of Tola's verbs is 42.1%, her nouns stood at 36.8%. This simply shows that verbs are used more than nouns by the Yoruba child at this stage. However, with further development, nouns overtake verbs. Figure 10 displays the distribution of Nouns and Verbs in the speech of Damilare:
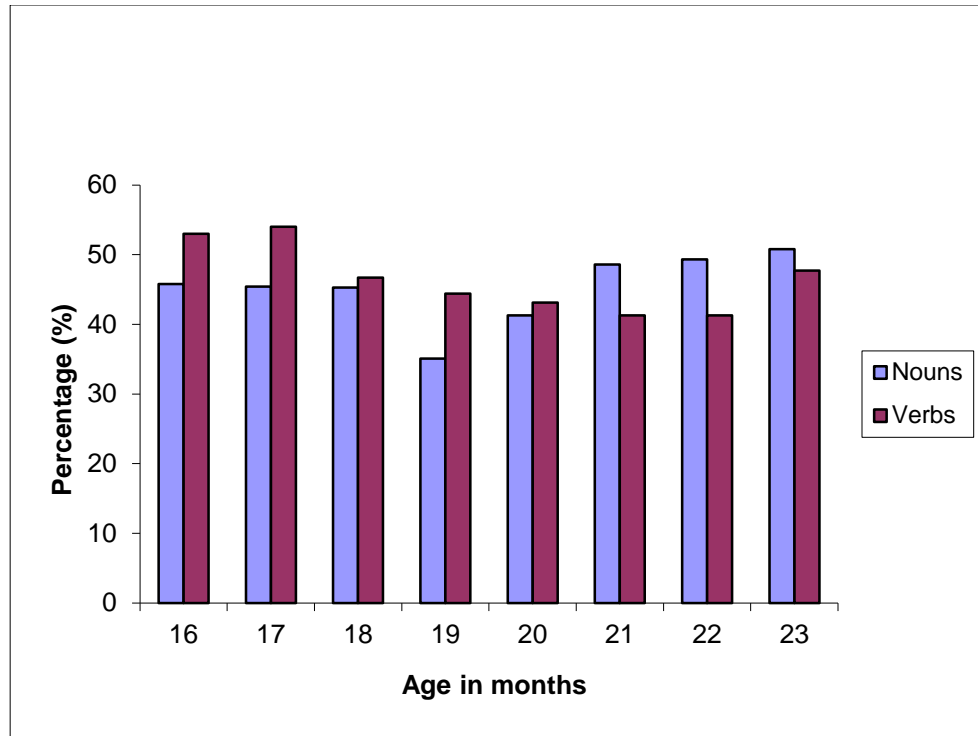
Figure 10: Distribution of Nouns and Verbs in the Early Utterances of Damilare

By twenty-one (21) months, Damilare's nouns stand at 48.6% as against 41.3% of verbs.

By twenty-three (23) months, Damilare's nouns have moved to 50.8% while his verbs

stand 47.7%. At the same age (23 months), Temiloluwa's nouns stand at 41.5% and the

verb at 27.6%, while the percentage of Tola's nouns is 34.3%, her verbs stand at 28.4%.

The reason for this change is because at this stage, which is from the two-word stage to

the multi-word stage, the sentence of the Yoruba child just like that of the adult has only

one verb while there may be more than a noun in an utterance, depending on the

realization of arguments.

The statistical representation above shows the growth and decline of some features. Figure (10) above shows a higher usage of verbs between sixteen (16) months and twenty (20) months while from twenty-one (21) months upwards, the usage of nouns is higher. It shows that the children keep processing the input data available to them in order for them to arrive at adult linguistic competence.

We also discover that as the children grow there is a decrease in the number of utterances without verbs. This shows that their language is developing normally. Evidence from our cross-sectional data shows that the Yoruba children from thirty-six (36) to sixty (60) months have acquired a lot of language skills and can use language very productively. Every lexical category is represented fairly in their speech. In fact at this stage, they have a proficiency that is close to that of the adult.

4.2 Null arguments in the Yoruba Child's Early Speech

This section presents findings on acquisition of null arguments in the early speech of the Yoruba child. We make the following predictions following discoveries from our data:

a. The Yoruba child acquires null arguments during early language development.

b. Null subjects are more prominent than null objects in the early utterance of the Yoruba child.

c. The rate of usage of null subjects decreases with language development and a co-relational increase in overt subjects in the child Yoruba.

d. Argument ellipses are not dependent on finiteness.

For the purpose of this study, 'argument' refers to only nominals. And we are also concerned with SUBJECTS, DIRECT OBJECTS AND INDIRECT OBJECTS respectively. Data are based on quantitative and syntactic analyses performed on the longitudinal and cross-sectional data.

4.2.1   Null Arguments

Across languages, children miss out arguments at the initial stage of acquiring their language. The argument that is missed could be the subject, direct object or indirect object. It is assumed that missing subjects are more readily licensed than missing objects (Hyams 1983, 1986; Wang, Lillo-Martin, Best & Levitt 1992, Hyams & Wexler 1993, Uziel-Karl 2001). In Yoruba, argument positions must be filled. This means that a transitive verb for example, must have two arguments, the subject which is the external argument and the direct object; the internal argument. These are canonical argument positions. These are however missing in the early speech of the Yoruba child.

In order to calculate the percentage of null arguments, we focused on contexts where obligatory argments are null. We calculated the amount of null arguments out of the total number of obligatory contexts rather than out of the total number of verbs in the data. In our calculation, we took cognisance of intransitive verbs, imperative and vocative constructions. Table 11 provides information about null arguments in the longitudinal speech of Damilare, Temiloluwa and Tola.

**Table 11: Null NPs in the Yoruba Child: Longitudinal Data from Three
              Children**

Child	Age (in months)	% of Null Subjects	% of Null Objects
Damilare	17	93%	38.5%
	18	94.4%	0%
	19	94.3%	1.9%
	20	87.1%	0%
	21	23.9%	0%
	22	34.5%	0%
	23	31.7%	0%
Temiloluwa	17	36.1%	11.2%
	18	13.6%	0%
	19	12.5%	0%
	20	7.14%	0%
	21	0%	0%
	22	0%	0%
	23	0%	0%
Tola	17	66.7%	33.5%
	18	25%	33.3%
	19	22%	0%
	20	20%	0%
	21	14.8%	0%
	22	0%	0%
	23	0%	05%

The findings in Table 11 show the preponderance of null subjects at the early stage
of the children's language acquisition, ranging from 93% to 36%. The incidence of null
objects as indicated in the data and represented in the table does not show any regular
pattern. The children show a minimal percentage of object drop as seen in figure 11
below:
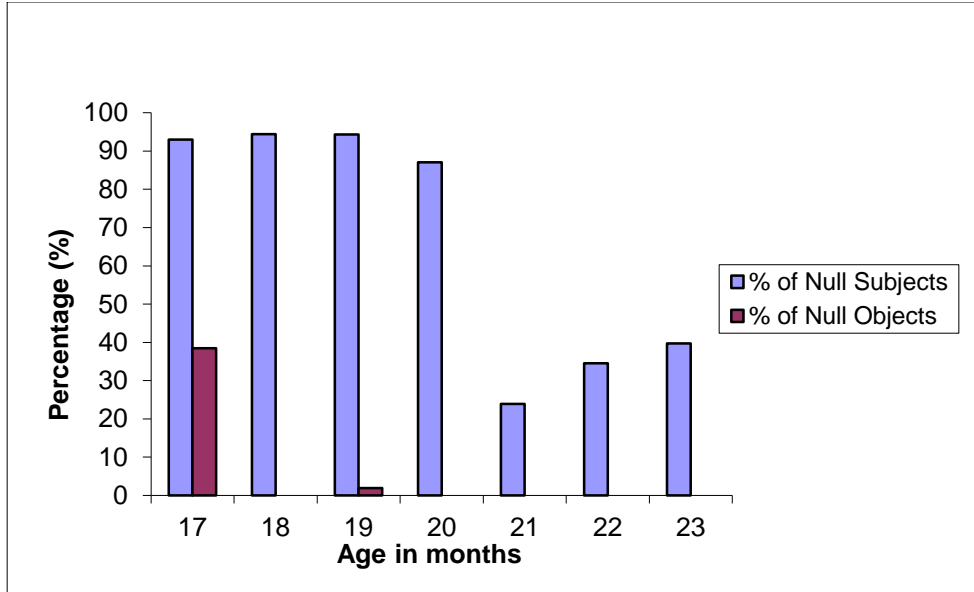
Figure 11: Null NPs in the Utterances of Damilare

In order to have a clear understanding of the phenomenon, we present the following data

from Damilare, Temiloluwa and Tola.

(115) a. sí i mọ́to   Damilare 18 months
           open it car
           'Open the car.'

       b. gbé e   Damilare 18 months
           carry it
           'Carry it.'

       c. sùn   Damilare 18 months
           Sleep
           'I want to sleep.'

       d. tò̩   Damilare 18 months
           urinate
           'I want to urinate.'

       e. jẹ isu   Damilare 18 months
           eat yam
           'I want to eat yam.'

f. fún mi   Temiloluwa 18 months
    give me
    'Give it to me.'

g. wẹ̀   Temiloluwa 18 months
    bathe
    'I want to bathe.'

h. subú   Temiloluwa 18 months
    Fall down
    'I fell down.'

i. wò ó   Temiloluwa 18 months
    Look it
    'look at it.'

j. jòkó   Tola 18 months
    Sit down
    'sit down.'

From the examples above, we see that the children have a high percentage of

subject elision. Radford (2000) assumes that children freely allow arguments and

predicates to be null if they are *given information*. He claims that in a perfect language,

lexical items could have a null PF-spell-out if their content can be pragmatically

determined. Ellipsis of phrases, the gapping of heads and the zeroing of arguments are

instances of null PF-spell-out in adult language. This is however not permitted in Yoruba

as the language does not permit null arguments. The children's use of null arguments

characterizes a case of null PFspell-out. They take the missing subjects as *given*

information. When we consider the following example from Damilare

(116) sí i mọ́to   Damilare 18 months
       open it car
       'open the car.'

It seems that he takes the subject *daddy* as *given*. The discourse involved him and his father. He gave the car key to him and asked him to open the door of the car. There are also instances where the predicate is taken as given. Those are instances when there are Noun-Noun collocations. The following examples are taking from Damilare' transcripts.

(117) a.   mọ́mì bọọl   18 months
             mummy ball
             'Mummy give me the ball.'

      b.   mọ́mì bag   20months
             mummy bag
             'Muumy see your bag.'

      c.   màmá aṣọ   20 months
             mummy clothe
             'Mummy wear my clothe for me.'

      d.   Bàbá mọ́tò   21 months
             Daddy car
             'Daddy has gone to the car.'

      e.   Ifeoma yoyoyo fridge   21 months
             Ifeoma youghourt frideg
             'Ifeoma put the youghourt in the fridge.'

When Damilare at 18 months says *mọ́mì bọọl* 'mummy ball', he treats the verbs *fún* 'give' as *given* and not needing any spell-out, hence the null appearance. According to Radford (2000), what Allison, his subject has failed to learn is that English imposes syntactic constraints on zeroing. This is also true of Yoruba. There are syntactic constraints that make it impossible to have a sentence without a subject or a sentence without a predicate.

We assume that because the subject is higher up in the hierarchy which makes it more prominent than others, the child assumes it is a *given information* shared by him and the listener and so it is elided (left out) but it is there underlyingly. This makes it covert argument rather than null. It is therefore not absent, only not realized phonetically, it is a null PF-spellout. .

4.2.2   Null Subjects and Null Objects

The subject and object positions are canonical argument positions that must be filled in Yoruba language. As observed above, children miss out arguments at the initial state in the course of acquiring the argument structure of their language. We however discover that there are more null subjects than null objects in the speech of the Yoruba child. Table 12 answers the question of whether null subjects are more prominent than null objects in the early speech of the Yoruba child.

Table 12: Null Subjects and Null Objects

Child	Age (in months)	% of Null Subjects	% of Null Objects
Damilare	17	93%	38.5%
	18	94.4%	0%
	19	94.3%	1.9%
	20	87.1%	0%
	21	23.9%	0%
	22	34.5%	0%
	23	31.7%	0%
Temiloluwa	17	36.1%	11.2%
	18	13.6%	0%
	19	12.5%	0%
	20	7.14%	0%
	21	0%	0%
	22	0%	0%
	23	0%	0%
Tola	17	66.7%	33.5%
	18	25%	33.3%
	19	22%	0%
	20	20%	0%
	21	14.8%	0%
	22	0%	0%
	23	0%	05%

Taking a look at the speech of the three children, we discover that Damilare at seventeen (17) months records 93% of null subjects while null objects was 38.5%. Temiloluwa at seventeen (17) months records 36.1% of null subjects and 11.2% of null objects while Tola's null subjects at seventeen (17) is 66.7%, her null objects stood at 33.5%. From the foregoing, we can say that null subjects are more prominent than null objects in the early speech of Yoruba children. Figure 12 below further illustrates this fact.
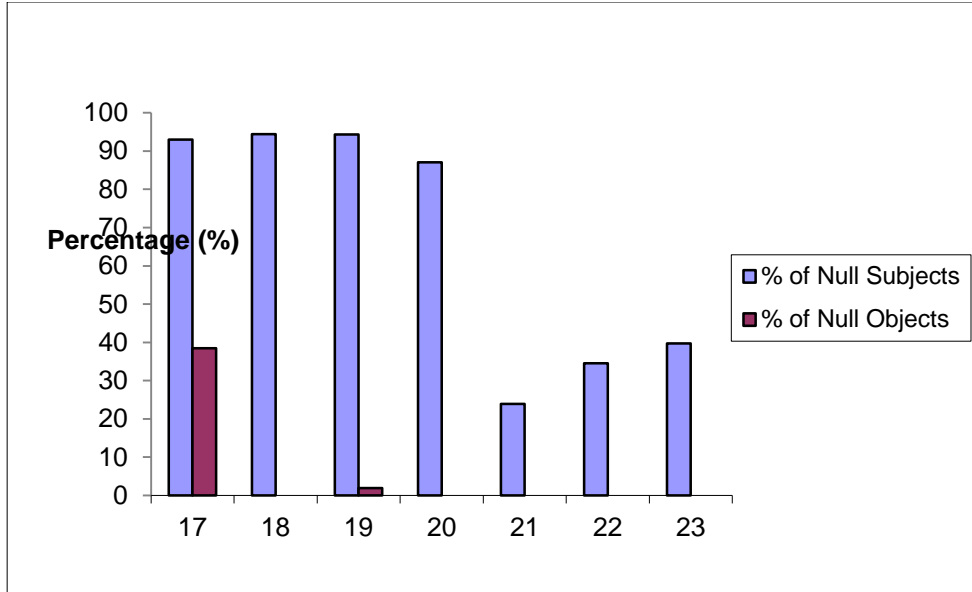
Figure 12: Null NPs in the Utterances of Damilare

We can see from the chart above that null subjects are more prominent in the speech of Damilare than null objects and also that null subjects decrease with age just as null objects.

4.2.3   Null Subjects versus Overt Subjects

At the initial stage, there is a high level of null subjects. With time, the amount of overt subjects will increase with a co relational decrease in null subjects. Table 13 shows that null subjects gradually give way to overt subjects while a graphic representation of this information is given in Figure 13.

Table 13: Distribution of Null and Overt Subject NPs

Child	Age (in months)	% of Null Subjects	% of Overt Subjects
Damilare	17	93%	7%
	18	94.4%	5.6%
	19	94.3%	5.7%
	20	87.1%	12.9%
	21	23.9%	76.1%
	22	34.5%	65.5%
	23	31.7%	68.3%
Temiloluwa	17	36.1%	63.9%
	18	13.6%	86.4%
	19	12.5%	87.5%
	20	7.14%	92.9%
	21	0%	100%
	22	0%	100%
	23	0%	100%
Tola	17	66.7%	33.3%
	18	25%	75%
	19	22%	78%
	20	20%	80%
	21	14.8%	85.2%
	22	0%	100%
	23	0%	100%
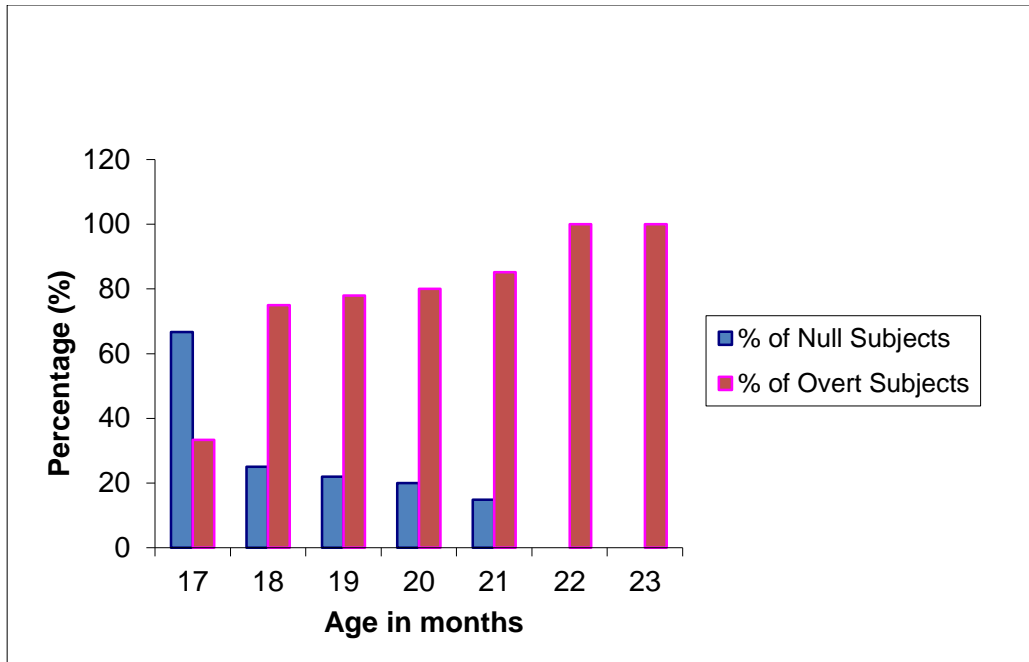
Figure 13: Distribution of Null and Overt Subject in the Early Utterances of Tola

Table 13 and Figure 13 show a gradual decrease in null subjects and a gradual increase in

overt subjects. For example, at seventeen (17) Tola records 66.7% null subjects and

33.3% of overt subject while at twenty-one (21) months, null subjects have dropped to

14.8%and overt subjects increased to 85.2% and by twenty-three (23) there is no record

of null subject as it has dropped to 0% and overt subjects have taken over with 100%.

Figure 13 above indicates that Tola's null subjects begin at 66.7% and gradually move to

0% while her overt subjects begin at 33.3% and move to the highest level of 100%. The

line shows an increase and a decrease in null and overt subjects respectively. From this

analysis, it is very clear that as the language of the Yoruba child develops, null subjects

give way for overt subjects.

At the initial stage, the one word stage, the child uses only verbal items which are regarded as action words and nominal items. By the time the child moves to the two-word stage, the vocabulary has been expanded widely. At that stage, he begins to combine words. Other lexical items have also entered the lexicon. There is however the preponderance of missing arguments, especially subjects in their speech. This gives credence to the earlier claim made that missing subjects are more readily licensed than missing objects. Examples (118), (119) and (120) illustrate these in the speech of the three longitudinal children.

(118)   a. jẹ isu
            eat yam
            'I want to eat yam.'

        b. kpa á
            kill it
            'I killed it.'

        c. sí i
            open it
            'Mummy opened it.'
                                Damilare 18 moths

(119)   a. fẹ tọ
            Want urinate
            'Want to urinate'

        b. gbe ẹsẹ
            carry leg
            'carry your leg'

        c. sá lo
            Run go
            'Ran away'   Temiloluwa 18 months

(120) a. gbé e
           carry it
           'I carried it.'

       b.   jẹ isu
            eat yam
            'I want to eat yam.'

       c. sùn
           Sleep
           'I want to sleep.'
                          Tola 18 months

The speech of the children represents a simple case of merging especially for transitive

verbs as intransitive verbs would occur without any complement. The diagrams in (121)

and (122) below illustrate this.

(121)

```
                        VP
                 _____/  _____
               DP                 Vᴵ
               |              ____/  \____
               Ø             V            DP
                             |            |
                            jẹ           isu
                            eat          yam
                         "Ate yam"
```

(122)

```
                        VP
                 _____/  _____
               DP                 Vᴵ
               |                   |
               Ø                   V
                                   |
                                  sùn
                                  Sleep
```
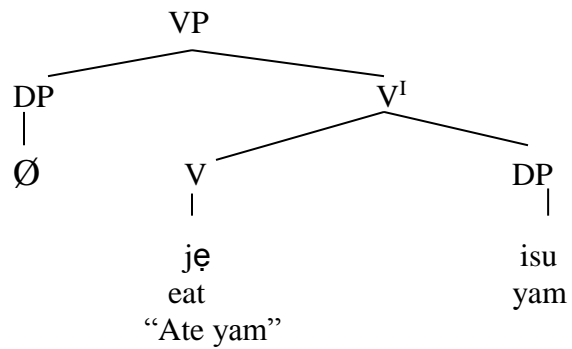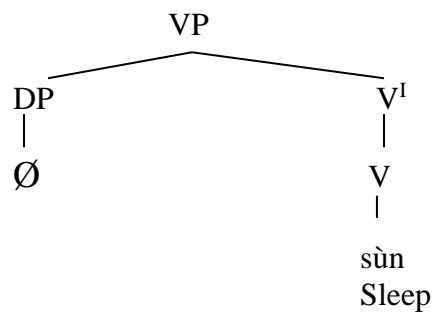
The tree diagram in (121) represents the structure of a transitive verb while (122) represents the structure of an intransitive verb. We could safely say that at this stage, the speech of the child is yet to project to a full clause as all tense and agreement are absent. Deprez and Pierce (1993) claim that the grammar of children differs from that of the adult not because they lack functional categories or movement but because they allow the subject NP to remain in the VP.

Works on missing arguments in the generative framework have characterised argument ellipsis using different parameters. (Hyams 1983, 1986, 1992, 1994) sees missing subjects in terms of the pro-drop parameter. Radford (2000) sees null arguments as null nouns which are given a null spell-out by virtue of representing *given information*. The Prominence theory also assumes that it is easier for the subject to be missing because it is the external argument which is higher up on the scale and therefore more prominent than other arguments

We discover in this study that null arguments in the early speech of the Yoruba child arise due to different reasons. We are constrained to examine only the generative syntactic reasons. We believe that missing arguments are syntactically active and represented even though they are phonetically null; silent and invisible (cf. Balogh and Grodzinky, 2000). This means that they are implicit arguments; inherent and unspoken.

4.2.4   Finiteness and Null Arguments

On the relationship between Finiteness and Null Arguments, we predict that there is no direct relationship between the acquisition of finiteness and the end of null

arguments. There is ample cross-linguistic evidence to show that early child grammars are devoid of TENSE (Brown 1973, Hyams 1986, Aldridge 1989 and Radford 1991). We discovered from the data of the children that subjects of finite sentences are hardly omitted. This is shown in Table 14.

Table 14: Overt Subjects and Finiteness

Damilare	Finite Clauses	Non-Finite Clauses
21-23 months		
Overt subject	96.3%	59.2%
Null subject	3.75%	40.8%
Temiloluwa		
17-21 months		
Overt subject	100%	66.7%
Null subject	0%	33.3%
Tola		
17-21 months		
Overt subject	100%	50%
Null subject	0%	50%

From the table above and as stated earlier, we deduce that most utterances with modals which we classify as finite always have overt subjects. This does not necessarily mean that the acquisition of finiteness signifies the end of null arguments as most non-finite clauses in the child's utterances come with null subjects. From the one-word stage to the two-word stage, the children are yet to acquire finiteness.

(123) a.   gbé e   Damilare 18 months
             carry it
             'Mummy carry me.'

       b.   màmá sùn   Damilare 18 months
             mummy sleep
             'Mummy is sleeping.'

c. màmá nà á   Damilare 18 months
mummy beat it
'Mummy beat me.'

d. fún mi   Temiloluwa   18 months
give me
'Give it to me.'

e. je isu   Tola 18 months
eat yam
'I want to eat yam.'

Assuming that modals are base-generated in T in adult Yoruba, we believe that once the children have acquired modals, they have started the process of acquisition of finiteness in the language. By eighteen months, Temiloluwa and Tola have started to acquire finiteness as evidenced with the use of *tí* 'have', *ń* 'PROG'in their speech. Finiteness also began to appear in Damilare' speech at twenty months. We have the following examples from the children:

(124) a. Ó ti yà igbẹ́   Temiloluwa 18 months
She has poupou
'She has poupoued.'

b. Ó ti tọ̀ sí ara   Temiloluwa 18 months
She has urinate to body
'She has urinated in her body.'

c. Temi ti n bọ   Temiloluwa 18 months
Temi be PROG come
'Temi is coming.'

d. Kíkí ti sùn   Temiloluwa 20 months
Kiki has sleep
'Kiki has slept.'

e.   ẹsẹ̀ ti n dùn mi   Tola   18 months
       leg be PROG pain me
       'My leg is beginning to pain me.'

f.   Temi ti sùn   Tola 19 months
       Temi has sleep
       'Temi has slept.'

g.   anti Ké̩mi ti gbà lọ́wọ́ mi
       anti Kemi has take from hand my
       'Aunty Kemi has taken it from me.'

h.   daddy ti lọ   Damilare 20 months
       daddy has go
       'Daddy has gone.'

i.   biscuit ti tán   Damilare 20 months
       biscuit has finish
       'Biscuit has finished.'

j.   bàbá ti dé   Damilare 22 months
       daddy has come
       'Daddy has come.'

k.   Ifeoma ti lọ school   Damilare 22 months
       Ifeoma has go school
       'Ifeoma has gone to school.'

It should be noted that Yoruba does not really mark finiteness overtly. This means that along with this overt marking with aspectuals, other utterances with no overt marking are also finite. The following examples are taken from Temiloluwa at twenty-one (21) months:

(125) a.   ó gbà lọ́wọ́ mi
              she take from hand my
              'She took it from me.'

     b.   ó gbé omi sáré
            He carry water run
            'He carried the water and ran.'

     c.   mo fẹ́ lọ sùn
            I want go sleep
            'I want to go and sleep.'

Over time, the usage of finite sentences becomes very frequent. We note that most of the finite utterances of the children have subjects. The finite utterances in Damilare's speech that lacks subjects are used like imperatives. For example:

    (126) a.   ti tán   Damilare 21 months
               has finish
               'It has finished.'

         b.   ti tó   Damilare 23 months
               has enough
               'It is enough.'

The absence of tense allows null subjects but does not disallow overt subject. This means that the beginning of the acquisition of finiteness does not signify the end of null subjects. The reason for this is that at the same time the children use overt subjects with finite sentences, they also use null subjects with non-tensed sentences. This stage signifies a reduction and eventual take-over of overt subjects from null subjects. At this point, it is clear that the children have acquired finiteness. At this stage in the syntax of the children, the subject that hitherto had remained in spec-VP before the acquisition of finiteness has now moved to spec-TP as illustrated in (127).

(127)

```
                    TP
                   /  \
                  /    \
                 /      \
               DP        T¹
               |        /  \
               Ó      T     VP
                      |    /  \
                     ti   D    V¹
                      |   |   /  \
                      |   t  V    DP
                      |      |    |
                      |     yà   igbẹ́
               She         has   poupou
```

'She has poupoued.'
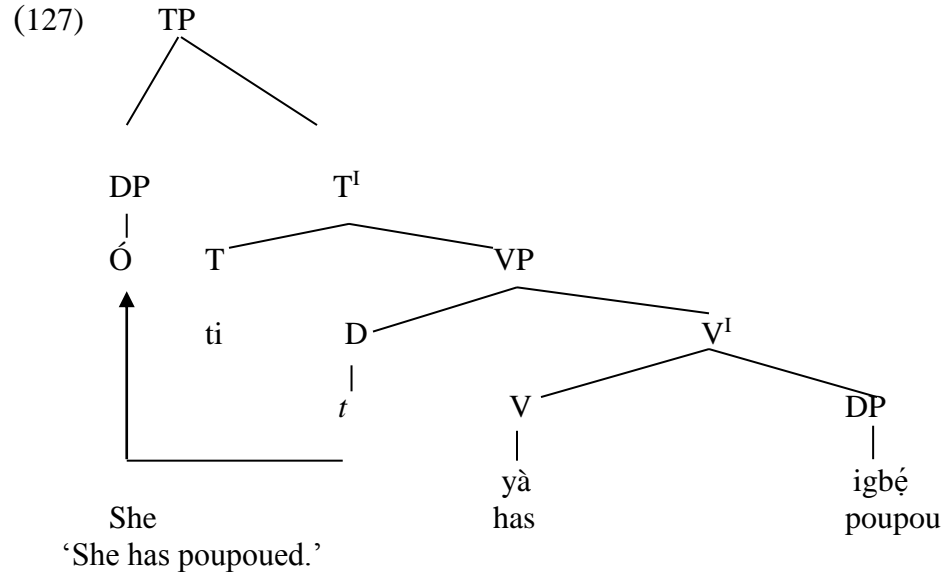
We can see from the diagram above that the subject *ó* 'she' originated from the spec-VP which is a position of merger and where it is theta-marked and moves to spec-TP where it can have its case checked. It is a case of internal movement, a situation where a constituenet moves because it has to move. We also assume that at this stage, the case feature that was uninterpretable has become interpretable to the children.

By the time the Yoruba child is three years old, null arguments have given way to overt arguments in his utterances. The implication of this is that, all the childrens' sentences are finite. This is in consonance with previous findings that children have acquired finiteness from age two (Aldrige 1989, Radford 1990, 1991). There is hardly any sentence in our cross-sectional data that has null arguments. Consider the following data from the three year old children.

(128) a.   Ó ń gun iyan
              She PROG pound yam
              'She is pounding yam.'

b.   Ó ń ya foto
        He PROG snap picture
        'He is snapping pictures.'

c.   Ó ń gun abẹrẹ
        She PROG prick injection
        'She is giving injection.'

d.   Wọn n wa kẹkẹ
        They PROG ride bicycle
        'They are riding bicycle.'

e.   Bebi n sùn
        Baby PROG sleep
        'Baby is sleeping.'

We believe that language acquisition involves *incremental feature-building* which has a direct relationship with cognitive maturation. By comparing the children at different ages, we can see that as they mature cognitively, they are able to make use of more complex features. This also gives credence to the fact that with age and further cognitive development, null arguments disappear in the utterance of the Yoruba child while overt arguments take over.

4.3 Transitive and Intransitive Verbs of the Yoruba Child

Yoruba verbs can be broadly divided into transitive and intransitive verbs. Transitive verbs require two arguments; the subject and the object of the verb while intransitive verb has only one argument, the subject. This means that they have different argument structures. Some previous studies claim that intransitive verbs are easier to produce thereby easily acquired because they do not require direct object argument

(Valian 1991) while some believe that the transitive verb is easier to produce than intransitive verbs (Tomasello and Brooks 1998).

Choi (1999) discovers that Korean children use more of transitive verbs at the early stage while Fukuda (2005) finds that Japanese children's early verbs are more of intransitive verbs. Fukuda and Choi (2006) in their own investigation conclude that both Korean and Japanese children produce more intransitive verbs. They suggest that children use more intransitives because it encodes a single participant. This section seeks to know the order of acquisition of transitive and intransitive verbs and whether one is more basic than the other. The table below shows the distribution of the first set of twenty verbs in the early speech of Damilare, Temiloluwa and Tola.

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Table 15: First Set of Verbs in the Early Speech of Damilare, Temiloluwa and Tola

Lexeme	Gloss
jẹ	to eat
gbà	to take
nà	to beat him
pọ̀n	to back (baby)
sí	to open
gbé	to carry
sùn	to sleep
tọ̀	to urinate
wẹ̀	to bathe
wá	to come
yọ	to remove
mu	to drink
yà	to excrete
jòkó	to sit
dìde	to stand
jó	to dance
fọ́	to break

The verbs in purple are transitive verbs while those in lemon green are intransitive verbs. We can see that the first three verbs are transitive verbs. However, there are eleven intransitive verbs as aginst nine transitive verbs in that distribution. Table 16 shows in percentage, the distribution of order of acquisition of transitive and intransitive verbs by the three children.

Table 16: Transitive and Intransitive Verbs in the Early Sentences of the Yoruba Child

Child	Age	%of Transitive Verbs	% of Intransitive Verbs
Damilare	17	57.7%	38.5%
	18	66.6%	27.8%
	19	65.3%	26.4%
	20	67.3%	29.7%
	21	50%	33.7%
	22	57.1%	42.9%
	23	58.6%	41.4
Temiloluwa	17	33.3%	52.8
	18	59.1%	31.8%
	19	87.5%	25%
	20	78.6%	28.6%
	21	78.6%	21.4%
	22	81.8%	18.2%
	23	72%	28%
Tola	17	50%	33.3%
	18	50%	34%
	19	62.5%	37.5%
	20	60%	40%
	21	85.7%	14.3%
	22	75%	25%
	23	70%	30%

The results from the table show a higher percentage of usage of transitive verbs than intransitive verbs. At seventeen (17) months, Damilare records 57.7% transitive verbs against 38.5% intransitive verbs while Tola records 50% transitive verbs and 33.3% intransitive verbs. Temiloluwa, however records 33.3% transitive verbs and 52.8% intransitive verbs. This is the only time that intransitive verbs are higher than transitive verbs in her utterances. At twenty-three (23) months, Damilare has 58.6% transitive verbs

and 41.4% intransitive verbs; Temilouwa has 72% transitive verbs and 28% intransitive

verbs while Tola records 70% transitive and 30% intransitive verbs respectively. This is

further illustrated in figure 14 below.
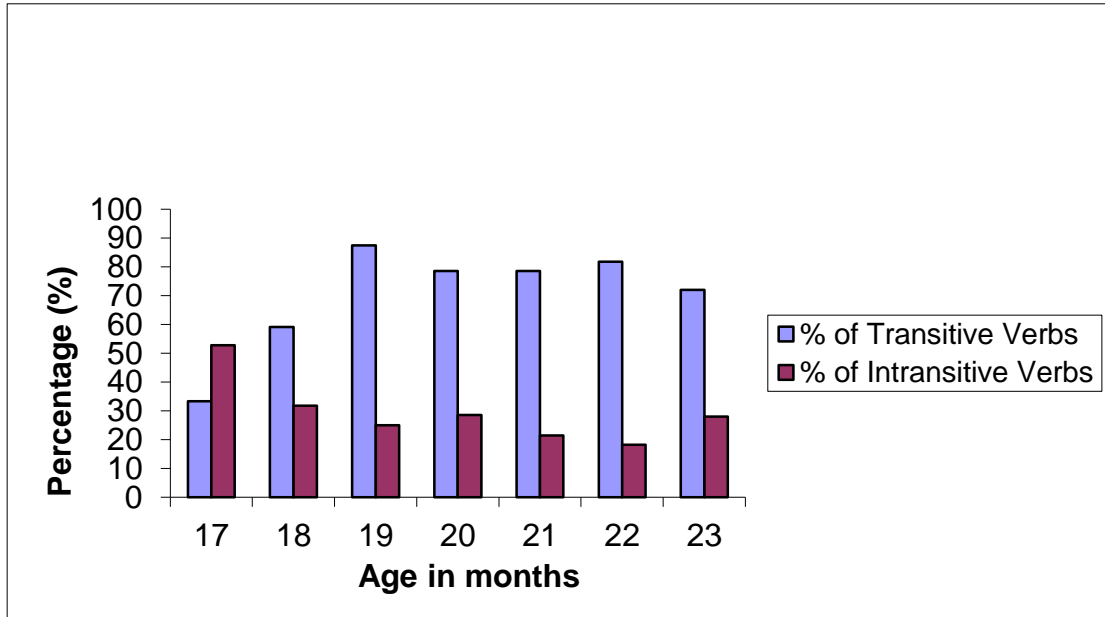
Figure 14: Transitive and Intransitive Verbs in the Early Sentences of Temiloluwa

From the distribution above, we could see that there is a good representation of the two

types of verbs at all stages of acquisition. We cannot therefore categorically say that

transitive verbs are acquired before intransitive verbs or vice versa. We can say that these

early verbs are those related to actions and events that the children or those around them

are involved in.

4.4   Order of Acquisition of Verb Argument Structure

The acquisition of verbs requires that children engage in both a semantic and a

syntactic analysis of forms used in discourse (Nelson, 1995:223). Learning verbs is

learning the structure of language (Scherf 2005). This section is aimed at examining the make-up of the early verb lexicon of the Yoruba child. What type of verbs does the Yoruba child initially acquire? What motivates the use of particular verbs at the initial point of acquisition? We use the classification of Yoruba verbs earlier discussed to analyse the type of verbs that the Yoruba child acquires. The verbs to be examined here are verbs with simple predication; transitive and intransitive.

4.4.1 Acquisition of Argument Structure of Verbs that opaquely Theta-mark the Object

The children in our study easily acquire the argument structure of verbs that opaquely theta-mark their objects. These verbs are transitive verbs with AGENT subjects and PATIENT/ THEME objects. At the one word stage when the children use null arguments, these verbs appear alone. With time, the children begin to use them with objects. It should be noted that object omission is not common in the language of the children acquiring Yoruba because the language does not license object omission. This phenomenon is unlike what happens in French. According to Gruter (2006:106) transitive sentences lacking an overt referential object occur at non-negligible rates in child French until age four and above. The following examples are taken from the utterances of the children from eighteen (18) months.

(129) a. gbà à
          'Take it'

      b. gbé e
          'Carry it'

c. jẹ isu
'Eat yam.'

d. mu omi
'Drink water'

e. mu omi tutu
drink water cold
'Drink cold water.'

At this stage, these verbs are used without subjects. However they all have objects which

they theta mark. Let us see the tree diagram of (129c) above given as (130) below:

(130)
```
              VP
             /  \
            /    \
          DP      VP
          |      /  \
          |     /    \
          Ø    V      DP
               |_____|
                THEME

              jẹ      isu
              eat     yam
            'Ate yam.'
```
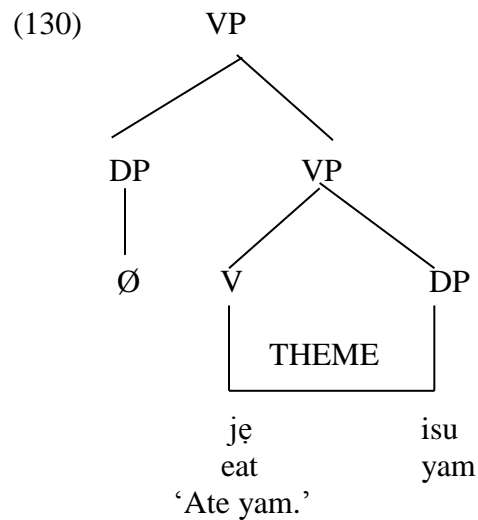
From our data, we discover that there are instances when the children use nouns in the

subject position. We however discover that these nouns are not subjects even though they

occupy the subject positions. They are vocatives. For example:

(131) a. mọ́mì, wọ asọ   Damilare, 20 months
      mummy wear clothe
      'Mummy, I want to wear my clothe.'

b. bàbá, mu omi   Damilare, 19 months
     daddy drink water
     'Daddy, I want to drink water.'

c. mọ́mì, jẹ ẹran   Damilare, 19 months
     mummy eat meat
     'Mummy', I want to eat meat.'

In these examples, the subjects are still missing. We have a situation whereby the child calls or addresses the person he wants to carry out the action for him. *mọ́mì* 'mummy' and *bàbá* 'daddy' are vocative expression. These NPs do not occupy the Spec of VP neither can they be moved to the position of the Spec of TP.

At the multi-word stage, subjects begin to appear in the utterances of the three children. For example:

(132) a. Dàmọ́lá kọ one   Damilare, 27 months
        Damola write one
        'Damola wrote one.'

    b. Mo ti yàgbẹ́   Temiloluwa, 19months
        I have poupou
        'I have poupoued.'

    c. mo fẹ́ mu ọsàn   Temiloluwa, 20 months
        I want drink orange
        'I want to take orange.'

    d. Ó ti kà ìwé   Tola, 21 months
        You have read book
        'You have read the book.'

    e. Ó pe mọ́mì   Tola, 23 months
        he call mummy
        'He called mummy.'

From the above data, we can see that the children acquire the argument structure of these verbs at an early stage. These sentences contain simple verb phrases headed by a verb with a single complement (Radford 2004:336). Example (132a) above is given in the tree diagram below showing the derivation of the sentence.

(133)

```
                    TP
                  /    \
                /        \
              /            \
           DP               T^I
           |               /    \
        Dàmọ́lá    T       /        VP
              ↑      ____/        /    \
              |     /           DP       V^I
              |    /            |       /    \
              |_____     t      V       DP
                                      |        |
                                      kọ      one
        Damola                      write     one
        'Damola wrote one.'
```
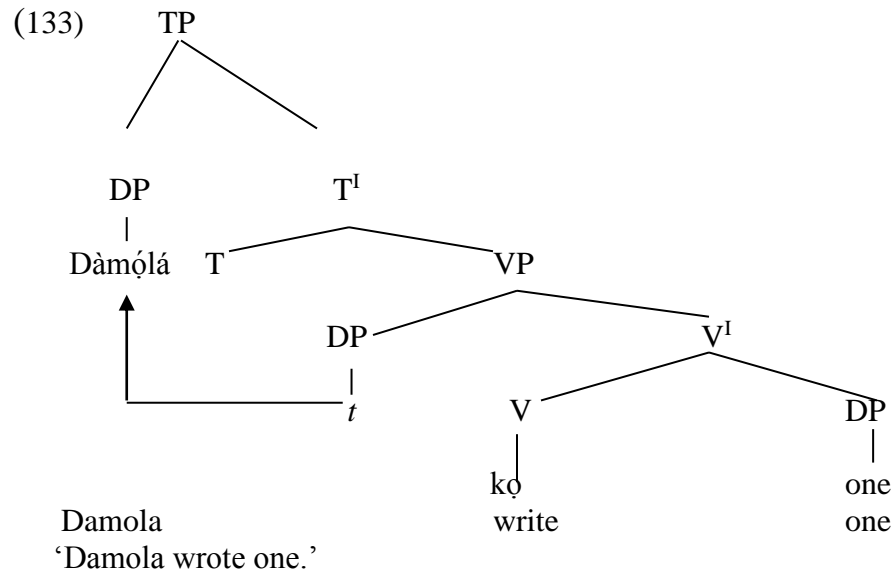
However, there are instances when the children still have a mix-up of the arguments. Let us consider the following examples from Damilare at twenty-four (24) months.

(134) a.   Lará pè é mọ́mì
               Lara call her mummy
               'Mummy is calling Lara.'

       b.   Mótò umbrella mu
               Car umbrella take
               'Take the umbrella from the car.'

       c.   Mọ́mì mú u mótò umbrella
               Mummy take it car umbrella
               'Mummy took the umbrella from the car.'

> d. ẹ̀fọn Dàmọ́lá jẹ ẹ́
>   mosquito Damola eat it
>   'Mosquito bit Damola.'

Looking at (134a) above, we can see that there is a rearrangement of the arguments. *Lara* is the PATIENT while *mọ̀mì* is the AGENT. AGENTS have always been equated with the subject position but in this case, it is in the object position. The same is the case in the other two examples. *Umbrella* is supposed to be the direct object of the verb *mú* 'take' but it is not placed in those positions. This is not a case of movement as this type of verbs opaquely theta-mark their objects and can only be moved to an A-position. In (134c) above, there is a juxtaposition of the direct and indirect object position. These examples show us that children acquiring language are constantly processing the data at their disposal. This shows that they are active participants and their language improves as they develop and mature cognitively.

4.4.2 Acquisition of Argument Structure of Verbs that Anti-causativize without New Object

These are unaccuasative verbs. The verbs that anti-causativize without new object only have an argument; the subject. This subject is however not the logical subject. There exists cross-linguistic evidence that shows that children begin to use unaccusative before they are two (Birger 2008, Friedman 2007, Lorusso, Caprin and Guasti 2005, Tomasello 1992, Pierce 1989). The children in our study however, began to use these verbs shortly after their second year birthday. We present the following data from their transcripts.

(135) a.   glasses ti fọ́   25 months
               glasses has break
               'glasses have broken.'

       b.   Bàbá, globe ti fọ́   25 months
               daddy globe has break
               'Daddy the globe has broken.'

       c.   globe fọ́   25 months
               globe break
               'globe is broken.'

       d.   Ó fọ́   26 months
               It break
               'It is broken'

       e.   Ó ti fọ́   26 months
               It has break
               'It has broken.'

       f.   biscuit rún   27 months
               biscuit break
               'The biscuit is broken.'

       g.   *biscuit fọ́   25 months
               biscuit break
               'Biscuit is broken.'

The subjects in the examples above are assumed to occupy the object position in the

original verb phrases as shown in the tree diagram in (136):

(136)

```
                TP
              /    \
            DP      T'
            |      /  \
         glasses  T    VP
                  |   /   \
                  |  DP    V'
                  |  |    /  \
                  ti e   V    DP
                         |     |
                         fǫ  glasses
```
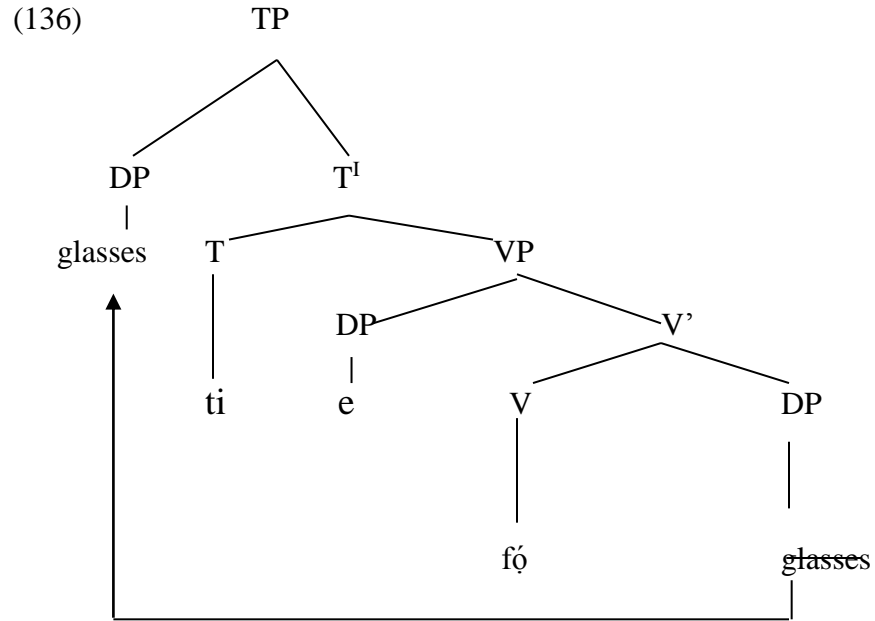
Evidence from the children show that the argument structure of these verbs is not acquired early. Baker's (1988) UTAH confirms the fact that the logical object occupies the subject position but it still maintains its theta role. The example phrase-marked above would have the following structure in (137):

(137)

```
           TP
          /  \
        DP    T'
             /  \
            T    VP
            |   /   \
            ti DP    V'
               |    /  \
               e   V    DP
                   |     |
                  fǫ   glasses
                 break  glasses
```

'NP_e break glasses
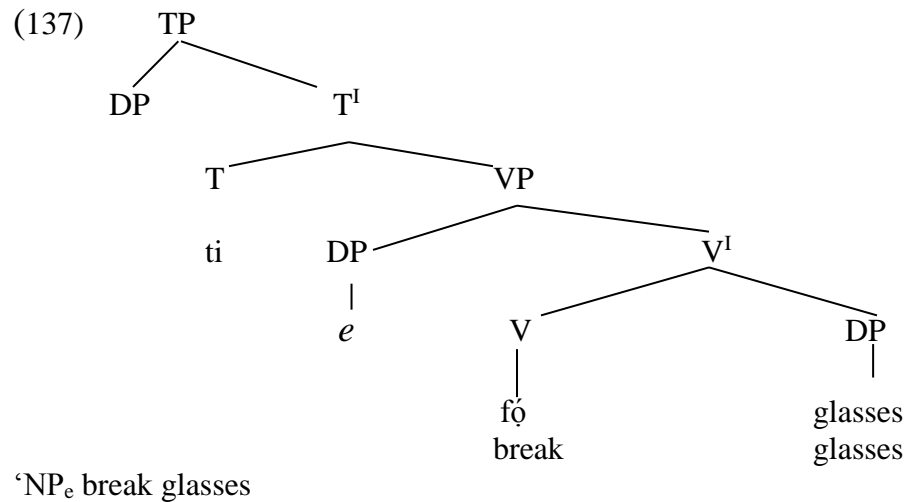
We can see from the diagram above that the object is still in its logical position, as complement of the verb. We can also see that the subject position is base-generated empty. It is this position that the object will move into to have its case checked.

4.4.3 Acquisition of Argument Structure of Adjectivisable Verbs

These are verbs that also function as adjectives. Adjectivisable verbs tell us more about the quality of the subject. The Yoruba child begins to use adjectivisable verbs at an early stage, however, evidence from our longitudinal data shows that adjectivisable verbs do not form one of the first set of verbs acquired by Yoruba children. Before a child can use an adjectivisable verb, he must have reached the cognitive stage where he can distinguish, judge and probably place values on some things either animate or concepts.

The first adjectivisable verb recorded in the utterances of Damilare is *gbóná* 'hot' at nineteen (19) months. He has been exposed to this verb right from time but he referred to it as jóojóo. We deduced that the first sets of adjectivisable verbs the children acquire are the ones that have to do with what they can feel, touch or taste. These verbs include *gbóná* 'hot' *tutu* 'cold', and *dùn* 'sweet/ delicious.

As mentioned earlier, adjectivisable verbs are one-place predicates taking only external arguments. The following utterances exhibiting the use of adjectivisable verbs were recorded for the children.

(138) a. gbóná   19 months
           hot
           'It is hot.'

b.   tutù   19 months
       cold
       'It is cold

c.   dùn
       Sweet
       'It is sweet.'   23 months

d.   dùn   24 months
       delicious
       'It is delicious.'

The adjectivisable verbs in (138) above are used without their arguments. This is taking into consideration the fact that null arguments form part of the properties of early child language. The structure of the utterance is given in (139).

(139)   VP
                          ╱   ╲
                     DP   V
                     │   │
                     │   │
                     Ø   gbóná
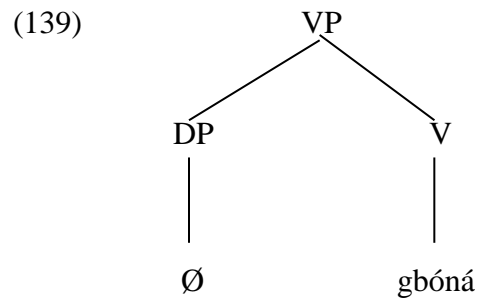
The diagram above shows that nothing has merged with the adjectivisable verb as the position of the external argument is null. Adjectivisable verbs cannot be used in an imperative construction. This means that any use of these verbs without the subject is purely a case of a sentence with a null subject and not an imperative construction. The next sets of adjectivisable constructions are illustrated in the following examples in (140)

(140) a. gbóná tîî   19 months
           hot tea
           'Tea is hot.'

b. gbóná omi   19 months
   hot water
   'The water is hot.'

In these examples, *gbóná* 'hot' is used but this time with internal arguments rather than

external arguments which adjectivisable verbs are presumed not to have.

(141) a.

```
        VP
       /  \
      V    DP
      |    |
    gbóná  tíì
    hot    tea
```
'Tea is hot.'

b.

```
        VP
       /  \
      V    DP
      |    |
    gbóná  omi
    hot    water
```
'(The) water is hot.'

At this time the children do not seem to know the difference between grammatical

relations. The most important thing is getting their message across. This is however in

consonance with *merge* which simply forms pair without imposing any restrictions on the

output order of the two elements that are merged. As discussed earlier, Merge is

formulated as:

    (142) Merge (a, ß):= [λ α ß]   (where λ is the label of the resulting tree)

At the initial stage there seems to be no hard and fast rule for the children, hence

structures like what we have above. This is formulated as

(143) [_{gbóná} *gbóná omi]*

where *a* is instantiated by the verb *gbóná* 'hot' and *ß* by *omi* 'water'. With time, the children began to use adjectivisable verbs with external argument. The number of adjectivisable verbs in their lexicon has also increased. The following is taken from Damilare's transcripts:

(144) a. mango dùn   23 months
       mango sweet
       '(The) mango is sweet.'

       b. àmàlà gbóná   24 months
       amala hot
       'Amala is hot.'

       c. mọ́mì omi tutu   24 months
       mummy water cold
       'Mummy the water is cold.'

       d. mọ́mì omi gbóná   24 months
       mummy water hot
       'Mummy the water is hot.'

       e. tíì gbóná   24 months
       tea hot
       'The tea is hot.'

       f. mọ́mì burú   24 months
       mummy wicked
       'Mummy is wicked.'

       g. ah mọ́mì burú eh   24 months
       ah mummy wicked eh
       'Ah Mummy is wicked eh

       h. aṣọ dòtí   26 months
       cloth dirty
       The cloth is dirty.'

The children's structure is beginning to approximate that of the adult. The only difference now is that the children have not fully acquired tense and so most of their structures are not finite. We must however note that Yoruba language does not mark tense as other languages do (see section 2.10.5 above). The following diagram displays the structure of example (144a) above.

(145)
```
              VP
             /  \
           DP     V
           |      |
         mango   dùn
         mango   sweet
      'The mango is sweet.'
```
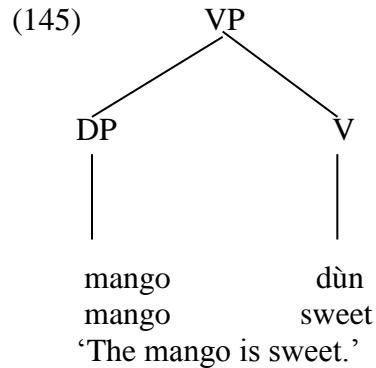
The examples above also exemplify the merging of elements so we have the following merge operation for adjectivisable verbs:

(146)   [*dùn* *mango dùn]*

Adjectivisable verbs are intransitive permanent state verbs. Permanent state verbs refer to verbs that express a permanent state of affairs or quality that do not undergo change over time (Ajiboye, 2007:117). They do not denote actions that take place as no activity is involved. The implication of this is that adjectivisable verbs are not transitive verbs neither are they marked for finiteness. It means that once the external argument is present, the structure is complete. We will now have the following structure in (147):

(147)   TP

```
            TP
          /    \
        DP      T'
        |      /  \
     mango   T     VP
                  /  \
                 D    V
                 |    |
                 t    dùn
```

Following the predicate internal subject hypothesis, *mango* appears in the Spec of VP and is moved to the Spec of TP to have its Case checked.

However, Ajiboye (2007), in analysisng intransitive permanent state verbs propose that they are unaccusatives and that the subjects originally originate as the internal argument before being raised to the subject position to have its case checked. He states that the subject occupies the object position at LF before it raises to the subject position at S-syntax (Ajiboye 2007:130). Ajiboye's (2007) analysis takes us back to the data in (140) repeated in (148) below:

(148) a. gbóná tîi   19 months
           hot tea
           'Tea is hot.'

       b. gbóná omi   19 months
           hot water
           'The water is hot.'

Going with the fact that they are unaccusatives, then it means that these initial structures

of the children are correct. The logical object has not moved from its position of merger.

Let us examine the following structure.

(149) a.   VP
```
                VP
              /    \
            V        DP
            |        |
          gbóná     tíì
           hot       tea
        'Tea is hot.'
```

b.   VP
```
                VP
              /    \
            V        DP
            |        |
          gbóná     omi
           hot      water
        'The water is hot.'
```
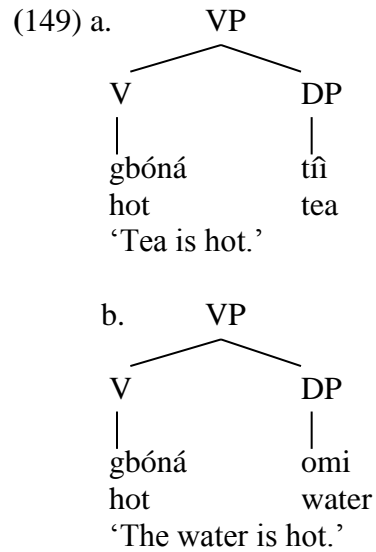
The internal arguments *tíì* 'tea' and *omi* 'water' still remain in-situ. They have not being

moved to check their case at spec-TP. The fact that at this stage, the children have not yet

acquired case gives credence to this fact. The internal argument cannot move because

there is no tense to check its case yet. A reanalysis of adjectivisable verbs as

unaccusatives would now be as follows:

(150)

```
                        TP
                       /  \
                      /    \
                    DP      Tᴵ
                    |      /  \
                  mango   T    VP
                             /   \
                           DP     V'
                           |     /  \
                           e   dùn    DP
                                      |
                                      t
```
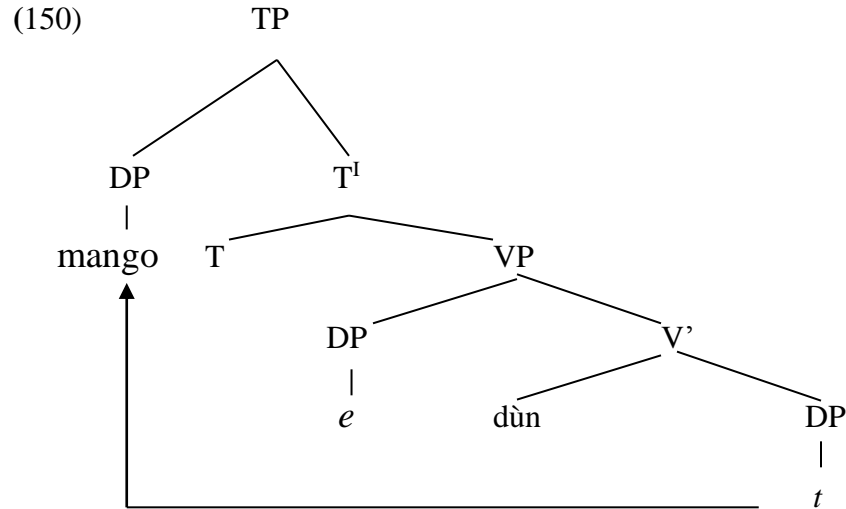
This shows that the subject originates from the object position and then moves to spec-TP to have its case checked. Another fact that gives credence to this analysis is that as we stated earlier that adjectivisable verbs are not marked for finiteness and that once the external argument is acquired then the structure is complete. The explanantion for this is that once the child has raised the internal argument to Spec-TP, it means that the structure is finite. The argument structure of adjectivisable verbs is quite easy to acquire compared to other type of verbs. Evidence from our data shows that by age two, Yoruba children have acquired adjectivisable verbs.

4.4.4   Acquisition of Argument Structure of Report Verbs

These are verbs used in indirect statement. They are verbs of saying. Acquiring these verbs and their argument structure do not come easy for the children. Before a child can acquire the argument structure of report verbs, he must have acquired a good knowledge of the language. Report verbs belong to the family of complex structures

which are not easy to acquire cross-linguistically. Simply put, report verbs and their argument structure are not acquired at the early stage of language acquisition by the Yoruba child. Report verbs have an external argument with a complementizer phrase as the complement of the verb. Over time, the children in our study began to use report verbs.

(151)   a.   màá sọ fún mummy pé mo n jẹ mọ́ínmọ́ín   Temiloluwa 21months
              I will tell to mummy that I PROG eat moimmoin
              'I will tell mummy that I am eating moinmoin.'

        b.   O sọ pé òun fẹ́ lọ bá mama ẹ̀   Temiloluwa 28 months
              He say that he want go meet mummy his
              'He said he wants to go and meet his mother.'

        c.   mummy náà ma n sọ pé Islamiya   Temiloluwa 32 months
              mummy too also PROG say that Islamiya
              'Mummy also said that Islamiya.'

        d.   Ó sọ pé òun ti fẹ́ wẹ̀ tán   Tola 31 months
              He say that he has want bathe finish
              'He said that he has almost finished bathing.'

        f.   O sọ pé òun fẹ́ lọ ya ìgbẹ́   Tola 31 months
              He say that he want go poupou
              'He said he wants to go and poupou.'

(152)

```
                TP
              /    \
            /        \
          DP          T^I
          |          /   \
          Ó        T       vP
          ↑             /     \
          |           D        v'
          |           |       /    \
          |_____ DP     v       VP
                           ↑        |
                           |        V'
                           |       /   \
                           |      V      TP
                           |      |      /\
                           |_____sọ    /  \
                                       pé òun fẹ́ lọ ya ìgbẹ́
```
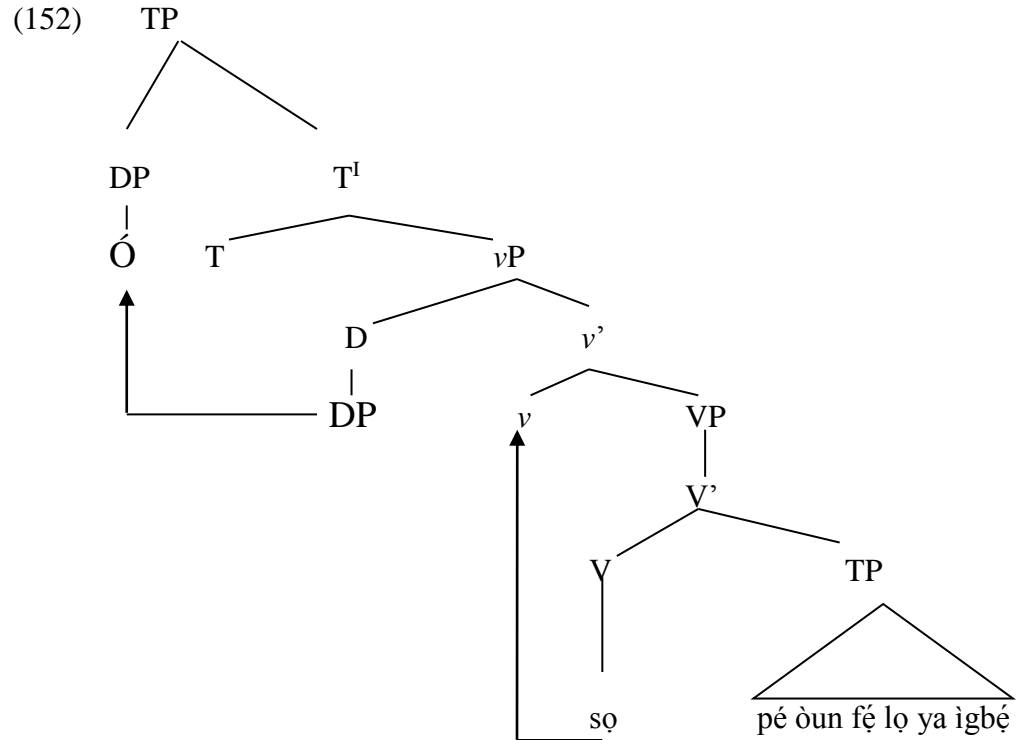
4.5   Acquisition of Argument Structure of Complex Predicates

In this section, we examine the acquisition of the argument structure of complex predicates by Yoruba children. Müller (2006) defines Complex predicates as predicates which are multi-headed; they are composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information ordinarily associated with a head. Complex predicates are assumed to be acquired late cross-linguistically. We seek to know the stage that the children acquiring Yoruba start to acquire complex predicates. We also want to know those that are attested in their speech. In the following sub-sections, we will examine the acquisition of the argument structure of serial verbs, splitting verbs and ditransitive predicates by the Yoruba child.

4.5.1   Acquisition of Argument Structure of Serial Verb Constructions

Yusuf (1999:46) states that it is amazing that children just acquiring language also make use of serial verbs. By virtue of the fact that serial verb constructions involve the concatenation of verbs, it means that this type of verbs and construction will definitely not come at the very early stage. It can only begin to appear at the early multi-word stage as there has to be at least three words in a serial verb construction. Our data show that the children in our study began to use serial verbs at the early multi-word stage. It should be noted that the verbs that appear in serial construction can be used singly without being joined to others. It was noted that the children have actually started using the verbs before they began using them in serial constructions.

In a serial verb construction, there are at least two verbs. Most serial verb constructions of the children have two verbs. This makes the structure complex and not easy to acquire for them. As discussed in section 2.6.5.2, some serial verbs share the same subject. Evidence of serial verb acquisition came at eighteen (18) months for Temiloluwa, twenty-one (21) months for Tola and twenty-three (23) months for Damilare. At the beginning of the acquisition of the argument structure of serial verbs, the issue of null subjects still come up as illustrated in (153) below:

(153)   a.   gbé e wá   Damilare 23 months
                Carry it come
                'Bring it.'

         b.   gbé e wá powder   Damilare 23 months
                bring it come powder
                'Bring the powder.'

c.   mú wá   Damilare 23 months
         bring come
         'Bring it.'

d.   gé mi jẹ   Temiloluwa 18 months
         cut me eat
         ' (He) Bit me.'

e.   gbe ẹsẹ kuro   Temiloluwa 18 months
         carry leg away
         'Remove your leg.'

f.   gbé ọmọ sọ̀kalẹ̀   Temiloluwa 24 months
         carrry child down
         'Bring the child down.'

In all the examples above, the subjects are null. Assuming the examples above are reconstructed with their subjects, they are all the type of serial verbs with the same subjects. We will have the following structure using (153a) above:

(154)   VP
                            /   \
                          V'   V
                         / \ |
                        V   DP |
                        | | |
                       gbé   e   wá
                       carry it   come
                       'Bring it.'
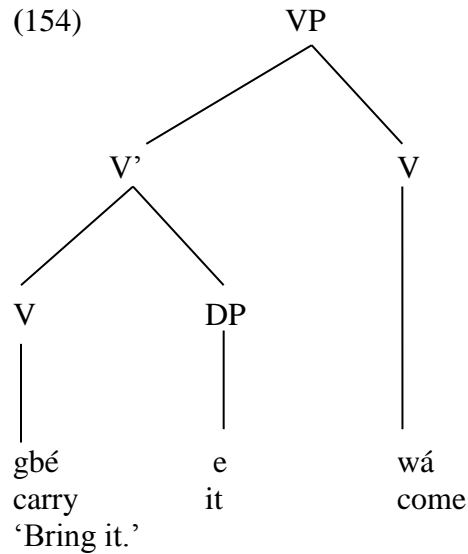
The first verb in the diagram above requires an object which is, *e* 'it' in this construction. The second verb however is intransitive and so does not require any complement. The

children have here seem to have a good knowledge of the internal arguments of serial

verbs. However, there are instances where the supposed internal arguments are placed in

the logical position of the subject as illustrated in (155) below:

(155) a.   ìwé mú u wá
              book bring come
              'Bring the book.'

       b.   tébù gbé e wá
              table carry come
              'Bring the table.'

From the examples above, it seems *ìwé* 'book' and *tébù* 'table' are the subjects but they

are not. The children in our study have actually produced two objects and moved the

lexical one to the subject position. The sentences could read:

(156) a.   mú u wá
               bring it come
               'Bring the book.'

       b.   mú ìwé wá
               bring book come
               'Bring the book.'

(157) a.   gbé e wá
              carry it come
              'Bring my table.'

       b.   gbé tébù wá
              carry table come
              'Bring the table.'

Following UTAH, we could see that despite the fact that *ìwé* 'book' and *tébù* 'table' are

not in their logical positions since they have antecedents in those positions, they still

maintain their theta role. We could say that at this stage, the children have still not

acquired overt arguments as the external argument is still missing. Over a period of time,

we could say that the children have acquired overt arguments and their use of serial verbs

has almost approximated that of the adults.

(158) a. bàbá gbé e wá   Damilare, 24 months
           daddy carry it come
           'Daddy brought it.'

       b. mọ́mì mú u wá biro   Damilare, 24 months
           mummy bring come biro
           'Mummy give me biro.'

       c. Ó gbé mọ́tò lọ̀   Damilare, 28 months
           He carry motor go
           'He took the car away.'

       d. ẹ mú u wá   Temiloluwa, 20 months
           you take come
           Bring it.'

       e.   ó gbé omi sá eré   Temiloluwa,   20 months
           he carry water run race
           'He ran with the water.'

       f. Tọ́lá gbé ọmọ mi wá   Temiloluwa, 33 months
           Tola carry child my come
           'Tola bring my child.'

       g.   ọmọ kúù sá eré lọ   Tola, 24 months
           child school run race go
           'The student ran away.'

       h.   mo ti gbé ounjẹ wá   Tola, 32 months
           I   have carry food come
           'I have brought food.'

       i. màmá ẹ gbé Jídé wá   Tola, 36 months
            mummy she carry Jide come
           'Mummy bring Jide.'

With the examples above, it is clear that the children have acquired the argument structure of Yoruba serial verbs. The data in (158) above show serial verb constructions where the subjects are shared. This is further illustrated with the tree diagram in (159).

(159)

```
                    TP
                  /    \
               DP        Tᴵ
                |       /    \
             bàbá    T         VP
                            /       \
                         VP           VP
                       /    \        /   \
                     DP      V'     D      V
                      |     /  \    |      |
              _____ t    V    DP  Ø      |
                           |    |          |
                          gbé   e          wá
          daddy          carry  it        come
          'Daddy brought it.'
```
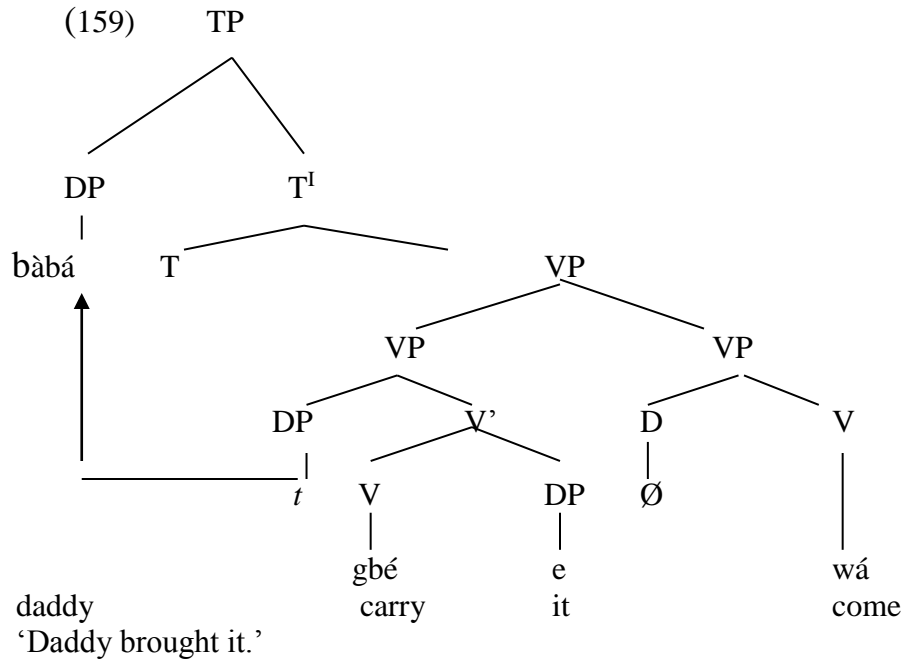
The diagram shows that the two serial verbs share the same subject. We can see that in the second VP, the space for subject is null. It is given a null spell-out as it occupies the spec-TP in the first VP. Another look at (158b) above shows a repetition of the object as *un* 'it' and *biro* 'pen' refer to the same thing. The second verb is treated as a transitive verb by the child, hence the presence of an 'object'. In most cases, when a transitive verb occurs as the last in a serial verb construction, the object is shared with the preceding verb. This is illustrated in (160) below.

(160)   gé mi jẹ   Temiloluwa 18 months
        cut me eat
        '(He) Bit me.'

The adult equivalent of this example would be (161)

(161)   Olú gé mi jẹ
        Olu cut me eat
        'Olu bit me.'

The subject in the example above is shared. The object is also shared. In this case, the second object is elided in order to prevent repetition. The semantic and syntactic roles are the same. That is *mi* 'me' functions as THEME and object for both VPs. To show that children in the course of language acquisition also continually process the acquisition data, we have the following utterance from Tola at twenty-one (21) months.

(162)   Má géjẹ mi   Tola   21 months
         Don't cut eat me
         'Don't bite me.'

Here, the child brought the two VPs together and placed the object after the last verb. The fact that the object is not shared accounts for the ill-formedness of this sentence.

The other type of serial verb constructions has the subject-object alternation. In this situation, the object of the first verb functions as the subject of the second verb. This is illustrated in (163) and phrase marked in (164).

(163)   Bàbá tì mí subú   Damilare, 32 months
         Daddy push me fall
         'Daddy pushed me and I fell.'

(164) TP

```
        TP
       /  \
      DP    T^I
      |    /  \
    bàbá  T    VP
             /    \
           VP      VP
          /  \    /  \
        DP   V'  D    V
        |   / \  |    |
        t  V  DP e_i  subú
           |  |       fall
           tì mí_i
              me
      daddy  push
```

'Daddy pushed me down.'

From the example above, we see that the object of the first verb is the subject of the second giving us the following structure in (165):

(165) a. bàbá tì mí
          Daddy push me
          'Daddy pushed me.'

      b. mo subú
          I fall
          'I fell.'

The semantic role of the argument, 'THEME' remains the same but the syntactic functions are different, i.e. subject and object. According to Baker (1997), arguments bearing similar thematic roles are expressed in similar structural positions. This argument *mí* 'me' has its ACCUSATIVE role checked by the first verb. The reason for this is that there is usually one tense and aspect specification for all the verbs in the construction

(Baker, 1989; Yusuf, 1999). This type of serial verb construction is complex and does not come early in the acquisition of serial verbs construction by the Yoruba child. In summary, we conclude that the children have acquired the argument structure of Yoruba serial verbs by age three.

4.5.2   Acquisition of Argument Structure of Splitting Verbs

The acquisition of the argument structure of splitting verbs is interesting and as observed from our data the principles involved are quite complex. The children acquiring Yoruba in their move towards adult linguistic competence also have to acquire the argument structure of Yoruba splitting verbs. From our data, it appears the acquisition does not come easy for the children. Splitting verbs are idiomatic phrases that are derived from extant or obsolete items. The fact that they are idiomatic phrases could make it quite complex for children. From our data, we discover that the children at the initial stage do not split the verbs. In all the usages recorded for the children at the initial state, no objects were inserted. The examples in (166) below show different constructions of splitting verbs.

(166)   a.   padé   Damilare, 21 months
               Close
               'Close it.'

         b.   mọ́mì padé   Damilare, 22 months
               mummy close
               'Mummy close it.'

         c.   phone bàjẹ́   Damilare, 23 months
               phone spoil
               'The phone is spoilt.'

d. sòkòtò bàjẹ́   Damilare, 26 months
    trouser spoil
    'My trouser is spoilt.'

The first example (166a) shows a splitting verb without any argument. Subsequently, we

see them used with an argument each. In example (166b), *mọ́mì* 'mummy' is the external

argument of the verb. However, splitting verbs are not used only with external arguments.

Looking at (166c, 166d), we see that internal arguments playing the role of Theme are

occupying the subject position. This is illustrated in (167) below:

(167)   TP
          / \
        DP   T^I
         | / \
      phone T   VP
            ↑   / \
               DP   V'
                | / \
                t   V   DP
                    | |
                  bàjẹ́ ~~phone~~
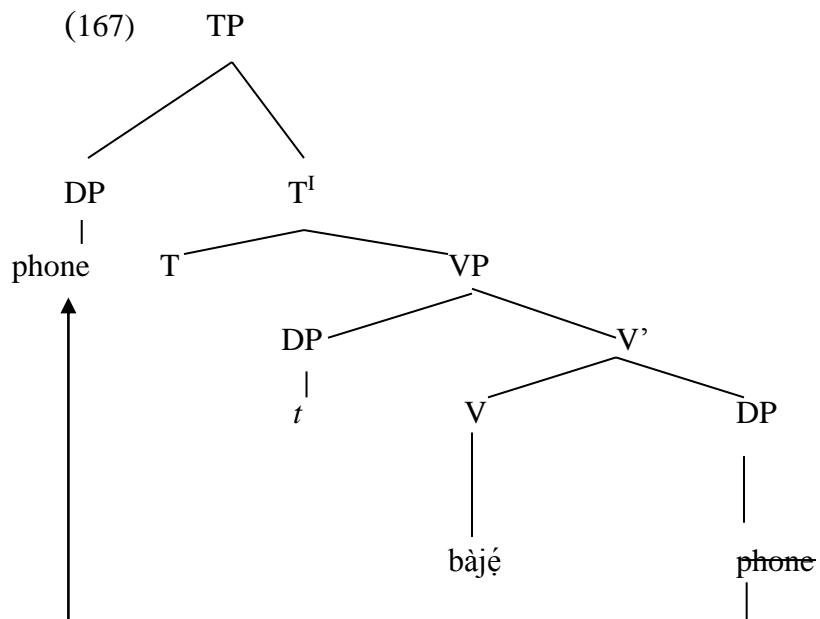
This means that these subjects originate as the complements of splitting verbs. It should

be noted that External arguments of splitting verbs are always AGENTS. When the verbs

are split into two parts, the internal argument is now positioned between the split

counterparts.

There are instances when the children do not position the internal argument at the logical position, which is between the splitting verbs. It now comes at the end like other verbs. For example

(168) a.   Mọ́mì Dàmọ́lá bàjẹ́ biro   Damilare 27 months
              Mummy Damola spoil biro
              'Mummy, Damola has spoilt the biro.'

       b.   Má géjẹ mi   Tola   21 months
              Don't cut eat me
              'Don't bite me.'

These utterances show that at this point the children do not yet have a perfect grasp of the argument structure of splitting verbs and have used it like other verbs especially the serial verbs. Maybe at this stage, the peculiar features of the splitting verb are still uninterpretable to the children. These structures would have read

(169) a.   Mọ́mì Dàmọ́lá bà biro jẹ́
              Mummy Damola spoil biro
              'Mummy, Damola has spoilt the biro.'

       b.   Má gé mi jẹ
              Don't cut eat me
              'Don't bite me.'

At some point children acquire the ability to judge that certain sentences are unacceptable or lack interpretations that they might otherwise be expected to have. These type of sentences include those in (169) above. The children in our study begin to use these constructions correctly at a later stage when they are more cognitively developed and have acquired the necessary the features to make splitting verbs perfectly interpretable to them. With time they now have the following structure in (170).

(170) a. Èmi ti pa ìlẹ̀kùn dé   Damilare 28 months
           I   have close door
           'I have closed the door

       b. Anti Lará ti ba ìbọn jẹ́   Damilare 29 months
           Anti Lara has spoil gun spoil
           'Anti Lara has spoilt my gun.'

       b. wọ́n ti tú mọ́tò yẹn se   Damilare 32 months
           they have repair car that repair
           'They have repaired the car.'

From the examples above, we see that a splitting verb construction would have a subject

and an object that splits the verb in two. The structure is presented in the diagram in (171)

below.

(171)

```
                         TP
                        /   \
                      DP     Tᴵ
                      |      /  \
                     Èmi    T     VP
                           ti    /    \
                              DP        V'
                              |       /  |  \
                              t      V   DP   V
                                     |    |    |
                                    pa  ìlẹ̀kùn  dé
                          I    have close  door  close
```

'I have closed the door.'

From this diagram, we see that the two arguments of the splitting verb are both

represented and at their logical positions. The external arguments of splitting verbs have

AGENT role while the internal arguments are assigned the THEME role. These roles are

maintained in conformity with UTAH even when the object now occupies the subject position. It still maintains the role of THEME. For example:

(172) a. ìlèkùn ti padé
           Door has close
           'The door has closed.'

       b. ìbọn ti bàjẹ́
           gun has spoil
           'The gun is spoilt.'

ìlèkùn 'door' and *ìbọn* 'gun' now function as Subject but according to UTAH, they still maintain the THEME role that they are assigned at the point of merger before being displaced by internal move. Since the external AGENT arguments of splitting verbs occupy the position of maximal prominence, it is the last to be theta-marked and made visible following the bottom-up fashion of operation merge of the minimalist programme.

According to the prominence theory of Filmore (1968), Jackendoff (1972) and Grimshaw (1990), it is the external argument that is omitted because it is the most prominent; it is the argument that can be assumed to be shared by both the hearer and the speaker. The external argument is also the last to be theta marked as theta-marking proceeds from the least to the most prominent. We see from the data that the children first acquired splitting verbs without the external AGENT argument. The reason for this is because the AGENT is seen to be more prominent than the other arguments. Since the external AGENT arguments of splitting verbs occupy the position of maximal prominence, it is the last to be theta-marked and made visible following the bottom-up fashion of operation merge of the Minimalist Programme. Over a period of time the

usage of splitting verbs become more frequent. By then we could safely say that the children have acquired the argument structure of splitting verbs.

4.5.3 Acquisition of the Argument Structure of Ditransitive Verbs

The acquisition of the argument structure of ditransitive verbs by Yoruba children indicate that so much progress has been made in the course of language acquisition. This is taken into consideration the different processes, stages and phases the children would have passed through before getting to that point. Ditransitive verbs take three arguments (Carnie 2002:166). The first is the subject which is almost always an *agent*. The second argument is the direct object while the third is the indirect object. The first note of ditransitive predicate in the speech of Damilare was at twenty-one (21) months with the collocation of the possible arguments of a ditransitive predicate. This is illustrated with the following examples from Damilare.

> (173) a.   Ifeoma yoyoyo fridge
> Ifeoma yoghourt fridge
> 'Ifeoma put the yoguhort in the fridge.'
>
> b.   Ifeoma fridge yoyoyo
> Ifeoma fridge yoghourt
> 'Ifeoma put the youghourt in the fridge.'

We this collocations, we discover that it is possible to have a three-place predicate. As discussed earlier, we assume that at that stage, the verb and the preposition are taken as *given* by the child, hence their absence. Looking at our cross-sectional data, we discover that the children use ditransitve verbs very productively. We have the following data from our three and four year-old subjects.

(174) a. Wọ́n bu omi si inu ike
            They pour water inside plastic
            'They poured water inside the container.'

       b. O ka ẹsẹ si ori bẹẹdi
           He fold leg on top bed
           'He put his leg on the bed.'

       c. O da omi si inu kisini
           He pour water inside kitchen
           'He poured the water in the kitchen.'

(174a) is captured diagrammatically in (175).

(175)

They   pour water   inside   plastic
'They poured water inside the container.'
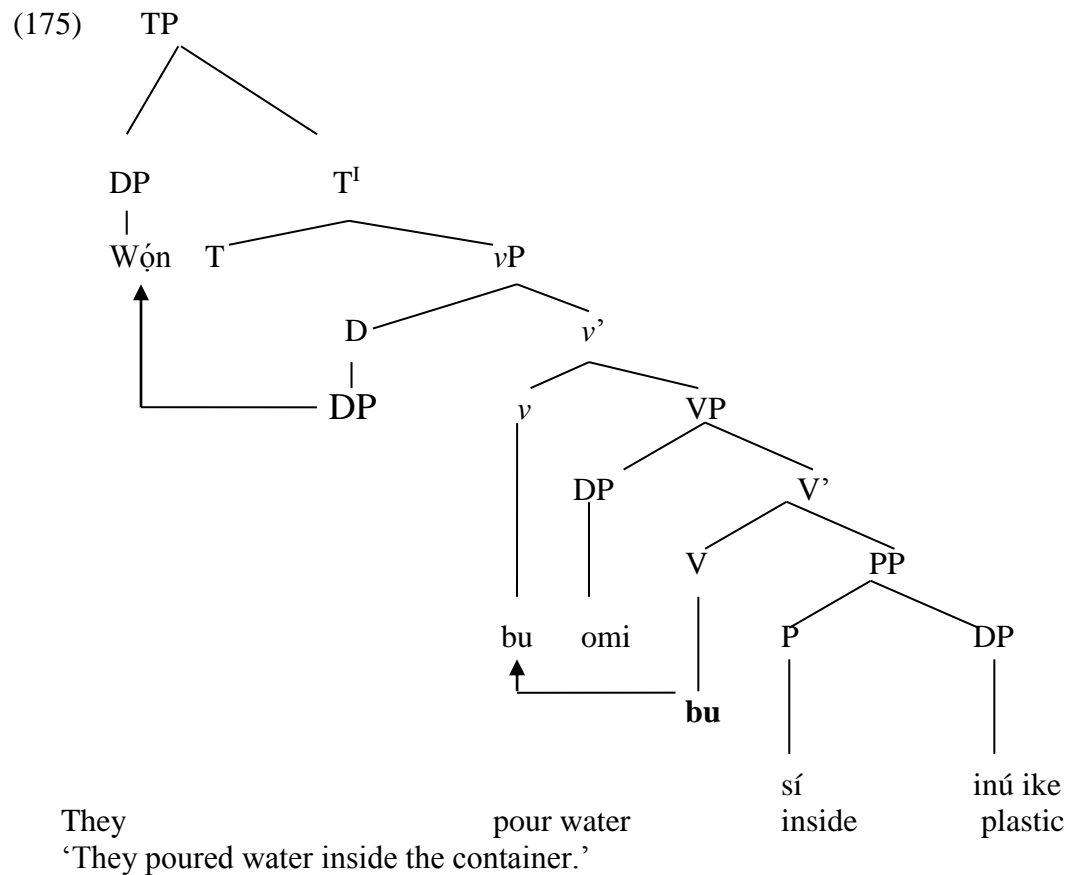
Looking at this diagram, we see that the process involved in the acquisition of these verbs

is complex and so it cannot be easily acquired. The children would need to know the

relationship between the constituents and also be aware of the the internal movements that take place. Following the VP-shell analysis, we see that *bu* 'pour' moves from VP to *vP* where *omi* 'water' was originally the subject and is assigned the *theme role*. Following UTAH, we can see that after the movement of *bu* 'pour' to the small *vP omi* 'water' still maintains the *theme* role despite the fact that it is now the object position of the verb *bu* 'pour'.

We assume following the *continuity* hypothesis that the children have knowledge of this predicate right from the initial stage but are not cognitively matured to use them. We therefore assume that by age three to four when they are cognitively matured, Yoruba children have acquired the argument structure of ditransitive verbs.

4.6 Acquisition of Overt Argument-NPs

This section presents the findings on development of overt argument-NPs by the Yoruba child. Data are based on quantitative and syntactic analyses. We know that at a point, the child begins to make use of overt arguments and gradually, null arguments give way. The purpose of this section is to see how and when the Yoruba child acquires overt argument-NP. We want to know the nature of overt arguments that the Yoruba child acquires. In the following sections, we will examine the acquisition of lexical NPs and pronouns.

4.6.1 Acquisition of Yoruba Lexical Noun Phrases

A lexical NP gets its meaning by referring to an entity in the world; it selects its referent from the universe of discourse (Haegeman 1994:204, Carnie 2002:90). It is a full

noun phrase that has independent reference. This NP type can appear in any position in the sentence and they include bare nouns, generic nouns, singular nouns, plural nouns, possessor NPs, etc. The aim of this sub-section is to examine the acquisition of lexical NPs by Yoruba-speaking children.

4.6.1.1   Acquisition of Bare Nouns

Bare nouns are determinerless plural count and singular mass noun phrases (Zamparelli, 2002:1). They do not have accompanying classifier. Slabakova (2005:219) says that in English, the subject bare NP has both a generic (Gen) and an existential (Ex) meaning, while in Italian it has only the existential meaning. Yoruba allow bare nominals more freely due to lack of plural morphology (see Ajiboye 2007) and like other languages characterized as [+argument, +predicate] (Ajiboye, 2007, Snape, Mayo and Gurel 2009), it allows bare nouns in argument position. For example *mo ra ilé* could be interpreted as 'I bought (a) house(s)', whereby *ile* 'house' is a bare nominal.

Clark (1993) examines the notion of "simplicity of form". She notes that when children produce their first words, they typically take as their target only one shape for each word, and use it on all occasions, and that initially this shape will be a bare root or stem. Clark holds the view that the fact that children's earliest innovations all make use of bare stems without affixes offers broad support for the influence of formal simplicity in early acquisition.

Lopes (2006) studies the acquisition of bare nouns and DP number agreement in Brazilian Portuguese and assumes that children go through three different stages in the

course of development until they converge to adult grammar. She claims that in the first stage, the child assumes a default singular value for DPs, and at this stage, the relevant features in D and Number are unspecified. During the second stage, the child begins to make number distinction leading to the plural being morphologically marked while the third stage involves a parametric marking due to the existence of a null determiner in the language.

The aim of this sub-section is to examine the acquisition of bare nouns in order to know the relevant stages involved in the acquisition and also examine how a child acquiring Yoruba argument structure treats bare nouns. We observe that the children use only bare nouns at the initial stage. This is probably because they are yet to acquire the necessary agreement features. The question arises: do they see bare nouns as bare noun or are they used as definite or non-bare nouns?

In the first stage, the child assumes that all nouns are singular. This means that all the lexical NPs acquired by the child at that stage are bare. The overt NPs that the child acquires at the early stage are names of people close to him, names of objects, things and food around him. O'Grady and Wan Cho (2004) claim that children choose the most informative word that applies to the situation at hand. The following are some of such NPs from Damilare at fifteen (15) months:

(176) màmá   'mummy'
      Táyé   'name of a person'
      bàbá   'daddy'
      omi   'water'

kẹkẹ́ 'bicycle'
tíì 'tea'

At the one-word stage, the only overt arguments present are bare nouns and these are only concrete objects as exemplified above. This means that at this stage, the child has not acquired any abstract concepts, he can only refer to things and people he can see or touch.

By the time the child moves to the two-word stage, he begins to merge words, to combine constituents. This stage marks the beginning of syntax. There are different combinations of overt bare noun arguments and verbs. The various constituents could be classified into different groups and so we begin to see the use of subjects, objects and to a lesser extents indirect object. The following examples are taken from Damilare at eighteen (18) months.

NP   **VP**

(177)   a.   màmá   wẹ̀
       mummy   bathe
       'Mummy, I want to bathe.'

     b.   mọ́mì   jẹ
       mummy   eat
       'Mummy, I want to eat.'

     c.   màmá   wá
       mummy   come
       'Mummy, come.

     d.   kẹ̀kẹ́   subú
       bicycle   fall
       'My bicycle fell.'

e. mọ́mì   sùn
    mummy   sleep
    Mummy, I want to sleep.'

f. mọ́mì   sùn
    mummy sleep
    'Mummy is sleeping.'

The examples above show the merger of bare nouns at subject position with verbs. These NPs occupy the subject position; however, they are not all subject. Subjects in Yoruba occupy spec-TP and have nominative case. Following the VP-Internal Subject Hypothesis, the subject originates at spec-VP and then moves to spec-TP to have its Case checked. Only the bare nouns in (177d) and (177f) above are supposed to carry the nominative case. Nominative case is meant for NPs at the subject position and this is checked by TENSE. These are repeated below with the tree diagram following:

(178) a. kẹ̀kẹ́ subú
           bicycle fall
           'My bicycle fell.'

       b. Mọ́mì sùn
           mummy sleep
           mummy is sleeping

(179)

                              VP
                    ┌──────────┴──────────┐
                   DP   V$^{\text{I}}$
                    │   │
                   kẹ̀kẹ́   V
                                           │

                                          subú
                   bicycle   fall
                   'My bicycle fell.'
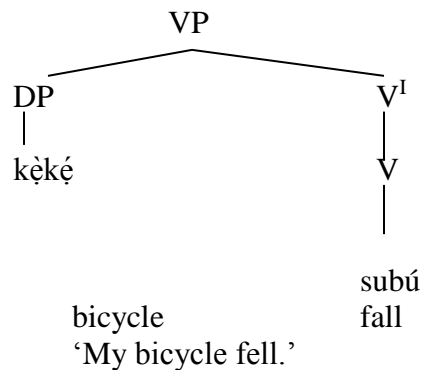
But this does not seem to be the case. It is claimed that early child nominals lack structural case (Radford 1991). It is assumed that a nominal expression is required to carry case only when it is the subject of a *feature*-complete T and not when it is the subject of a *feature*-defective clause (Radford 1991). We find that two factors support this claim in Yoruba. The first is the claim that children's early language only projects to VP. This means that the subject resides in Spec-VP and does not move to Spec-TP where the nominative case is checked as indicated in the diagram above. The other factor is that the children at this stage only use bare nouns. Their utterances lack personal pronouns especially in the subject position. In the object position, the only personal pronoun used is the third person singular and with the way it is used, there is no sign that the children have acquired case. Acquisition of overt pronominal object will be discussed fully in section 4.6.2.2.

All the other examples in (177) except (177c) are vocatives, bare nouns used for calling. These are repeated in (180) below:

(180)   a.   màmá wẹ̀
             mummy bathe
             'Mummy, I want to bathe.'

         b.   mọ́mì, jẹ
             mummy eat
             'Mummy, I want to eat.'

         c.   mọ́mì, sùn
             mummy sleep
             Mummy, I want to sleep.'

The child only calls in order to get the attention of the person he is talking to. The bare nominals, *mọ́mì* and màmá 'mummy' are vocatives which can not be substituted by case marked singular personal pronouns like *ó* 'she'. This would be possible if they were nominatives rather than vocatives. Trying to substitute will give us the following ill-formed sentences.

(181)　　a.*ó wẹ̀
　　　　　b. 　*ó, jẹ
　　　　　c. 　*ó, sùn

The sentence in (177c) and repeated below is imperative.

(182)　　màmá wá
　　　　　mummy come
　　　　　'Mummy, come.

Imperative sentences do not always take subjects except in some cases as this. Only vocatives and the second person plural pronominal can occur in the subject position of an imperative sentence in Yoruba.

At the two-word stage, bare nouns also appear at the object position in the utterances of the children. At this time, the subject is missing. The object position is a subcategorized position, a complement position of the verb. The structure is simply a verb phrase.

(183)　　a.　gbe ẹsẹ　　　　　　　　　Temiloluwa 18 months
　　　　　　　remove leg
　　　　　　　'Remove your leg'

　　　　　b.　je isu　　　　　　　　　　Tola 18 months
　　　　　　　eat yam
　　　　　　　'I want to eat yam.'

c. mu omi   Damilare 18 months
        'drink water'
        'I want to drink water.'

The bare nouns are the complement of the verbs and they are combined via the process of

merger. The diagram below shows the merging of the verb with the object.

(184)

```
                              VP
                     _____/  _____
                  DP                      Vᴵ
                  |                   ____/  \____
                  Ø                  V            DP
                                     |            |
                                    gbe ─────────▶ ẹsẹ
                                    carry         leg
                              'Carry your leg.'
```

The object is bare because there is no form of referent whatsoever. However, the object is

assigned a thematic role as role assignment is done in a position of merger and also has it

case checked. We also assume that utterances of the Yoruba children lack Nominative

case and not accusative case as the objects occupy their logical position. The reason for

this is that there is a more intrinsic relation between the verb and its object than the

subject and the verb.

       Another structure found in the utterances of the children at the two-word stage is

the collocation of bare nouns. This is a situation whereby only nouns are combined to

make an utterance in the speech of the children. Consider these examples from Damilare.

(185)   a.   mọ́mì bọ́ọ̀lù   18 months
               mummy ball
               'Mummy gave me the ball.'

b. màmá aṣọ   20 months
    mummy clothe
    'Mummy wear my clothe for me.'

c. Bàbá mọ́tò   21 months
    Daddy car
    'Daddy has gone to the car.'

d. mọ́mì ọ̀bẹ   22 months
    mummy soup
    'Mummy I want soup.'

All the nouns that he used here are bare nouns. As stated earlier, we believe that he assumes that the verb is *given infromation* and so does not need to be mentioned. He makes use of arguments without the predicate. These utterances vary in their structure and meaning. For example, (185a) above has the argument structure of a three place predicate with two arguments, the subject and the indirect object, as given below with the adult equivalent also following:

(186)

```
                          VP
                        /    \
                      DP      VP
                      |      /   \
                    mọ́mì   V'      PP
                          / \     /  \
                         V   DP  P    DP
                         |   |   |    |
                         Ø   Ø   Ø   boolu
                      Mummy             ball
                 'Mummy gave me my ball.'
```

(187) mọ́mì gbé bọọlu fún mi
       Mummy gave ball to me
       'Mummy gave my ball to me.'

(188)

```
                    TP
                   /  \
                  /    \
                 DP      T¹
                 |      /  \
               mọ́mì  T      vP
                      ↑     /  \
                      |    D     v'
                      |    |    /  \
                      |   DP   v     VP
                      |        ↑    /  \
                      |        |   DP    V'
                      |        |   |    /  \
                      |        |  bọọl V    PP
                      |        |       |   /  \
                      └────────┘     gbé  P    DP
                                          |     |
                                         fún    mi
```

'Mummy gave my ball to me.'

He does not seem to know any other referent apart from bare nouns at this stage. The use

of bare nouns continues and we even found three-noun collocations in his speech.

(189) a. Ifeoma yoyoyo fridge   21 months
           Ifeoma yoghurt fridge
           'Ifeoma put the yoghurt in the fridge.'

       b. Ifeoma fridge yoyoyo   21 months
           Ifeoma fridge yoghurt
           'Ifeoma put the yoghurt in the fridge.'

The three-bare noun collocation used by Damilare is quite interesting. The three bare

nouns function as subject, object and indirect object of a three-place predicate. We could

draw a hypothetical tree as as in (190):

(190)
```
                    VP
                   /  \
                  /    \
                 DP     VP
                 |     /  \
                 |    /    \
              ifeoma V'     PP
                    / \     / \
                   /   \   /   \
                  V    DP P    DP
                  |    |  |    |
                  |    |  |    |
                  Ø yoyoyo Ø  fridge
```
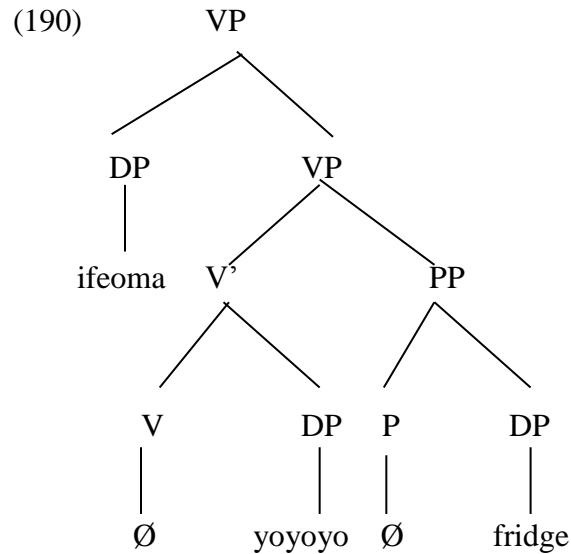
These bare nouns are arguments of unrealized predicates marked as null in the diagram

above. It should also be noted that these bare nouns are theta-marked. They have roles

that they are playing in the sentences. *Ifeoma* is the AGENT; *yoyoyo* 'yoghourt' is the

THEME while *fridge* is assigned LOCATION. We believe that these predicates are

covertly realized as the child takes them as *given* and does not need to be given overt

spell-out.

The multi-word stage of the Yoruba children involves a lot of complexities and

different structures. The first utterance in Damilare's data at the multi-word stage came at

twenty (20) months with the following utterance:

(191) mọ́mì   mu omi
       Mummy, drink water
       'Mummy, I want to drink water.'

This is followed in quick succession by other utterances. The noun at this stage is also still to a large extent bare and concrete. This means that there is no use of abstract nouns yet. This is illustrated below with other utterances from his transcripts also at twenty (20) months.

(192) a. mọ́mì   wọ asọ
           mummy wear clothe
           'Mummy, I want to wear my cloth.'

       b. dádì lọ mọ́tò
           daddy go motor
           'Daddy has gone with the car.'

       c. koki ti tán
           coke has finish
           'Coke has finished.'

We assume that the bare nouns that are used by the children are bare nouns that are interpreted as generic or existential. These bare nouns do not need any context for their interpretation (Ajiboye 2007:151). For example *mọ́mì*, 'mummy', *dádì* 'daddy' and *kóókì* are generic or existential nouns. The children also use bare nouns whose interpretation are contextually determined and thereby interpreted as definite. For example

(193) a.   jẹ ẹran
           eat meat
           'ate meat.'

      b.   mọ́mì   wọ asọ
           mummy waer clothe
           'Mummy, I want to wear my clothe.'

ẹran 'meat' and *aṣọ* 'cloth' are bare nouns whose contexts make them to be interpreted as definite.

We assume that the children use bare nouns because they are yet to acquire the necessary agreement features. For example, Damilare used names and other nouns for both self reference and addresse reference rather than using pronouns. For example

(194) a.   Dàmọ́lá subú síà   25 months
            Damola fall chair
            'Damola fell from the chair.'

       b.   Dàmọ́lá sùn   25 months
            Damola sleep
            'Damola wants to sleep.'

       c.   Dàmọ́lá sá   25 months
            Damola ran
            'Damola ran away.'

       d.   Dàmọ́lá sè é   26 months
            Damola cook it
            'Damola cooked it.'

       e.   inú dun Dàmọ́lá   26 months
            stomach pain Damola
            'Stomach is paining Damola

We can see from the foregoing examples that the child uses his name rather than the first person pronoun that is more appropriate in those situations. The children use bare nouns like general nouns; they use them in positions where definite nouns or non-bare nouns would have been used. However, soon after, other nominal expressions begin to appear in the utterances of the children.

4.6.1.2 Acquisition of Definite Nouns

With time, Yoruba-speaking children begin to use different nouns in different argument positions with qualifiers. Awobuluyi (1979:33) identifies nine classes of qualifiers that can be used with nouns in the language. The purpose is to make the referent of nouns to be specific and salient. Specificity refers to a referent that is known to the speaker while saliency implies being significant and striking (Ludlow and Neale 1991, Haspelmathe 1997, Ajiboye 2007). Specificity and salience are thereby introduced into their speech at a point in the course of language acquisition. This means that the hitherto bare nouns that were given no distinction begin to be specified. We assume the *continuity hypothesis* in this analysis. We believe that the children possess this knowledge from the initial state, but were cognitively immature to use them.

According to Ajiboye (2007), specificity is marked with *kan* 'one' while saliency is marked with *náà* 'this' in Yoruba. Palma (2007) says that the use of the cardinal number "one" as an indefinite determiner for singular count nouns is common cross-linguistically. Before a child can acquire specificity, he must have become aware of the people around him and must have also acquired a bit of knowledge about number. This is because *kan* 'one/ certain' in Yoruba does not only refer to a particular referent, but it also has singular specification. Specificity first appeared in the speech of Temiloluwa at twenty-four (24) months with the following sentence in (195):

(195)   ọmọ kúù kan sá eré lọ ni
        child school one run race go that
        'A certain pupil ran to school.'

It appeared as a specifier of nominal subject. It specifies that it is referring to a particular

pupil and not just any pupil. Our cross-sectional data is replete with this specifity marker.

This is illustrated in (196) below:

(196)   a.   Ó ń sa ere lọ ibi kan
             He PROG run race go place one
             'He is running to a place.'

        b.   Ó ń lọ ibi kan
             He PROG go place one
             'He is going somewhere.'

        c.   O fa asọ mọ ẹni kan ni ọwọ́
             He pull clothe on person one at hand
             'He is pulling someone's clothe.'

        d.   O sọ pe ki ẹni kan wo kini
             He say that person one look thing
             'He said that someone should look at something.'

The examples in (196) show that by age three, the Yoruba child has acquired specifity.

On the acquisition of *salience* which various qualifiers like *náà* 'this', *yìí* 'this', and *yẹn*

'that' mark in the language, we have the following examples from our data in (197).

(197)   a.   bóyá èmi náà ò ní fi nkan seré mọ́   Temilouwa 30 months
             Maybe I too NOT use something play again
             'Maybe I will not play with anything too.'

        b.   nítorí èmi gun bédì òun náà fẹ́ gun bẹ́dì   Tola 30 months
             Because I climb bed he also want to climb bed
             'Because I climbed the bed he also wants to climb it.'

        c.   Mọ́mì wo èyí   Damilare 26 months
             Mummy look this
             'Mummy look at this.'

d. èyí ni mo fẹ́   Damilare 27 months
This I want
'It is this that I want.'

e. Mo ti gbàgbé èyí sí ilẹ̀lẹ̀   Damilare 31 months
I   have forget this on ground
'I left this on the ground.'

f. Bread y̲ì̲í̲ ti tán   Damilare 28 months
Bread this has finish
'This bread has finished.'

From the above given data, it could be observed that the children have developed a more robust argument structure with the different types and shapes of arguments used. Looking through Damilare's data, we see that he uses *èyí* 'this' as a noun both at subject, object and even focus positions as in (197c and 197d). We see that the children have become rather productive in the use of nouns and by extension, arguments.

Following the *continuity hypothesis*, we believe that the development of specifity and salience is constrained by principles and parameters and that its absence at the beginning does not mean lack of competence on the part of the children. By the time they acquire the necessary cognitive maturity, they begin to use them productively.

4.6.1.3 Acquisition of Plural Nouns

This section accounts for how the Yoruba child acquires plurality in the language. Plurality is not marked by inflection in Yoruba. Yoruba nouns can be unspecified for number, so if an NP is unmarked for plural, it could be interpreted as either singular or

plural. At the early stage, the utterances of the Yoruba child are devoid of any form of plural marking strategy as the child has not acquired number[3].

Contextually determined strategy assumes that in the absence of a PLURAL feature, a nominal expression is interpreted as singular or plural depending on the context. Semantically determined strategy is semantically determined. The inherent semantics of some lexical items make them to be construed as plural, group-denoting quantifiers and numerals above one fall into this group. The third strategy, morphologically determined strategy, captures the fact that some morphemes have exclusively plural function. Their basic function is to mark plurality. These plural morphemes include quantifiers like *púpọ̀* 'many', *gbogbo* 'all', *díẹ̀* 'few'; numerals like *méjì* 'two', *mẹ́ta* 'three'; *àwọn,* which occurs before nouns, *-wọn*, attaches to demonstratives and the plural copy morpheme, where a morpheme is copied to mark plural (Ajiboye 2007:187).

For the purpose of this study, we will divide the marking of plurality in Yoruba into two; contextually determined strategy and morphologically determined strategy with morphological plural marking subsuming semantically determined marking strategy. The

reason behind this is that they both make use of morphemes to mark plurality in the language.

However, the first of the strategies to be acquired by the child is the contextually determined strategy. Here, contexts are used to disambiguate singular from plural. At the initial stage, one cannot say that the child has acquired number because it is the listener that will determine the context and interpret as either singular or plural. The following examples from Damilare at eighteen (18) and twenty-five (25) months illustrate the plural strategies.

(198) a.   kẹ̀kẹ́ bubú
        bicycle fall
        'My bicycle fell.'

    b. jẹ isu
       eat yam
       'I want to eat yam.'

    c. pa ẹsẹ̀
       rub leg
       'I am creaming my leg.'

    d. jẹ ẹran
       eat meat
       'I want to eat meat.'

    e. pa ara
       rub body
       'I am rubbing my body.'

    f. wọ asọ
       wear clothe
       'I want to wear my clothe.'

    g. èpà ti tán
       groundnut has finish
       'Groundnut has finished   Damilare 25 months

The nouns in these examples can be analyzed as either singular or plural depending on the context. For example, (198a, d) above would be interpreted as singular as the child has just one bicycle and one body and it is this bicycle that fell or the body that is creamed. The other examples would be interpreted as either singular or plural depending on the contexts. *Pa ẹsẹ̀* 'I am rubbing my leg' could be referring to either one leg or both legs. The Yoruba child makes more use of singular forms than plural forms. At the initial stage, the language is devoid of any form of marker for plural in the language, hence the use of bare nouns as discussed above.

The second plural-marking strategy acquired by the Yoruba child is the morphologically determined strategy. They are morphemes referred to as plural words (Dryer 1989, Ajiboye 2007). It means that at this point the children begin to use *àwọn, wọn-* and a copy of the noun. *Àwọn* marks plural on nouns, *-wọn* marks plural on demonstratives while the copy marks plural on modifiers (Ajiboye, 2007:203). Temiloluwa and Tola used the plural morpheme productively for the first time at thirty (30) months with the following sentences.

(199) a.   O rí i bí àwọn Tolú se n sere   Temiloluwa 30 months
           You see how PL Tolu do PROG play
           'You saw how Tolus are playing.'

      b. èyí tí àwọn olú wò ní èkan   Temiloluwa 32 months
         this that PL Olu look at then
         'The one that Tolu and others are looking at earlier.'

 c. A ti fẹ́ sáájú àwọn Búkì   Temiloluwa 32 months
   We are want be first PL Buli
   'We are about to be earlier than Buki and others'

 d. taló kun àwọn ojú ẹ   Tola 36 months
   who paint PL eye yours
   'Who painted your eyes.'

 e. àwọn ìdòtí wà níbi isu   Damilare 32 months
   PL dirt be in yam
   'There are dirts in the yam.'

 f. Èmi jẹ gbogbo èyí tán   Damilare 32 months
   I eat all this finish
   'I ate all of this.'

 g. gbogbo wọn ò gbé lọ   Damilare 32 months
   all they NEG carry go
   'All of them did not go with it.'

From our cross-sectional data, we conclude that the acquisition of plural morphemes progresses with age. We have the following data from the cross-sectional transcripts.

(200) a. gbogbo wọ́n n gba bọọlu
    All them PROG play ball
    'All of them are playing ball.

   b. gbogbo wọ́n tun n gba bọọlu
    All them again PROG play ball
    'All of them are playing ball again.'

   c. gbogbo wọn n wa kẹkẹ
    All them PROG ride bicycle
    'All of them are riding bicycle.'

   d. awọn mejeeji n wo fiimu
    PL two PROG watch film
    'The two of them are watching ball.'

When we examine the progress that the children make in the development of plurality in Yoruba language, we conclude that they are actively involved in the process of language acquisition as they make a lot of deductions before finally arriving at adult grammar. Following minimalism, we assume that plural marking as an uninterpretable feature has to become interpretable before it can be acquired and this is exactly what happened in the case of these children.

4.6.2   Acquisition of Yoruba Pronouns

The transition from nominal person reference to pronominal reference is an important milestone in the language acquisition ability of any child acquiring language. The emergence of pronouns in first language acquisition in English and other European languages has been widely studied (Huxley 1970, Clark 1978, Charney 1980, Chiat 1981, Rispoli 1998, Deutsch, Wagner, Burchardt, Shultz and Nakath, 2001).

Deustch et al. (2001:284) claim that person identification is the precondition to socio-emotional attachment and meaningful human social life, and is in place long before the beginnings of language. It is however very clear that the acquisition of pronouns does not come easily. One major difficulty in the acquisition of pronoun is the issue of different roles, case and person. They are all features that are complex and thereby difficult for the children to learn. Rozendaal (2005) believes that the children have to acquire the relevant morpho-syntactic forms (e.g. nouns, pronouns) and in pragmatics they need to learn amongst other things to take the listener's perspective into account.

Children's first reference to self is their own name or nickname and this is a well documented fact (Chiat 1986, Qi 2005). The purpose of this section is to examine the emergence of pronominal forms in Yoruba. We also examine the order of acquisition and the frequency of use of pronominals as arguments by Yoruba children.

4.6.2.1 Acquisition of Overt Subject Pronounss

At a point in time in the course of language acquisition, the children begin to acquire Yoruba subject pronouns. These are pronouns that occur at the subject position in an utterance. These pronouns take different form as they have person and number distinction. Until the number and person features become interpretable to the children before they can begin to use these productively. Data from the children show that overt pronominal subjects increase across development. The nature and order of acquisition of overt pronominal subject is presented in the table below.

Table 17: Nature and Order of Occurrence of Overt Subject Pronouns.

Pronoun	Damilare	Temiloluwa	Tola
1st Pers. Sg. - Mo 'I'	26	17	23
2nd Pers. Sg. - O 'you SG'	23	17	21
3rd Pers. Sg. - Ó 'he/ she/ it'	23	15	16
1st Pers. Pl. - A 'we'	25	16	15
2nd pers. Pl. - Wọ́n 'you PL'	27	23	22
3rd Pers. Pl. - Ẹ 'they'	24	15	23

From the table, we see that the subject pronoun to be acquired by the children very early is the third person singular *ó*. Temiloluwa and Tola began to use it at fifteen (15) months and sixteen (16) months respectively while Damilare acquired it at twenty-three (23) months. This is shown in the data in (201) below.

(201) a. Ó ti jẹ tán   Temiloluwa 15 months
           He has eat finish
           'He has finished eating.'

       b. Ó ti tó   Temiloluwa   15 months
           It has enough
           'It is enough.'

       c. ti tọ́ sí ara   Tola 16 months
           She has urinate to body
           'She has urinated in her body.'

       d. Ó ti yàgbẹ́   Tola 16 months
           She has poupou
           'She has poupoued.'

       e. Ó ti jade   Tola 16 months
           He has go out
           'He has gone out.'

       f. ó ti yọ   Damilare 23 months
           it has removed
           'It has removed.'

       g. Ó n subú   Damilare 23 months
           It PROG fall
           'It is falling down.'

Damilare also began to use second person singular subject at twenty-three (23) months, about the same time with the third person singular. He acquired the first person singular subject at twenty-six (26) months. Temiloluwa began to use the second and the third person singular subject at about the same time of seventeen (17) months. Tola on the other hand, acquired the second person singular subject at twenty-one (21) months and the first person singular subject at twenty-three (23) months. From the analysis we have above, we can conclude that the Yoruba child first acquires the third person singular

subject, followed by the second person singular subject and then the third person singular subject.

On the acquisition of plural subject pronoun, the data, as indicated in the table above, show that the first the Yoruba child acquires is the third person plural. Damilare acquired this at twenty (20) months; Temiloluwa began to use it productively at fifteen (15) months while Tola also began to use it at twenty-three (23) months. The next to be acquired by the children is the first person plural which Damilare acquired at twenty-five (25) months, Temiloluwa at sixteen (16) months, and Tola at fifteen (15) months respectively. The second person plural is the last to be acquired by the children. At twenty-five (25) months, Damilare began to use the second person plural subject productively. Temiloluwa began to use it productively at twenty-three (23) months while Tola has also acquired it by twenty-two (22) months.

Given the above analysis, it can be claimed that the third person subject pronoun is the first to be acquired by the children. Damilare acquired the singular subject pronoun before the plural subject pronoun while Temiloluwa and Tola acquired the plural and singular at about the same time. The reason for the concurrent acquisition of both singular and plural subject pronouns could be because they are twins and there is always the need to refer to things that are more than one; in the plural. This need makes the feature that should be uninterpretable to become interpretable. The implication is that Temiloluwa and Tola are cognitively more matured in that area of grammatical development than Damilare.

We discover that subject pronouns are not as easily acquired as lexical NPs. The reason for this could be because it is more complex. A pronoun is a bundle of features. These features at a stage are uninterpretable to the child and until he understands or interprets the features, he cannot acquire or use it. As stated earlier, the language of children especially at the early stage is devoid of uninterpretable features. With further cognitive development, subjects and objects are realized as pronominals by the children in our study as illustrated below from our cross-sectional data.

(202) a.   Wọ́n n lọ
            They PROG go
            'They are going.'

         b. Ó ń sùn
            He PROG sleep
            'He is sleeping.'

         c. Wọ́n n lé wọ́n
            They PROG pursue them
            'They are pursuing them.

4.6.2.2 Acquisition of Overt Object Pronouns

The first object pronoun to be acquired by the Yoruba child is the third (3rd) person singular. The table (18) shows that Damilare, Temiloluwa, and Tola all started using this pronoun at fifteen (15) months. Table (18) displays the distribution of overt object pronouns of the three children based on child and age.

Table 18: Nature and Order of Occurrence of Overt Object Pronouns

Pronoun	Damilare	Temiloluwa	Tola
1st Pers. Sg. - Mi 'me'	24	15	16
2nd Pers. Sg. - ẹ 'you SG'	23	20	20
3rd Pers. Sg.**- clitic**	15	15	15
1st Pers. Pl. - wa 'us'	26	24	24
2nd Pers. Pl. - yín 'you PL'	30	23	23
3rd Pers. Pl. - wọn 'them'	27	25	25

The 3rd person singular in Yoruba is a clitic that takes the form of the vowel that ends the verb. It is noted that objects are hardly omitted in Yoruba and when it occurs, it is at the very early stage of language development. What seems to make this possible is the use of this clitic (3rd person singular) as it is easy for the child to produce because of its euphonic feature. It is noted that the Yoruba child makes use of the clitic even when referring to himself (first person) and to other persons (second person) when those are yet to be acquired. This is illustrated with these examples from Damilare at eighteen (18) months.

(203) a. tẹ̀ ẹ́
           touch it
           'I touched it.'

       b. nà á
           beat me
           'He beat me.'

       c. mọ́mì nà á
           mummy beat her
           'Mummy, beat her.'

       d. yọ ọ́
           remove it
           'Daddy remove it.'

The next object pronoun *mi* 'me' acquired by Temiloluwa and Tola is the first person singular which they acquire at fifteen (15) and sixteen (16) months respectively. Damilare however acquires this at twenty four months (24). He also starts using the second person singular object *ẹ* 'you' before the first person singular at twenty three (23) months. Temiloluwa and Tola began using the second person singular object productively at about the same time; twenty months (1:8).

Temiloluwa and Tola started using the first, second and third person's plural object about the same time. This has to do with the fact that they are twins. They acquired the second person plural object *yín* 'you' at twenty-three (23) months , first person plural object *wa* 'us' at twenty-four (24) months and third person plural object *wọn* 'them' at twenty-five (25) months. Damilare, the boy, acquired the first person and the third person plural objects at twenty-six (26) months and twenty-seven (27) months.

At the initial stage, i.e., the one-word stage, when the children started to speak, pronouns had not shown up in their lexicon. By the two-word stage, they begin to use pronouns at the object position. The first and only pronoun they use is the third person singular object. Up to this point, they have no lexicon, either noun or pronoun to refer to themselves. We conclude from the samples that the singular pronouns are the first to be acquired before the plural pronouns. This means that number plays a significant role in language acquisition.

The cross-sectional data however showcases the use of all the pronouns by the children aged three to five years. The data in (204) below illustrate this fact:

(204)a. O   n   ya   foto
       He PROG snap picture
       'He is taking pictures.'

   b. Wọn n   gun abẹrẹ
       They PROG give injection
       'They are giving injection.'

The children at this stage have acquired the uninterpretable features that were absent in the longitudinal data. They have started to use overt arguments correctly and productively.

4.6.3   Acquisition of Genitive Constructions

The acquisition of genitive construction shows a clear progression in the language acquisition exploit of the Yoruba child. The reason for this is that the genitive construction involves a high level of complexity that the child has to acquire. The purpose of this section is to examine when the children acquire genitive constructions and to also know the type they acquire. Knowing fully well that genitive nouns are not simple nouns, we know that they will definitely come after the acquisition of bare nouns which form the basis of all noun acquisition.

At an early stage in acquisition, children use genitives primarily to express possessor and benefactor roles. Genitive construction deals with the relation between two arguments that are in R-relation. It refers to constructions where two simple nouns enter into a relation with one another (Storto 2003). This relation is a Possesor-Possesum relation. Possessor NP and Possesum NP refer to two arguments that are in genitive relation. The possessor NP is exclusively found with animate nouns or pronouns as the

genitive expresses possessive and benefactive relations (Slobin 1997). All the Yoruba possessive pronouns function as possessor NP. Ajiboye (2007) identifies three ways that nouns can enter into relations with each other. These relations include *discourse-linking, relational noun and inalienable body-part noun*. Ajiboye (2007:18) provides the following illustrations in (205).

(205) a.　ìwé e Túndé　　　　　*discourse-linking*
　　　　book MTS Tunde
　　　　'Tunde's book'

　　b.　bàbá a Túndé　　　　　*relational noun*
　　　　father MTS Tunde
　　　　'Tunde's father'

　　c.　apá a Túndé　　　　　*inalienable body-part noun*
　　　　arm MTS Tunde
　　　　'Tunde's arm'

Thes genitive constructions as noun phrases also function as subject, object or indirect object of predicates. They are arguments.

The first sign of acquisition of genitive construction was at twenty-five (25) months by Damilare. The first type he used is the discourse-linked nouns. Discourse-linked nouns have the value of the R-relation supplied by discourse. There has to be a discourse context for the relation to be understood (Ajiboye, 2007). This include genitive of possession, of depiction and of modification. The following data in (206) are recorded at twenty-five (25) months.

(206)　a.　<u>ìwé mi</u> nìyí
　　　　book my be this
　　　　'This is my book.'

    b. <u>pépà mi</u> nìyí
        paper my be this
        'This is my paper.'

    c. <u>ìgbẹ́ adíyẹ</u> n rùn
        faeces hen PROG smell
        'Hen's feaces smells.'

    d. <u>phone bàbá</u> kò da
        phone daddy not good
        'Daddy's phone is spoilt.

The data show a good division of the genitive nouns between possessor nouns and possessor pronouns. At this point also, we notice that the genitive NPs are used only at the subject position. In subsequent months, he began to use them in object positions also.

For example:

(207) a. Mọ́mì jẹ a lọ <u>Jesus Lará</u>   Damilare 27 months
         Mummy let us go Jesus Lara
         'Mummy let's go to Lara's Church.'

        b. Anti fa <u>etí Dàmọ́lá</u>   Damilare 27 months
         Anti pull ear Damola
         'Anti pulled Damola's ear.'

From example (207b) above, we also see that Damilare has acquired the *inalienable body-part noun.* This type of genitive construction include inalienanble nouns like body-part nouns like *etí* 'ear', *orí* 'head', *apá* 'arm, etc.

(208) a. ẹsẹ̀ Dàmọ́lá   Damilare 27 months
         leg Damola
         'Damola's leg'

        b. <u>ẹsẹ̀ ẹ Dàmọ́lá</u> nìyẹn   Damilare 27 months
         leg Damola be that
         'That is Damola's leg.'

    c. owó o Dàmólá mi   Damilare 27 months
        hand Damola my
        'Damola's hand'

    d. ó gbà lówó mi   Temiloluwa18 months
        he take from hand my
        'He took it from my hand.'

    e. Màá fò eyín mi   Temiloluwa 19 months
        I will wash teeth my
        'I will brush my teeth.'

    f. ó gbà a lówó mi kóbù mi   Temiloluwa 20 months
        she take it from hand my cup my
        'She took my cup from me.'

    g. mómì , e wá gba báágì yín   Temiloluwa 23 months
        mummy, come take bag your
        'Mummy come and take your bag.'

Before a child can acquire this type of genitive construction, he must have known the different body parts and what relations they have to the possessor. In (208c) above, we see the double use of the possessor by Damilare. In (208f), we also see that the there are three arguments in the verb phrase. It shows that they are still yet to have a perfect knowledge of these arguments.

        The third type of genitive construction to be acquired by the Yoruba child is the relational nouns. For example

(209) a. Mómì mi nìyen
        Mummy my be that
        'That is my mummy.'

      b. Dádì mi ti dé
        Daddy my has come
        'My daddy has come.'

    c. Dádì Aliya ti lọ
       Daddy Aliya has go
       'Aliya's daddy has gone.'

According to Ajiboye (2007) the relation is supplied by the meaning of the noun itself; it is lexically determined. Before this can be acquired, the child needs to know the relation that exists between him and others and also between others around him. Despite the fact that the first sets of words that children acquire are the names of people around them, it takes them time to be able to really decipher the relationship and put it in the right perspective. It is a cognitively complex process that requires higher cognitive ability and maturation.

One important component of Yoruba genitive construction which is also found in the genitive constructions of the children is the presence of the Mid Tone Syllable (MTS) which is obligatory before a consonant initial noun and optional before a vowel initial noun. The status of the MTS in Yoruba is still being debated (Ajiboye 2004, 2007; Awobuluyi 2004).

4.7 Further Issues

So far we have tried to look at the acquisition of argument structure by Yoruba children. In carrying out our analysis, we affirm some of the earlier positions taken by scholars who have worked on language acquisition from different perspective. We however conclude that the Minimalist Programme (MP) has been able to capture child language acquisition. Behaviourists believe that language learning should be seen as a conditioning process. They claim that the reinforcement provided by parents leads to

improvement in the language learning rate of children (Harris and Coltheart, 1986). Going by our discoveries in the course of the research, we believe that the issue of reinforcement cannot be outrightly condemned. We conclude that it serves as a source of input which the children process in the course of language acquisition.

We however disagree with the belief of the behaviourists that the child is endowed at birth with general learning abilities, but not with any language-specific knowledge and that linguistic behaviour is externally reinforced. We also disagree with the view that children learn to speak by imitation and that parents reinforce or correct their children's speech. The reason for this is that children do not speak as adults. According to the 'logical problem' of language acquisition, language learning would be impossible without 'universal language-specific knowledege' and input data is also believed to be often deficient and degenerate. There are so many structures in the utterances of the children that are absent in adult's language. For example there are instances when the children use a wrong verb to express a particular meaning or wrong argument for a predicate. We have the following examples in (210) from Damilare at twenty-five (25) and twenty-six (26) months respectively:

(210)   a.   omi ti sùn
                water has sleep
                'Water has slept.'

        b.   omi ti lọ school
                water has go school
                'Water has gone to school.'

      c.   póò ti lọ school
                  potty has go school
                  'Potty has gone to school.'

      d.   póò ti sùn
                  potty has sleep
                  'Potty has slept.'

      e.   àmàlà sùn
                  amala sleep
                  'Amala is sleeping.'

      f.   àmàlà ti lọ school
                  amala has go school
                  'Amala has gone to school.'

      g.   ẹ̀fọn ti lọ school   26 months
                  mosquito has go school
                  'Mosquito has gone to school.'

At a point, Damilare would refer to whatever he cannot see as either sleeping or has gone to school. This period coincided with the time he started school. As far as he was concerned then, an entity is either sleeping or at school. With time however, he discovered that you don't have to be at school or be sleeping not to be at a particular point, hence the disappearance of this structures. This can be linked to the issue of maturation and cognitive development as porposed by the cognitive theory. When the child is cognitively matured, he revisits his structures and makes the corrections himself.

This case also shows that the child acquiring the argument structure of his language is constantly processing the input at his disposal. He is an active participant in the language acquisition process. For example in the course of acquisition, the children use wrong collocation of lexical items. The following sentences in (211) illustrate this.

(211) a.   Ti tèmi dàgbà ju tì ẹ lọ   Temiloluwa 27 months
              that mine old than your own
              'My own is older than yours.'

       b.   Dàmọ́lá jẹ tíì   Damilare 27 months
              Damola eat tea
              'Damola ate tea.'

Temiloluwa in (211a) above was referring to her pencil being older than that of her twin sister. *Dàgbà* 'older' should not be used in that situation but rather, *gùn* 'longer'. This is because, *dàgbà* 'older' is only used for animate nouns. The same thing also applies to Damilare's utterance in (204b). *Jẹ* 'eat' is not the appropriate verb in that circumstance. The correct verb is *mu* 'drink'. The natural question to ask is what motivates the use of these verbs at the initial point of acquisition?

We believe that the children carried out a deductive reasoning. Temiloluwa used *dàgbà* 'older' rathan than *gùn* 'longer' because at that point she knows when someone is older than the other; the person is also most often taller than the other person too. What she however fails to know is that *dàgbà* 'older' is used for animate nouns and not for inanimate entities. In the case of Damilare, the input most often is

(212)   Dàmọ́lá jẹ bread àti tìí
        Dàmọ́lá eat bread and tea
        'Damola ate bread and tea.'

He therefore concludes by using *jẹ* 'eat' for either of the nouns. With time and better understanding of the language and how to interprete the constituents they begin to use them correctly.

The acquisition of overt arguments especially pronouns confirms Piaget (1970) assertion that language acquisition is linked to child's maturation. Children can only use certain linguistic structures when they understand fully the concepts surrounding them. We see that the children move from the stage of using bare nouns right from the one-word stage to the when they have a full complement of the pronominal system of Yoruba language. It is really long and complex process. Until the children have a good understanding of the concepts before they begin to approximate them with appropriate linguistics structures. However, despite the complexities involved, they succeed.

Another piece of evidence that shows the importance of cognitive development to language acquisition is the issue of verb semantics. Looking through our data of early verbs of the children acquiring the argument structure of Yoruba, we see that they start by using different semantic classes of verbs. The first of the classes found in the children's utterances are *event* verbs. These are verbs that denote what they are involved in. These verbs denote concepts that they can easily understand. With time, they acquire other more complex verbs. It should be noted that the interpretation of Yoruba nouns depends on the kind of verbs they occur with. The verb constrains its arguments; a particular type of verbs would require a particular type of thematic relations. Children do not easily acquire verbs that require *experiencer, source, stimulus and force* arguments. These roles are at the initial stage too complex for them.

In accordance with the belief of nativist scholars, we confirm that children are born with an innate propensity for language acquisition and that there is a language

acquisition device that makes it possible for children to acquire language. Evey evidence points to the fact that language acquisition is innate. There are evidences to show that children have an innate capacity to acquire language. When the time comes to acquire language, the child does not have a choice. Once the part of the brain that is responsible is ready, it triggers on the language acquisition mechanism and since the input data will always be there (except in some uncommon circumstances) the process of language acquisition begins.

CHAPTER FIVE

SUMMARY, FINDINGS AND CONCLUSION

5.0   Introduction

In the previous chapter, efforts were made to present relevant ample data and we carried out thorough analyses and discussions of the data. This is the concluding chapter of this research work. It presents the summary, findings and highlights areas in need of further researches. It ends with recommendations and conclusions on the study.

5.1   Summary

Our focus in this study has been on the acquisition of argument structure among Yoruba pre-school children. We carried out our analyses using the various operations of the Minimalist Programme. In the acquisition processes, children begin by building up their lexicon, and we saw that the number and type of lexical items at the initial state was quite few. Gradually, the lexicon expands and it is built up to be the human mental dictionary that it is. It is this lexicon that feeds the $C_{HL.}$ The syntactic component consists of two sub-components; the lexicon and the computational system of human language (C_{HL}). The lexicon contains the lists of words and their properties.

The children thereafter moved to the stage of merging constituents, the computational system of human language (C_{HL}) is triggered. The C_{HL} also consists of two operations; *merge* and *move.* The first to be acquired by the children is operation merge. The children entered into the world of syntax by starting to merge different lexical items. Basically, they tried to build their structures. These structures were built up in a bottom-

up fashion. At this stage however, the children have begun to acquire the argument structure of the language. This is because arguments are marked by merger with a lexical θ–assigning category. It is the theta role that an argument is assigned at the point of merging that it carries even if affected by internal move. This means that the initial clauses of the children represent the perfect clause structure: the logical form.

When the children merged two-words, even though this is seen as the beginning of syntax, we find that very many things were missing from their structures. For example, there is no case, no tense; their utterances were not finite. The reason for this is that they had not acquired the ability to *move* constituents. With time, they acquired Operation Move/ Attract. This led to the acquisition of case and finiteness. An argument has to move to have its case checked. For example, at the initial stage, the subject resides in the spec-VP. When they have acquired case, it moves to spec-TP to have its case checked. This also explains the seemingly ill-formed structure of the children's unaccusative verbs. The logical object cannot move to spec-TP to have its case checked because they have not acquired the feature.

With the acquisition of Operation Merge, the children were able to check grammatical features. Gradually, null arguments gave way to overt arguments. They began by using bare nouns and then progressed to definite nouns, plural nouns, genitive nouns and then pronominals. The utterances of the Yoruba children were very economical, devoid of all superfluous elements; they make use of only needed constituents, following the principles of full interpretation. We can see that the language

of the children approximates the design of the Minimalist Programme. It is able to capture the bottom-up fashion of the children building up of their argument structure.

The study also addressed the acquisition of Yoruba argument structure from different perspectives. An eclectic approach to the study of the acquisition of Yoruba argumenet structure was adopted. *The initial state, continuity hypothesis, maturational hypothesis, uniformity of theta assignment hypothesis* and *the prominence theory* are the approaches we used to account for our data.

The *initial state* is the stage at which the child is assumed not to have any knowledge of grammar. The child moves from that state to adult competence. We assumed that the child is endowed with the Language Acquisition Device (LAD) that makes language acquisition possible. At the initial state, the one-word stage, we find that the lexicon is scanty. However, with further cognitive development, the initial state gives way to adult competence, and the lexicon becomes very robust, ready to feed the computational system. At the initial state, when children begin to merge constituents, they miss out arguments.

According to the *continuity hypothesis,* adult and child grammars are alike, it is assumed that children possess knowledge of grammatical categories from the onset of linguistic development. We assume that the absence of some adult features in children's language is not lack of competence on the part of the children but rather they are yet to acquire the necessary grammatical features. The issue of cognitive development is also closely related. It affects virtually every area of the children's language development.

This means that cognitive development and language acquisition are clearly inter-dependent. There are some features that children can only use productively when they are cognitively matured.

The *Uniformity of theta assignment hypothesis* accounted for different features of the acquisition of argument structure by Yoruba children. It is especially useful in accounting for the complex predications where internal movement had taken place. Complex predicates are not easily acquired by Yoruba children, but when they do, UTAH comes in handy to account for the well-formedness of the utterance. UTAH also accounts for unaccusatives in children's language just as in adults' language.

The *prominence theory* accounted for subject omission. According to the structured argument structure of Grimshaw (1990), it is assumed that argument structure has structure and a projection of hierarchy. The subject is assumed to be high up in the hierarchy and so can be easily omitted because it is the most prominent. This accounts for subject omission by the Yoruba children. Because the subject is the most prominent, it is assumed as *given information* which is known to the listener, hence, the omission by the children. The major findings from this research work are discussed in the following section.

5.2   Findings

The empirical studies report in chapter four of this research work were carried out in order to examine the acquisition of argument structure by Yoruba-speaking children. This is an area which has not been examined in earlier research but which holds much

relevance to both to language acquisition and syntactic theories. The major findings of this study are as follows.

1. The number of lexical items in the utterances of Yoruba-speaking children at the early stage was low. The lexical items in their early lexicon were predominantly nouns and verbs. However, as they grew older, the number of lexical items in their lexicon increased. We also discovered that as the children developed mentally, there was a decrease in the number of utterances without verbs. This follows the pattern of normal child language development.

2. Four research questions were asked under null arguments. It is a known fact, backed by empirical evidence from language acquisition studies across languages, that children miss out arguments at the initial stage of acquiring their language. We noticed a preponderance of null subjects at the early stage of the Yoruba children's acquisition of argument structure. The children's use of null arguments characterizes a case of null PFspell-out. They took the missing subjects as *given information*. We also discovered that null subjects were more prominent in the speech of the children than null objects; we found that the use of null subjects and objects decreased with age. As the amount of overt subjects increased there was a co relational decrease in null subjects in the utterances of Yoruba children.

   We conclude, following Radford (2000), that most often, null arguments in the speech of the Yoruba child were given null spell-out because the child felt it was *given information*. The problem, however, is that *given information* needs

to be shared by the speaker and the interlocutor; this fact the child did not seem to know at that stage, hence the missing arguments. We assumed that by the time the Yoruba child is three years old, null arguments have given way to overt arguments in his utterances. We did not find any direct relationship between null arguments and finiteness, however, we saw that most of their finite sentences have overt subjects and only non-tensed sentences have null subjects. There is hardly any sentence in our cross-sectional data that has null arguments; neither do we have any sentences that are not tensed.

3. The first three verbs in the early lexicon of Yoruba-speaking children were transitive verbs. Our analysis shows a good representation of the two types of verbs at all stages of acquisition. We conclude that the early verbs that the children used are those related to actions and events that they or those around them were involved in.

4. The children in our study easily acquired the argument structure of verbs that opaquely theta-mark their objects and they also began to use unaccusative verbs shortly after their second birthday. The Yoruba-speaking children began to use adjectivisable verbs at an early stage, however, evidence from our longitudinal data shows that adjectivisable verbs do not form one of the first set of verbs acquired by Yoruba children. On report verbs and their argument structure, these were not acquired at the early stage of language acquisition by the Yoruba

children because they belong to the family of complex structures which are not easily acquired cross-linguistically.

5. We found that Yoruba-speaking children began to use serial verbs at the early multi-word stage. It was noted that the children had actually started using the individual verbs before they began using them in serial constructions. The acquisition of the argument structure of splitting verbs is interesting and, as observed from our data, the principles involved are quite complex. We assume that the acquisition does not come easy for the children. We discovered that the children at the initial stage did not split the verbs. In all the usages recorded for the children at the initial state, no objects were inserted. There were also instances when the children did not put the internal argument at the logical position, which is between the splitting verbs; they placed it at the end like other verbs. With time, the usage of splitting verbs became more frequent and we could safely say that the children have acquired the argument structure of splitting verbs by age five.

We presumed that the acquisition of the argument structure of ditransitive verbs by Yoruba-speaking children indicates that so much progress has been made in the course of language acquisition. We deduced that the children have knowledge of this predicate right from the initial stage but were not cognitively matured to use them. We therefore concluded that by age three to four when they are cognitively matured, Yoruba children have acquired the argument structure of ditransitive verbs.

6. We observed that at a point, Yoruba-speaking children began to make use of overt arguments and gradually null arguments gave way. We assumed that the children used only bare nouns at the initial stage because they assumed that all nouns are singular and they were yet to acquire the necessary agreement features. The study shows that at the age of three, the subjects have acquired specificity.

Following the continuity hypothesis, we believe that the development of specificity and salience is constrained by principles and parameters and that its absence at the beginning does not mean lack of competence on the part of the children. We discovered that by the time they are cognitively matured, they begin to use specificity and salience productively. On the acquisition of plurality by Yoruba-speaking children, we conclude that the first of the strategies to be acquired by the child is the contextually determined strategy followed by the morphologically determined strategy. We conclude that the transition from nominal person reference to pronominal reference is an important milestone in the language acquisition ability of Yoruba-speaking children.

7. The differences in the chronological age in the acquisition of the three longitudinal participants have a lot to do with the input which they were variously exposed to.

8. We submit in this study that the order of acquisition of argument structure by the Yoruba child progressed in a cumulative fashion; we could say that it wil be the same with other children cross-linguistically. The children began by using verbs

with no arguments. Later, verbs were used with one argument, especially the object. Finally, they gained competence in handling the argument structure of their first language, Yoruba.

5.3   Areas in Need of Further studies/ Recommendations

We have tried to cover some area on issues relating to the acquisition of argument structure by Yoruba-speaking children. However, there is still much to be done. There are still some major areas that still need to be explored in future research. Some of these areas include the role of input in the acquisition of argument structure from a generativist perspective, a longitudinal study of acquisition of argument structure from the pre-grammatic stage to six years, comparative study of first and second language acquisition of Yoruba argument structure and computerized database for studying the acquisition of Yoruba language. This will be examined in the following sub-sections.

5.3.1   Role of Input in the Acquisition of Yoruba Argument Structure

The role of input in Yoruba children's acquisition of argument structure is an area that needs further research. The role of input in language acquisition has been an area of controversies among scholars with different orientations. Some scholars believe that input plays a very important role thereby giving little or no room for innate knowledge; some assume that input serves as evidence which will either confirm or disconfirm hypotheses while some scholars have very limited role for input, they believe that when a child is to choose between two alternatives, input helps the child in making the choice. There is however, a large body of literature on the role of input in language acquisition

from a usage-based perspective (Tomasello, 2003), than from generative perspective. This fact makes it an area that should be further looked into by generative grammarians.

In the course of this research, we discovered from our longitudinal participants that input plays a very significant role. Two factors are worthy of note. The first one is that Temiloluwa and Tola are twins and they constantly interact. This seems to be an advantage as they are able to quickly acquire some features that Damilare did not acquire on time. For example, the study shows that Temiloluwa and Tola acquired personal pronouns before Damilare. The second factor is that the twins have older siblings and this positively aided their language acquisition task. This is contrary to Damilare who is the first child of the family.

It is recommended that studies on twins who are the first in the families vis-a-vis twins who have siblings should be carried out. We also recommend that twins who are the first and another single first born child should also be studied. We strongly believe that these studies will bring out very many linguistically significant discoveries. Despite these observations, the findings of this research still stands.

5.3.2   Longitudinal Studies of Acquisition of Yoruba Argument Structure

The present study relies on both longitudinal and cross-sectional data. The cross-sectional data primarily served to provide data that found in stages of language acquisition later than three years. We however believe that in carrying out any language acquisition study that is developmental, the best is to rely on naturalistic longitudinal studies. This makes it possible to monitor every developmental milestone that the child

achieves. We therefore hope there will be a research that will be longitudinal and that will cover every phase of the language acquisition process. Naturalistic data is also best carried out on a daily basis. That is the interaction between the child the researcher or data collector should be daily. The reason for this is that there is a high probability that the data collected on a weekly or twice-a-month basis might miss some significant information.

5.3.3 Comparative Study of First and Second Language Acquisition of Yoruba Argument Structure

In the course of carrying out this research and going through our data, we discovered that there exist a lot of similarities between the children acquiring the argument structure of Yoruba and adult learners of Yoruba. Most of the times their utterances resemble adults who are learning Yoruba. This will definitely be an interesting area of further research as it has implications for Yoruba language teaching and learning.

5.3.4 Computerized Database for Studying the Acquisition of Yoruba language

There is the need to develop a database for Yoruba language where any researcher interested in carrying out language acquisition study can draw data from. It should be noted that the explosion of language acquisition study in the western world is as a result of the easy availability of data. It makes the work less cumbersome and less time consuming. This is a call to linguists who have access to young children to collect data from them. These corpuses will then be processed, transcribed and stored in a retrieval form and made available to those in need.

A computerized programme will have to be developed or adapted from existing analytical tools like the CHILDES tools for storing and analysing talk. These existing tools cannot be used without being adapted because they are not originally designed for Yoruba language. The features that are peculiar to Yoruba will have to be designed in order to be able to use the programme.

5.4   Conclusion

This research work has looked at a wide range of issues relating to the acquisition of argument structure by Yoruba-speaking children using both longitudinal and cross-sectional methods. We conclude in this study that language acquisition is innate. We explored the composition of the early lexicon of the Yoruba child and we discovered that at the initial stage he has very few lexical items in his possession. These lexical items are nouns and verbs. With time, and very quickly too, he begins to *merge* the lexical items in a *bottom-up* fashion and this period is seen as the beginning of syntax. This merging and building up of structures are initially done hapharzadly following their own deductions (Radford, 2000 refers to them as perfect learners of an imperfect system).

A major characteristic of this stage we discovered and this also have cross-linguistic back-up is the issue of null arguments. We discovered that the Yoruba child drops the subject but hardly drops out the object. The reason for this is that the language does not license object omission at any level. The subject is also easily omitted for various reasons. First, according to the *prominence theory,* the subject is the most prominent argument and so can be missed out; the child takes it as *given information.* The

second reason is because, at this stage, the child has not acquired *tense* and so cannot check the NOMINATIVE case of the subject.

In the acquisition of overt arguments, the Yoruba child begins by using bare nouns in all positions and then develops to have a good mastery of Yoruba nominal expressions. The analysis of the acquisition of argument structure of various Yoruba verbs was also very revealing. We discovered that the argument structure of some verbs were acquired early while some were acquired much later. Very many factors influenced this. But the most important of all is the complexity of the verbs. Verbs with simple argument structure and simple semantics were acquired early while complex verbs and complex semantics were acquired later when they are cognitively matured to understand the concept. This is in line with normal child language development. In conclusion, despite the fact that nobody can conquer knowledge and so much still remains to be done, it is our hope that the present study has provided enough openings through which the frontiers of knowledge, as far as studies on language acquisition are concerned, can be expanded. The major purpose has been to carry out a comprehensive study of the acquisition of Yoruba argument structure. We were able to observe the processes through which a normal Yoruba child undergoes in order to acquire his first language and also be a competent user of the language.

End Notes

1.   **Given information** is information that is assumed to be shared by the speaker and the listener and does not need to be repeated.

2.   **Assumptions of the Minimalist Programme:** Language is a perfect system; the language faculty is a component of the human mind/brain dedicated to language; there are two interacting systems: an articulatory-perceptual system (A-P) and a conceptual-intentional system (C-I).

3.   Ajiboye (2007) identifies three strategies for identifying plural marking in Yoruba. According to him, we have the 'contextually determined plurality, semantically determined plurality and morphologically determined strategy'.

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APPENDIX A:

Longitudinal Data

Damilare
1:3   15 months
Aye   Taiye
Jóojóo hot
mẹ   goat
Ake   take
Aye   Taiye
Ake   take
hẹhẹ   goat
jẹjẹ   pointing at food
ìta   I want to go out
mẹmẹ   water   I want to drink
water
nana   Ana
jẹjẹ   pointing at food
ìta   I want to go out
Aye   Taiye
Ake   take
mẹ   goat
jẹjẹ   food
jẹjẹ   I want to eat
gbà   take
kẹkẹ   bicycle
yọya rọra   take care
nàá   beat him
jóojóo hot
16 months -1:4
Gbà à
bọnbọn
sí ibẹ̀
sí i
sí i mọto
key sí i mọto
gbé e
sùn
tọ̀
màmá sùn

wẹ̀
màmá wẹ̀
n wá
mọ́mì   jẹ
nà á
mọ́mì   nà á
mọ́mì   nà á
wá
màmá wá
jẹ isu
yọ ọ́
yọ ọ́ battery
mu omi
yà ìgbẹ́
tẹ̀ ẹ́
iná
gbóná
jòkó
dìde
18 months – 1:6
Yà ìgbẹ́
pẹlẹ́
nà á
mọ́mì   nà á
jẹ isu
jòkó
dìde
màmá pọ̀npọ̀n
kpa á
sí i
gbé e
n wá
gbà a
mu omi
bàbá rọra
kẹkẹ́ bubú
mu omi tútù
gbà charger
gbé e
gbé e bag
dìde kẹkẹ́

gbá a bọọl

wọ bàtà

mọ́mì   bọọl

n wọ̀

yọ ọ́

ju

jó

jù ú

fọ́

nà á

mu omi tutu

n nà á

jòkó sí ibẹ̀

yọ ọ́

ya á

tẹ̀ ẹ́

jẹ ẹran

ya irun

mọ́mì   jẹ ẹran

n ya irun

bàbá mu omi

pa á

pa ẹsẹ̀

pa á

pa ara

mu ọmú

wọ aṣọ

n mu ọmú

mu ọmu

pa ara

19 – 1:7

pa ẹsẹ̀

Mu ú

jẹ isu

N gbà

mu u tîî

fọ́

sùn

n fẹ́

mọ́mì   sùn

n jẹ isu

sùn yàrá

jẹ àmàlà

jòkó sí ibẹ̀

yọ ọ́ biro

mọ́mì   sí ibẹ̀

fọ ọwọ́

bàbá jòkó sí ibẹ̀

wọ aṣọ

gbóná tîî

n wọ aṣọ

gbóná omi

n jẹjẹ

fọ eyín

n po

n fọ eyín

n yà ìgbẹ́

20 months 1:8

wò ó

tẹ̀ ẹ́

wo kẹ̀kẹ́

mu ọmú

fọ eyín

mọ́mì   mu ọmú

n fọ eyín

yà ìgbẹ́

jó

tò

mọ́mì   jo

n yà ìgbẹ́

n jó

n tò

n wẹ̀

n yàrá

gbá a

sí i

fi gbá

sí i mótò

bubu kẹ̀kẹ́

yọ ọ́

n wọ̀ sweater

n yọ

gbá bọọl

n gbá

gbé e

n gbé e

fọ́ ọ́

gbá a

n gbá

wẹ̀ ẹ

n wẹ̀

mọ́mì   pọ̀npọ̀n

n pọ̀n

wọ asọ

n wọ asọ

mọ́mì   wọ asọ

sùn

sùn yàrá

sùn bed

n sùn

daddy sùn

daddy ti lọ

daddy lọ mọ́tò

mu omi

n mu omi

jẹjẹ

daddy sùn

jẹ isu

n jẹ

n fẹ́

jó

n jó

dìde wà á

wa kẹ̀kẹ́

subú

màmá subú

jù ú

daddy jù ú

jẹ ẹ bread

nà á Ifeoma

màmá nà á

tàn án

bàbá tàn án

bọọl jábọ́

wò ọ́ sweater

wò ọ́ bàtà

gbá ilẹ̀

fọ ọwọ́

dìde màmá

phone jábọ́

wò ó bàtà

jòkó

jòkó síà

n jó

n jòkó

n wò

biro gbà

sí i coke

mu yoghourt

n fẹ́

n sùn

mọ́mì   wọ asọ

mọ́mì   bag

màmá asọ

pa ẹsẹ̀

pa ara

n pa ẹsẹ̀

n pa ara

ó ti tó

biscuit titan

wọ ilé

mọ́mì   wọlé

pa a

fọ̀ ọ́

fọwọ́

fọ ẹsẹ̀

n wọ̀ ọ̀

jẹ ẹ̀wà

n jẹ ẹ̀wà

gbà charger

mú u

n mú u

gbé e

n gbé e

313

gbé e bọọl

bù ú

bù ú omi

n jábọ́

gí titan

bàbá wọ aṣọ

n wọ aṣọ

21 months – 1:9

Bàbá lọ

Gbá ilẹ̀

Bàbá mọ́tò

Sí i

Padé

wọ ilé

bàbá wọ ilé

ifeoma bù ú

bàbá sùn

bàbá lọ

bàbá lọ mọ́tò

bàbá ìwé

bàbá wẹ̀

bàbá, wẹ̀

mọ́mì   wọ ilé

dà á

ifeoma dà á

yọ ọ́

yọ ọ́ pampers

dìde

bàbá jẹjẹ

sùn

bàbá sùn

jábọ́

jẹ isu

bọọl jábọ́

lò ògùn

ǹ lò ògùn

yà ìgbẹ́ pó

dùn ún

bọ́ ọ

ifeoma yoyoyo

bàbá lọ mọ́tò

jẹjẹ

mọ́mì   jẹjẹ

ǹ jẹjẹ

n jẹ ẹ́

ifeoma dìde

ifeoma dìde dirty jòkó

mu omi

mu yoyoyo

yọ ọ́

ifeoma sùn

ifeoma yoyoyo fridge

ifeoma fridge yoyoyo

bàbá wẹ̀

mọ́mì   gbé e

bàtà jábọ́

biscuit titan

n jẹ eh eh sùn

Tọ́pẹ́ mu omi

jẹjẹ

n jẹ ẹ

n Dàmọ́lá

ó ti lọ

powder jábọ́

ball jábọ́

mọ́mì   dìde

ifeoma wọlé

coke ti tán

dìde

jábọ́

gbà à

mu wá

fi sí ibẹ̀ eh eh

ifeoma gbà

ẹ rọra

gba

fọ̀ ìdí

mọ́mì   yà ìgbẹ́

bàbá nà á

gbà

ẹ gbà

kúrò mọ́mì

ifeoma mọ́mì   mu omi
biscuit ti tán
ifeoma ti lọ
ifeoma ti lọ school
ìwé jábọ́
mọ́mì   gbé e
màmá nà á
NEPA iná
ẹ gbà
yoyoyo ti tán
dìde
mọ́mì   dìde
powder ti tán
ti tán
glasses ti fọ́
mú u
bread ti tán
mọ́mì   wọ̀ ọ́ aṣọ
22 months 1:10
Daddy lọ
Daddy ti lọ
f ọ́ ọ
bàjẹ́
powder jábọ́
mu wá
ẹ mu wá
caprisone ti tán
fi í lẹ̀
n gbà
bàbá ti lọ
bàbá mọ́tò
bàbá fọ̀ ọ́
bàbá omi fọ̀ ọ́
bàbá ti dé
ifeoma ti lọ school
NEPA ti mú iná lọ
Jù ú
kojá
phone ti ja
daddy ti lọ school
daddy lọ

mọ́mì   phone
phone hello
powder ti tán
barney ti tán
padé
mọ́mì , bọ́ ọ sòkòtò
n bọ́ ọ
mọ́mì   ti l ọ
mọ́mì   sùn
mọ́mì , milk ti tán
milk ti tán
já a
mọ́mì   já a
mọ́mì   tàn án
pa á tàn án
bàbá ti dé
mọ́mì   ti dé
dìde
padé
mọ́mì   dìde
mọ́mì   pònpòn dìde
pònpòn
mọ́mì   dìde
mọ́mì   sùn yàrá
sùn yàrá
n Dàmolá
n lò ògùn
fi sí ibẹ̀
jòkó
dìde
jòkó sí ibẹ̀
tàn án
daddy tàn án
powder ti tán
mọ́mì   mú omi
omi jábọ́
wọ̀ ọ́
mọ́mì   wọ̀ ọ́
mọ́mì   wọ̀ ọ́ pampers
bọ́ ọ
mọ́mì   bọ́ ọ

bǫ́ ǫ sòkòtò

mǫ́mì   bǫ́ ǫ sòkòtò

wǫlé

ifeoma wǫlé

ifeoma wǫlé yàrá

sí I ilèkùn

mǫ́mì   pònpòn

mǫ́mì   tea

bù ú ęyin

mǫ́mì   bù ú ęyin

gbà a òbę

tàn án

gbé ęsę

daddy gbé ęsę

dìde

mǫ́mì   tàn án

mǫ́mì   pa á

mǫ́mì   tęę́

kèké subú

key jábǫ́

kèké lǫ school

battery jábǫ́

bread ję ę́

bàję́

kúrò

mǫ́mì   kúrò

kúrò mǫ́mì

fi sí ibè

mǫ́mì   fi sí ibè

òbę

mǫ́mì   òbę

òbę iná

padé

mǫ́mì   padé

gbóná

mǫ́mì   gbóná

yǫ ǫ́

kèké yǫ ǫ́

mǫ́mì   yǫ ǫ́

tîî gbóná

jęję

ję isu

mǫ́mì   ję isu

nà á

ti tán

tîî ti tán

n bǫ́ sweater

n fò ìdí

n fò ǫwǫ́

bù ú cornflakes

mǫ́mì   bù ú cornflakes

cornflakes ti tán

subú

mǫ́mì   subú

mǫ́mì   cornflakes

mǫ́mì   ję ę́

23 months 1:11

jábǫ́

mǫ́mì   jábǫ́

yǫ ǫ́ jábǫ́

mǫ́mì   wǫ pant

phone mu wá

pant gbe wá

bàbá ti dé

ti tó

bread ti tán

nylon jù ú

mǫ́mì   bread ti tán

nylon jábǫ́

kòkòrò pa á

gbé e daddy gbé e

mǫ́mì   ti dé

n ję ję

wò ǫ́ pampers

n wǫ pátá

dùn ún

abę́rę́ dùn ún

n gba abę́rę́

phone bàję́ subú

tàn án

iná tàn án

phone bàję́

phone subú
gbé e wá
gbé e wá powder
tàn án
tàn án iná
mọ́mì   mu omi
gbé e
yọ ọ́
yọ ọ́ daddy
mọ́mì   bọ́ ilẹ̀
 bọ́ ilẹ̀
daddy gbé e
ó ti yọ
dùn ún
mọ́mì   dùn ún
Bọbi ti lọ
Bọbi ti lọ sùn
Mọ́mì   wọlé
Mọ́mì   mu omi
Mọ́mì   biscuit
Lará ti dé
Lara sùn
N sùn
Mọ́mì   po (potty)
N po
N jẹ
Bàbá gbe tíì
gẹ irun
bàbá gbe wá
biscuit yọ ọ́
ti tán
gbà à
mu wá
gbé e wá
bù ú
bù ú mọ́mì
mọ́mì   bù ú
fọ ọ
fọ́
Lará pè é mọ́mì
Sùn yàrá

Sùn
Lará mu omi
Mu omi Lará
Mọ́mì   pè é Lara
Mọ́mì   pè é
ẹ pè é
Lará t i pè é
Daddy ti lọ
Bàbá ti dé
Bàbá lọ school
Bàbá ti lọ
Mọ́mì , wọ̀ ọ́ sòkòtò
Lará ìgbẹ́ fọ̀ ìdí
Pè é mọ́mì
Daddy pè é
Sùn
Mọ́mì   sùn
Bread ti tán
Tàn án fan
Pa á television
kọjá
mọ́mì   wọlé
Lará taxi
Baby n sùn
Òjò ti rọ̀
Bàbá ti dé
Gba ball bàbá dìde
Ó n subú
Gbá ball
Bàbá gbá ball
N lò ògùn
Gba abẹrẹ́
N gba abẹrẹ́
ayéféẹ́lẹ́ jó
ayéféẹ́lẹ́ dìde
jà
omi rà á
omi Bobi rà á
ìgbẹ́ rùn
mọ́mì   ìgbẹ́ fọ ọwọ́
dùn

indomie dùn

mọmì gba abẹ́rẹ́

mọmì dide

bá n gbe e

mọmì bá n gbe e

bag bàjẹ́

cornflakes ti tán

mọmì bá n bù ú

dàánù

mú wá

mọmì mú wá

yọ ọ́

Lará yọ ọ́

Pant tutu

Mọmì pant tutu

Bàbá ti dé

Lará ti lọ

Mọmì fi í lẹ̀

Bàbá mọmì mu omi

ìgbẹ́ rùn

mr Biggs ibẹ̀

padé

dúró mọmì

dìde

dìde mọmì

ẹ dìde

bàbá jó

bàbá jíjó

ẹ jó

ẹ mu wá

mọmì dìde jòkó

ibí

 jòkó sí ibí

daddy lò ògùn

mọmì tàn án

ìwé ti ya

ìwé já

inú dùn ún

24 months 2:0

Anti Lará gbé e

Mọmì ti lọ

Mọmì ti lọ school

Bàbá ti dé

Omolewu ti lọ

Sún

Dùn

yọ ọ́

Mọmì gbé e jòọ́

Mọmì mu omi

Mọmì mu omi jòọ́

Daddy lọ Tọ́pẹ́

Nù ún

Mọmì nù ún aṣọ

ẹ fi í lẹ̀

ẹ fi í lẹ̀ mọmì

mọmì fi í lẹ̀

ẹ fi í lẹ̀ anti Lara

ẹ mu wá

ko sí ibí

baby sùn

kọ ọ́

mọmì kọ ọ́

mọmì kọ ọ́ ìwé

mọmì kọ ọ́ biro

tàn án

lara tàn án

mọmì sún

kọjá

anti Lara kọjá

ó dùn

mọmì pa á

mọmì kọjá

kọjá mọmì

mango dùn

bá n gbé

fọ ọwọ́ anti Lara

anti Lara fọ ọwọ́

omi fọ ọwọ́

mọmì ti dé

mọmì ti lọ

Dàmọ́lá ti dé

Kà ìwé

Mọ́mì   kà `ìwé
Dàmọ́lá kà ìwé
lọ Jesus
fọ ọwọ́
anti Lara fọ ọwọ́
mọ́mì   fi si i
mọ́mì   pa á
mọ́mì   pa á kòkòrò
mọ́mì   jòkó
mọ́mì   sún
mọ́mì   fi í ilẹ
mu wá
bàbá gbá ilẹ̀
gbá ilẹ̀
bàbá fi sí i
mọ́mì   dùn ún
mọ́mì   òbẹ dùn ún
bàbá wò ó
wò ó
kú ú
egungun ti lọ
bàbá egungun
mọ́mì   kà á
mọ́mì   ti lọ
mọ́mì   sún 'un
mọ́mì   sún jòkó
mọ́mì   pa á kòkòrò
bàbá fi sí ibẹ̀
bàbá fi sí ibẹ̀ John Locke
sá
bàbá mẹẹ
tọ̀ ọ̀
mọ́mì   tọ̀ ọ̀
wọ̀ ọ̀
pátá wọ̀ ọ̀
biro bàjẹ́
mọ́mì   biro bàjẹ́
ìwé kà á
mọ́mì   bàjẹ́
bobisco ti lọ school
mọ́mì   tàn án

mọ́mì   biro
mọ́mì   mu wá
mọ́mì   mu wá biro
kọ̀ọ́
kọ ìwé
mọ́mì   burú
ah mọ́mì   burú eh
bù ú
mọ́mì   bù ú
bù ú cornflakes
mọ́mì   bù ú cornflakes
pò ó
mọ́mì   pò ó tea
tea mọ́mì   pò ó
sún ún
sún ún mọ́mì
sún ún mọ́mì   jòkó
blowblow ti lọ school
ka ìwé
ẹ mu wá
àmàlà
àmàlà gbóná
mọ́mì   omi tutù
mọ́mì   omi gbóná
tea gbóná
síà subú
bàbá subú
mọ́mì   bù ú
mọ́mì   jẹ ẹ́ tán
omi ti sùn
omi ti lọ school
mọ́mì   bìì
mọ́mì   já a
já a
já a biscuit
bù ú
póò ti lọ school
póò ti sùn
póò ti lọ
mu ọmú
daddy mu ọmú

dùn ún
fi gbá
inú dùnún
bàbá inú dùn ún
gbe wá
ẹ gbe wá
Taiye ti lọ
Bàbá yọ ọ́
wọ inú
key wọ inú
fà á
bàbá fà á
kẹ̀kẹ́ subú
jà
bàbá wò ó
bàbá mu omi
mọ́mì   ti lọ school
omi ti lọ school
nà á
nà á anti Lara
mọ́mì   nà á
bàbá bù ú
omi bù ú
sún
mọ́mì   sún
mọ́mì   kọjá
kọjá
ìwé kọ ọ́
mọ́mì   kọ ọ́
mọ́mì   kà á
mọ́mì   kọ orin
mọ́mì   jóó
 mọ́mì   jóó
àgbàyà ni ẹ́
mọ́mì   dùn ún ẹsẹ̀
mọ́mì   burú
bàbá pè é
kò gbọ́
25 months (2:1)
Mọ́mì   jẹ ẹ́
Mọ́mì   wá

Mọ́mì   wẹ̀
Mọ́mì   blow blow
Mọ́mì   ìwé
Mọ́mì   kà á
Mọ́mì   wò ó
Mọ́mì   dùn ún
Mọ́mì   dùn ún inú
ẹpà ti tán
mọ́mì   apá dùn ún
bàbá ti lọ Tópẹ́
bàbá lọ
mọ́mì   dùn ún
mọ́mì   jẹ́ a lọ
gbá ilẹ̀
mọ́mì   gbá ilẹ̀
mọ́mì   gbá ilẹ̀
fi sí ibẹ̀
 fi sí ibẹ̀ dada
mọ́mì   tò ọ
mọ́mì   tò ọ
mọ́mì   tò ọ
nùn ún
mọ́mì   nù ún
bàbá já a
bàbá já a
bàjẹ́
jí
mu wá
mọ́mì   aṣọ bò ó
ẹgba nìyì
biscuit jábọ́
ti tán
mọ́mì   jẹ ẹ́
mọ́mì   gbe e daddy
daddy gbe mọ́mì
biscuit ti tán
mọ́mì   jẹ́ a lọ
daddy ma lọ
mọ́mì   fi aṣọ nùn ún
mọ́mì   biro
daddy sòkòtò jábọ́

ó ti tó

bàbá gbá ball ibí

subú

Damola subú chair

Gbé e

Òjò ti rò

Bàbá sùn yàrá

mẹẹ ma lọ

mọ́mì   kọ orin

mọ́mì   jó

mọ́mì   jó

anti Lara gbé e

òbùn ni ẹ́

àgbàyà ni ẹ́

mọ́mì   dùn ún ẹsẹ̀

mọ́mì   ẹsẹ̀ dùn ún

bàtà baby

shoemaker ti dé

ẹ dìde

mọ́mì   ẹ dìde

ball subú

mu wá

gbe wá

ball pẹ̀lẹ́

ball wọ inú

gbà à

gbá a

ìgbẹ́

ìgbẹ́ adìyẹ

jà

ó nà á

màmá n jà

machine subú

petrol n rùn

ó ti tán

bàbá rọra

Dàmọ́lá subú

Mọ́mì   wẹ̀ sùn

Dàmọ́lá sùn

Nà án

Bàbá nà án

Nà án Dàmọ́lá nà án

Dàmọ́lá nà án

Anti jòkó

Jòkó anti jòkó

Bàbá jà

Mọ́mì   pè é

Bàbá mọ́mì   pè é

Kò gbọ́

Mí

Dàmọ́lá mí

Mọ́mì   gé e

Mọ́mì   bù ú

òbùn ni ẹ́

mọ́mì   òbùn ni ẹ́

bàbá lọ

mọ́mì   fi sí ibẹ̀

ẹ fi sí ilẹ̀

mọ́mì   ẹ fi sí ilẹ̀

àgbàyà ni ẹ́

anti nà á

bàbá wá

mọ́mì   nà á

mọ́mì   nà á

bàbá wò ọ́

bobo dùn

bàbá subú

bàbá bọ́ ọ

pátá n rùn

ata n rùn

wò ó

kòkòrò wò ó

ó ti lọ

ó titan

bàbá ta á

ta á

ó ta á

n gbà

bàbá n gbà

ìgbẹ́ n rùn

bàbá ya ìgbẹ́

bàbá wò ó

fi sí ilẹ̀

ya ìgbẹ́ tán

pátá mọ́mì   pátá

bàbá lọ Tópẹ́

mọ́mì   jà

mọ́mì   kọ ọ́

omi wà?

biro wà?

omi bù ú

àgbàyà ni ẹ́ daddy

adìyẹ ma lọ

n fẹ́ ẹ́

wo ó

biscuit n rùn

biscuit rún

biscuit fọ́

ìwé mi nìyí

paper mi nìyí

mọ́mì   kọ ọ́ biro

aṣọ Jesus

ìgbẹ́ adíyẹ

ìgbẹ́ n rùn

ìgbẹ́ adíyẹ n rùn

ẹ mu wá

ẹ rà á biscuit

rà á biscuit

ẹ fi sí ilẹ̀

anti sún

anti sún jòọ́

bobo ti dé

bù ú si

jábọ́

àmàlà sùn

àmàlà ti lọ school

àmàlà dùn

anti dà?

Key wà?

jẹ ẹ́

n jẹ

bàbá kán án

bàbá kán án

mọ́mì   kán an

machine bàjẹ́

generator bàjẹ́

aṣọ Jesus

Jesus Lara

Helmet jábọ́

Fi sí i

Bàbá kò gbọ́

Pè é dáda

Pè é jòọ́

Kò gbọ́

Bàbá ò gbọ́

ìgbẹ́ n rùn

lará pè é

ìbọn wà

pè é dáda jòọ́

gun òkè

sè àmàlà

mọ́mì sè é àmàlà

mọ́mì fọ ọwọ́

mọ́mì fọ ọwọ́ jòọ́

mọ́mì jẹ ẹ́ èfọn

bàbá globe ti fọ́

adìyẹ sá

adìyẹ sá lọ

mẹ ma lọ

globe fọ́

ìgbẹ́ rùn

mọ́mì tàn án iná

tọ̀ tán

ó dùn ún

sùn yàrá

mọ́mì jẹ́ á lọ sùn

bàbá jẹ́ á lọ sùn

mọ́mì ti jí

phone bàbá kò da

phone kò da

bobo dà

mọ́mì ra biscuit jẹ

indomie yàrá mú u

mọ́mì ra biscuit

daddy n tọ̀

daddy ti tọ̀

Damola sá

Bàbá dùn ún

Bàbá bí í

Fi i sí

mọ́mì fi si i

ti tán

bàbá fi si i fíìmù

daddu fíìmù

dún

daddy dún ún

mọ́mì fi si i fíìmù

mọ́mì ra bread

baby wá

baby jòkó

baby jòkó dáadáa

baby jòkó omi

mọ́mì bù ú omi

mọ́mì bù ú

mọ́mì sùn

adìyẹ sùn ilẹ̀lẹ̀

2;2   26 months

fọ̀ ọ

fọ̀ ọ dáadáa

ìgbẹ́ Damola

mọ́mì ti jí

ball nlá

ball Damola dà?

Ball nlá bá n mú u

Ìwé ya

John Locke fẹ́

À n lọ

À n lọ Tọ́pẹ́

Damola subú

Damola subú ilẹ̀lẹ̀

Mọ́mì se sòkòtò

n tọ̀ ilé

daddy ti ìlẹ̀kùn

a ti n lọ

generator bàjẹ́

Mọ́mì gbá ilẹ̀

Tàn án generator

Generator tàn án

Bàbá tàn án generator

Mọ́mì tan an iná

Ó fine

A ti ń lọ Bobisco

Òjò ti ń rọ̀

Mọ́mì dìde

Mọ́mì dìde, jòkó

Àgbàdo dà?

Kóredé ńkọ́

Kóredé gbá bọ́ọ̀lù

N fẹ́

Spiderman fẹ́

Fi sí I bàbá fi sí i

Bàbá gbé e

Mọ́mì John Locke fi sí i

Iná ti kú

ọwọ́ dùn ún

ẹsẹ̀ dùn ún

daddy wẹ̀

bàbá Mọ́mì ya á

lará ti sùn

Mọ́mì tàn án fan

adìyẹ sáá

etí Mọ́mì

sòkòtò bàjẹ́

kọ́kọ́rọ́ dà?

Àpò ya

Mótò jábọ́

Mótò dà?

Bàbá ti dé

jẹ́ a lọ Tọ́pẹ́

bàbá bọ́ ọ

bàbá jẹ ẹ́

Damola sè é

Mótò umbrella mu

jábọ́ kòtò

wọ inú

ah bàbá ti sùn

bébì ti lọ Jesus

Mọ́mì mú u mótò umbrella

kọ́kọ́rọ́ wọnú

bébì ti lọ school

bébì dà?

Gbà

Ó fọ́

Ó ti fọ́

Mọ́mì bọ́ ọ sòkòtò

N wọ̀

Mọ́mì wọ̀ ọ́

Dámọ́lá wọ ilé

adìyẹ sá

daddy ra ìbọn

ìbọn dà?

Mọ́mì sùn yàrá

Dámọ́lá pa á

Dámọ́lá pa fan

Dámọ́lá jó

Dámọ́lá subú

Mọ́mì sún

Dámọ́lá sáré

Mọ́mì kọ one

Bù ú si

Mọ́mì bù ú si

Dámọ́lá rín ẹ̀rín

Dámọ́lá Dámọ́lá Dámọ́lá

Mọ́mì fi sí ibẹ̀

Phone dà?

Mọ́mì gbá ilẹ̀ ayán

fi sí ibẹ̀ padà

Mọ́mì tọ̀

Mọ́mì wiwi ti tán

Mọ́mì kẹ̀kẹ́?

Mọ́mì fọ̀ ọ́ ọwọ́

Mọ́mì fọ̀ eyín

Orí dun Lará

Lará orí dùn ún

Mọ́mì mu ú tea

Lará ti lọ

Lará ti dé

Dúró

Dúró Mọ́mì

Mọ́mì se è

Mọ́mì mu bobo

Mọ́mì jẹ ẹ́ ẹ̀pà

Subú school

Mọ́mì dùn ún, ọwọ́ dùn ún

Mọ́mì lọ bàbá

Mọ́mì mà á lọ

Mọ́mì mà á lọ jọ

Mọ́mì pa á

Dàmọ́lá ya á

Dádì jẹ́ á lọ

Mọ́mì aṣọ

Dàmọ́lá yọ ọ́

aṣọ Mọ́mì aṣọ yàrá

Mọ́mì bàtà

 jẹ́ á lọ

Mọ́mì jẹ́ á lọ

Bàbá dà?

Elephant ti tán pátá

Mọ́mì ti ri?

Mọ́mì ti rí kọ́kọ́rọ́

A ti ń lọ

Mò pa mẹ

mẹ ti kú

sorry mẹ

Dàmọ́lá sukún

Ìkà mótò

Gba ibí

Dádì gbé e

Èmi Dàmọ́lá

A ti ń lọ Jesus

Mọ́mì fi si í barney

ọwọ́ dùn ún

ẹ̀sẹ̀ ò dùn ún

ǹ jẹ mọ́

computer ti kú

computer jábọ́

phone bàjẹ́

battery ti kú

computer sorry

Mọ́mì gé e ekanna

N gẹ irun

Mọ́to ti lọ

Mọ́to kọjá

Mọ́to kọjá lọ

wọ́n ń jà

dáḍì wò ó

wọ́n ń jà

ayán ti kú

ayán ti kú pátá

má a lọ èfọn

èfọn ti lọ school

èfọn ti kú

nǹ yà ìgbẹ́

nǹ yà ìgbẹ́ o

Mọ́mì bá dádì

Dàmọ́lá bá dádì jọ̀ọ́

Dàmọ́lá sùn

Dàmọ́lá ti sùn

adìyẹ ti kú ní àná

Dàmọ́lá jẹ ẹ́

Anti jẹ ẹ́

Mọ́mì rà á bobo

Mọ́mì̀ wo èyí

asọ dọ̀tí

Dàmọ́lá gun machine

Dáḍì wá

Dàmọ́lá lọ yàrá

Dàmọ́lá yán

2:3   twenty-seven months

Dáḍì Dàmọ́lá wọ bàtà

Wo eléyì

Dàmọ́lá kọ one

Dáḍì fọ ìdí, ìgbẹ́ ń rùn

Bàbá lọ

asọ school

malu pọ̀

malu pọ̀ dada

omi dànù

ti ri

dádì fọ̀ ọ́ tán

dàdí fọ̀ yí ì tán

wọlé lọ

wọnú lọ

dádì wọnú lọ

n gbà

n gba ìbọn

Mọ́mì mú u bọọl

Mótò ti dé

Mótò ti dé padà

Dàmọ́lá ń jẹun

èfọn jẹ ẹ́

èfọn ti lọ

èfọn ti sá lọ

Mọ́mì kọ ọ́

Mọ́mì lọ Abuja

Dàmọ́lá yán

Dàmọ́lá bí i

Dàmọ́lá sukún

Dùn ún

ẹsẹ̀ dùn ún

Dàmọ́lá rín ẹ̀rín

Mọ́mì rín ẹ̀rín

Dáḍì sùn

Anti wẹ dà?

Mọ́mì fi sí ibẹ̀ àpò

Dáḍì jẹ́ á lọ now

Dáḍì bù ú

Dáḍì ńkọ́?

Dada?

Gàri á jẹ

Dáḍì ra òmín wá

Iná ti kú

Iná ti dé

Mọ́mì ti sùn

Mu omi tutu

Dáḍì lọ now

Mọ́mì ń rín ẹ̀rín

Ti dé

Phone ti kú

Dáḍì tán án generator

Dádì wọ ti tì ẹ

Dàmọ́lá kọ one

Dàmọ́lá kọ one jòó

Anti jẹ ẹ́ tán

iwọ àgbàyà ni ẹ́

Mọ́mì jẹ́ á lọ

Mọ́mì ra ti tìẹ

Mọ́mì ra ti tìẹ ẹpà

Ó ń jó

Ǹ fẹ́ èyí

Ǹ wọ̀ mọ́

Mọ́mì fà á yọ

Mọ́mì mu omi tutu

ẹsẹ̀ ń dùn ún

kòkòrò jẹ ẹ́

òjò ti tán

aṣọ míín

Mọ́mì dìde

Mọ́mì lọ tọ̀

Ta ló nií

Lará òun ló ni

ìwọ ni ó nií

wọnu lọ

òjò ó pa á

òjò ti ń rọ̀

òjò tì rọ̀ mọ́

Dàmọ́lá wá

òjò ti ń rọ̀ padà

Mọ́mì dìde padà

Fà á ilẹ̀kùn

èfọn jẹ ẹ́

èfọn Dàmọ́lá jẹ ẹ́

Dàmọ́lá lọ Jesus

Fún Mọ́mì padà

Lará nà mí

ọwọ́ dọtí

ǹ jẹ mọ́

Dàmọ́lá ń bẹ̀rù

Dàmọ́lá ń bẹ̀rù

Mọ́mì n rín ẹ̀rín

Mọ́mì wá jòó

Mọ́mì a ti ń lọ dádì

a ti ń lọ dádì

dádì ń lọ

dádì jẹ ẹ́ tán

Dàmọ́lá sá

Dàmọ́lá sá lọ

Dádì nǹ fẹ́

nǹ fẹ́ èyí

mẹ pọ̀

Mọ́mì ti tán

Dàmọ́lá kọ one

Mọ́mì wọ shoe

wọ́n sáré

lará wá ná

ìlu Dàmọ́lá dà?

Ìlù nìyí

Dùn ún

Ó dun Dàmọ́lá

Ra omi ní junction

bọọl dà?

Dàmọ́lá bọọl dà?

Dádì yọ ọ́

Fa aṣọ mi

Dádì fà á

Wiwi ti dé

Wiwi ti lọ

Dádì jòkó lẹ̀lẹ̀

Ó fine

Ilé fine

Orun ti dé

Orun ti dé mótò

Ó ti tán

Dádì Mọ́mì kọ́?

Dàmọ́lá ra ǹkan

Dàmọ́lá subú ní àná

Dádì rà miin

Dàmọ́lá ti sùn

Dàmọ́lá ti jí

Dàmọ́lá sunkún

Mọ́mì ń rín ẹ̀rín

Iná ti dé

Iná ti lọ sùn

Iná ò ti lọ

Dádì òtútù mú

ilẹ̀ ti sú

dádì ya ìgbẹ́

ǹ yà ìgbẹ́ mọ́

ìgbẹ́ ti lọ school

Dàmọ́lá subú

ìyẹn ni

dádì wá

dádì fọ ọwọ́

ọwọ́ dọtí

dádì gba mú

Dàmọ́lá lọ yàrá

Èmi ni ó jù ú

Èyí ni mo fẹ́

Dádì rà mîn

Dádì tàn án

Dádì wò ó

ẹsẹ̀ ń dun Bùsáyọ̀

Bùsáyọ̀ ti dé Tọ́pẹ́

Omi fọ mótò

Doctor ti dé

A ti ń lọ

Dádì a ti ń lọ

wọ́n ń jà

dádì wá

dádì wá now

Dàmọ́lá subú

Mọ́mì wò mí

Wò mí

Dádì wò ó

Dàmọ́lá sáré

Ó ń sáré

Mu omi

Omi nìyẹn

wọ ilé lọ

dádì wọ ilé lọ

Mọ́mì jẹ́ a lọ Bobisco

Mọ́mì wọ ilé

Mọ́mì bóọ́lẹ̀

Mọ́mì bóọ́lẹ̀ jòọ́

Dàmọ́lá call dádì ní àná

Ibí

Ibi ibẹ̀

Ibí now

Dádì tun se

Dàmọ́lá tún se bọọl

bọọl bàjẹ́

Mọ́mì jẹ́ a lọ Jesus Lará

Mọ́mì lọ Jesus Lará

Dádì jẹ́ a lọ yàrá

Dádì fi sí iwáj'u

Ó ń kọ

Dádì bòọ̀

Ah Dádì bòọ̀

Dádì wo èyí

jẹ́ á lọ

ilẹ̀ ti sú ǹ lọ mọ́

Dàmọ́lá jó

Dàmọ́lá lọ

Dàmọ́lá lọ Èkó

Dádì bọ́ ọ shoe

Dádì wò ọ́

ilẹ̀ ti sú

nǹ lọ mọ́

bicycle kọ́ machine ni

gba ibí

dúró

Dàmọ́lá dúró

Mótò ń bọ̀

ẹ̀fọn jẹ mí

èmi ni ó ni

òjò ti ń rọ̀

wọ́n jábọ́

Dàmọ́lá lọ sitting room

Dàmọ́lá ò lọ mọ́

Dàmọ́lá padà wá

Òjò ti ń rọ̀ pátá

Dàmọ́lá wo òjò

Òjò ti ń rọ̀

Dádì jẹ́ á lọ now

Dàmọ́lá gun machine
Dádì mu dání
Dádì mu dání bọọl
Dàmọ́lá ti dé
Ó ti dé pátá
Mọ́mì jẹ́ á lọ sùn
Mọ́mì sùn Mọ́mì
Mọ́mì sùn bed
Mọ́mì dádì Dàmọ́lá ti lọ
Mọ́mì Dàmọ́lá bàjẹ́
Mọ́mì Dàmọ́lá bàjẹ́ biro
Biro bàjẹ́
Mọ́mì ti jẹ ẹ́ tán
Mọ́mì mú biro
Dádì kọ ìwé
Èmi Dàmọ́lá nìyẹn
Èmi ni
ìgbẹ́ again
Mọ́mì omi tutu
Anti fa etí Dàmọ́lá
Dàmọ́lá wọ socks
Bobisco ti lọ Jesus
Bobisco ò wá mọ́
Ilé e Dàmọ́lá
Ilé e Mọ́mì
Ilé e anti Lará
Dàmọ́lá wọ èyí
Èyí í fẹ́
Bébì ní ojú
Nǹ jẹ mọ́ jòọ̀ inú ń dùn ún
Òun nìyẹn
Mọ́mì dádì ti jí
Dádì ti jí
Dàmọ́lá jẹ tíì
ìgbẹ́ ti lọ
nǹ ya ìgbẹ́ mọ́ ìgbẹ́ ti lọ
dádì mú ọ̀la bọọl
dádì ọ̀la
dádì ọ̀la bọọl
Mọ́mì jòkó sí ibẹ̀
Nǹ gbà dádì

Nǹ gbà èyí
Dádì jẹ́ á lọ
Mọ́mì se tán
Phone Mọ́mì nìyẹn
Dádì jẹ indomie
Dàmọ́lá jẹ chewing gum
lọ ra chewing gum ti tìẹ
lọ ra ti tìẹ
machine ń lé wọn
machine ti lọ
wọn ń lé wọn
machine wọn ń lé wọn
nǹ wá wò ó
Dàmọ́lá wo machine again
Anti òjùjú ni ẹ́
Dàmọ́lá lé mótò
ẹsẹ̀ ń dun Mọ́mì
ẹsẹ̀ Dàmọ́lá
ẹsẹ̀ Dàmọ́lá nìyẹn
Mọ́mì jẹ á lọ jòọ̀
Mọ́mì jẹ á lọ dádì
Mọ́mì Mọ́mì jẹ á lọ sùn
ọwọ́ mi
ọwọ́ Dàmọ́lá mi
ọwọ́ ẹ̀jẹ̀
Dàmọ́lá sáré
Ti lọ ẹn ti lọ sáré
Pa wọ́n
A ò lọ mọ́
Mọ́mì ò lọ mọ́
Ó sá
Ó pa bọbọ yìí
Mọ́mì kòkó igi
Ǹ bọ́ aṣọ Dàmọ́lá mi
àwọn nìyẹn
àwọn subú dà
ìpara kọ
dádì ó wò ó náá
àwọn ti lọ
dádì wò ó
ẹsẹ̀ ń dun Dàmọ́lá mi

àwọn ti lọ iwájú
ọbẹ gé Dàmọ́lá mi
àwọn nìyẹn ti dé
wá wó helmet
Dàmọ́lá jẹ ẹ́
Fi sí i
Dàmọ́lá dúró
Dàmọ́lá jẹ isu
Machine ò lọ mọ́
Oò lọ mọ́
Chair bàjẹ́
Oò lọ
Oò lọ mọ́
Dádì ibí
Dìde padà
Machine ti lọ
Dàmọ́lá jòkó
Dàmọ́lá
Mọ́mì gbé e fún uncle Victor
Ah, Mọ́mì ti gbé e lọ
Dádì gbé e Dàmọ́lá
Dádì Dàmọ́lá gbé e
Ah, dádì ti jẹ àgbàdo tán
Dàmọ́lá já a
Dàmọ́lá ti yọ ọ́
Dádì kàn án
Dádì ti jẹ ẹ́
Dádì kan èyí
Dàmọ́lá ti jẹẹ́ tán
jẹ́ kí n gbọ́ràn
ìgbẹ́ ti lọ
dádì wọlé
dádì wọlé office
dádì gbọ́ràn jọ̀ọ́
dádì èyí
dádì Dàmọ́lá sí I èyí
2:4   Twenty-eight Months
Dàmọ́lá ò jẹ mọ́
Mọ́mì jẹ ẹ́
Anti ti rí biro mi
Dàmọ́lá ló ni biro mi

Dàmọ́lá bu gàrí
Dàmọ́lá sukún
Dádì Dàmọ́lá sukún
Mọ́mì jẹ́ á lọ dádì
Mọ́mì jẹ́ á lọ Abuja
Anti ń rín èrin
ọwọ́ jẹ ẹ́, èyì ó da á mọ́
ó ti tán
Dàmọ́lá sá fún ajá
Dádì ti jẹ èfọ̀ tán
Bàbá ti kú
Dádì ọbẹ̀ ti tán
Mọ́mì lọ ra ti tìẹ
Bàbá ti pa á
Dádì ti jẹ ẹ̀bà
Dàmọ́lá ti ri guitar
Dàmọ́lá ti fọ aṣọ tán
A ti ń lọ ni/
Kiní yìí ò wọ machine
èyin ni
ǹ fọ eyín mọ́
eh eh ó ti yọ
ǹ tú sùn mọ́
mo ti jí
Mọ́mì Dàmọ́lá ti jí
Mọ́mì ti sùn
Mọ́mì ti sùn padà
Ah dádì fọ eyín
Ó ti dòtí
Anti ti lọ
Mọ́mì fún mi
Dádì tyre dòtí
Dúró de Mọ́mì
A ti ń lọ
Dádì wo ìwé
èyìn ń dun Dàmọ́lá
Mọ́mì dádì ń bọ̀
Dádì paná
Ó ti paná
Mo ti kí i
Mọ́mì pe dádì bọ̀

2:5   Twenty-nine Months
Mò ń jẹun lọ́wọ́
Mi ò ri
Òun kọ́ leléyì
Èmi jẹ fúnra ẹ
Mọ́mì fọ̀ọ́ **fúnra ẹ**
Èmi ń lọ
wọ́n ti mú iná dé
mi ò tán mọ́
dádì ń kọ orin
Mọ́mì ti sòrọ̀
Mo ti pá
Mo ti kígbe
Mi ò wo cartoon
Mi ò wo èyí náà
Ebi ń pa Dàmọ́lá
Mọ́mì bu omi
Mọ́mì mu ún
Ó ti dé padà
Mo gbókìtì
Dàmọ́lá jẹ rice
èmi kọ́
ó gé e jẹ
ó gbé moto lọ
màá gbe dání
lọ mú ti tì ẹ
mi ò jẹ èyí mọ
mi ò jẹ mọ
mo ti mu omi tútù
Mọ́mì yán
Mò ń yà
Mo yà
Mo ti bọ
Mo fẹ́ lọ wẹ̀
Mo ti já a
ẹ wo àwọn mẹẹ
mò ń sáré
èmi lọ ni?
Èmi sáré
Eti ń dùn mí
Èmi ń jàń

Èmi ko dání
Mo dà á nù
Èmi ń jà lọ́wọ́
Èyí ti bàjẹ́ náà
Mo sunkún
Pátá mi dà
Mo fẹ́ bẹ́
Èmi ò bì
Mi ò sunkún mọ́
wọ́n ń jó
ilẹ̀ ti sú
ilẹ̀ ò sú mọ́
kito ni mo wọ̀
èmi ń bẹ̀rù
èmi ń bẹ̀rù mọ́
ó ti bàjẹ́
film ti bàjẹ́
èmi ń mu omi mi
èmi ń rín ẹ̀rín
èmi ti ri se
ó ń dún
èmi ti yó
èmi ò yó mọ́
èmi nù ún
Mọ́mì nù ún
Dádì pa ilẹ̀kùn dé
wọ́n jẹ biscuit mi
òjò ń rọ̀
Mọ́mì fọ ìdí mi
èmi ti wẹ̀ tán
èmi bẹ̀rù èyí
èmi bẹ̀rù o
èmi subú
èmi fi gbá
dádì bù ú
dádì bù ú ibí
èmi fọwọ́
èmi fọwọ́ báyì
2:6 Thirty Months
Èyí ò dùn
Èmi bora

Èmi ò ri
Èmi ò ri se
Èmi ò ri
Dádì ti gbàgbé
Èmi ti gbàgbé
Èmi lọ Ile-Ifẹ
Ibí ti jiná
Èmi ò ní owó yẹn
Ó ti ń bọ̀
Mo sọ fún ẹ
ẹsẹ̀ ń dùn mí
èyí ò sọ fún mi
wọ́n ti jẹun lálẹ́
a ti ń lọ
ó ń dùn yàn
ibí kọ́
èmi ò tọ̀ lálẹ́
èmi ò sùn lálẹ́
ó ti rẹ̀ mí
ó ti fọ moto
àwọn ọlópà ti lọ
wọ́n subú
ó subú
ó ti dọ̀tí
ẹsẹ̀ ti ń dùn mí
ó ti fọ̀ ọ́ ní school mi
ilé ti jó yẹn nìyẹn
èmi ò lọ school mọ́
mo sọ fún ẹ
wọ́n ń nu moto
àwọn ti lọ
ó ti lọ
ẹ jẹ́ á lọ o
ọwọ́ ò to
mo ti sọ fún ẹ
mo ti sọ fún ẹ ọwọ́ ò to
èmi wo Dàmọ́lá
bread ti tán
bread kékeré dà?
Èyí ò yọ
Ó ti já

Èmi jẹ si
Ó yá
àwọn Joshua ti lọ
èmi ti ra ìwé
èmi ti jùú nù
ó ti gbá
ó gbóná
ìweé mi nìyí
dádì ti ìlẹ̀kùn mọ mi
ibí ti bàjẹ́
ẹ wó ó, ibí ti bàjẹ́

2:7 Thirty-one Months

Mo ti gbàgbé èyí sí ilẹ̀lẹ̀
Titèmi nìyí
wọ́n fún wa
wọ́n ń lọ ilé mi
ó ti ń bọ̀
ó ti lọ ilé
ó ti fún mi
dádì tun se
èmi ò ri se
dádì tun se
ó ti fún mi
òun nìyí
Mọ́mì ló nìyí
Dádì yi báyì
ẹ wo èyí náá
titi Mọ́mì kọ́
titi dádì nìyí
òun ló jábọ́ yẹn
òun ló jábọ́
ọmọ kékeré kọ́ Dàmọ́lá ni
kiní mi dà?
owó mi dà?
Èmi subú
Èmi wà lẹ́yìn
mo ti sọ fun ẹ
ó wà ní school mi
èmi gbe dání
ẹrù mi dà?
Àmàlà, ó wà

Ó wà
Mọ́mì rà á
Ó wà o
Èmi ò jẹ isu mọ́
Mọ́mì ó yá
Ó yá
Dádì kò dùn mọ́
Kiní yí kò dùn mọ́
Èmi ti yọ́
Èmi ò fẹ́ mọ́
Èmi ò ri
ẹ jade
óyá ẹ jade
ó ti gbálẹ̀ tán
ó nà m'i
èmi nàá
òtútù mú mi
orum mú yí
chair mi ò gbóná
ebi ń pa mí
èmi yọ̀ subú
ó gbóná
ìgbẹ́ ó ń gbọ̀n mí
èmi ó ya ìgbẹ́ tán
ó kù díẹ̀
èmi ò wò yẹni tán
ẹ gbe kúrò níbẹ̀
ó ti tán
indomie ti tán lálẹ́
ó ti dòtí
ilẹ̀ ti sú
ó ti tán
anti ó bu omi si
èmi ò wọ aṣọ
èmi lọ sùn
kò rí mi
óyá dádì
èmi mu si
kò da mọ́
ó gbóná o
ó tóbi gan ni

èmi ní agbára
wọ́n sáré
àwọn ń sáré
èmi yán
ó ti rẹ̀ mí
bàbá yẹn ó ń bu yẹ̀pẹ̀
mo sùn dada
iná ń jó
mo ti sọ fún yín
kò da
kò da mọ́
ó burú gan
ó sá pamọ́
mi ò fẹ́ mẹ́ta mọ́ o
ó tóbi
Mọ́mì bu púpọ̀ si
Ó ti tán
Sé oò mọ̀ ni?
Èmi ya ìw'e Mọ́mì
Èmi ya á náà ni
Kò ba lésẹ̀
àwọn ò wọlé ni?
àwọn yí ò lọ
àwọn ti lọ
àwọn nìyẹn
tani?
Èmi pariwo

2:8 Thirty-two Months
Mọ́mì ẹ se àmàlà fún mi
Ó ń dùn náà
Èmi yọ dòtí kúrò níbẹ̀
Ó ń sè é
`emi na anti Lará ni
Bàbá yẹn ti kú
Èmi wo èyí o
Sé oò ri ni? àwọn nìyí
Bàbá yẹn ti lọ ni?
Èmi gbá bọ́ọ́lù nísìn o
Èmi gbá bọ́ọ́lù níbí
ẹ jẹ́ á lọ
ẹ jẹ́ á lọ ilé

tani ó ń rùn?
Ó ti pọ̀ jù
Iná yẹn ti jó ni
Se ìwọ ò tan fan ni?
Ó ti jinná ni?
Ó yọ̀ subú
Ó ti mu púpọ̀ díẹ̀
Dádì kò wá ilé mọ́
Ó yọ̀ subú
Fan yẹn ò sisẹ́
Èmi mu omi tútù
Anti mi ní school nà mí
O`o sùn mọ́
ẹ wo méjì
kiní yẹn ti jábọ́
kúrò níbẹ̀
èmi ò sáré
oó gbé omi fún mi ni?
Sé oó gbé omi fún mi ni?
àwọn ò tun se ni?
wọn ò tún moto yẹn se
ìwọ ò sáré ni?
eré wọn ti pọ̀jù
èmi ò jẹ mọ́
èmi bu omi fúnra mi
èmi jẹ fúnra mi
omi tutu dà?
Ó ń gbálẹ̀
Ó ń gbálẹ̀ lọ́wọ́
Èmi fi aṣọ bora
O ò fẹ́ atẹ́gùn si
Èmi ò bọ́ aṣọ mi, òtútù mú mi
Mọ́mì, èmi kà á ni
Ìwé mi dà?
Ma gbé ẹsẹ̀ sí ilẹ̀
Ó wà ní ẹnu mi
Èmi lọ weewee ni
Èmi wòran
Èmi ò riran
Èmi ti yó
Sé kò dúró dada ni?

Èmi fi aṣọ bora
wọ́n ti pa ara fún mi
Mọ́mì yán
Ó ti tán ni
Èmi ò ri
Mi ò ri látẹ̀kan
Èmi á bu omi lọ́wọ́ ni?
Èmi ń pọn omi
Èmi ń bu omi
Ó tàn fún ara ẹ̀
Èmi jẹ gbogbo èyí tán
Ó ń fún mi ní wàhàlà
Èmi mú kiní yí dání
Èmi fẹ́ àmàlà
ìyẹn ò da mọ́, èyí ló da
mọ ti sọ fún yín
wọ́n ti ba ilé yẹn jẹ́
ó jábọ́ o
èmi ò ri bọ́
èmi ti se é fúnra mi
èmi fà á
èmi sọ nìyẹn
ẹ wo irùngbọ̀n
èmi gba pẹ̀lù ẹsẹ̀
èmi ò ri gbá
èmi fi owó sí ibẹ̀ ni
èmi fi owó sí inú báàgì ni
èmi mu ni
òkúta yẹn ti dọti
èmi ti mu tán
òtútù ò mú mi
òtútù ò mú mi mọ́
òtútù ò mú mi jọọ́
2:9   Thirty-three Months
Ebi ń pa mí
Ó ti ń dùn mí díẹ̀díẹ̀
Èmi ti wo ibẹ̀
Kò tí ì lọ
O n`a lọ nísìn
kẹ̀kẹ́ ni èmi gùn
èmi ò fi ẹsẹ̀ rìn

èmi ń lọ ọ̀dọ̀ Mọ́mì
má bá mi seré
èmi ti jábọ́ lórí kẹ̀kẹ́
èmi ò seré
ó ti wọnú
kò wọnú ni?
ẹsẹ̀ méjì àwa ní ni?
Ilé wa ni
Phone ò ní ọwọ́
Ó ní ẹsẹ̀
Omi nìyí
àwọn ìdọ̀tí wà níbi isu
èmi ń mú wọn kúrò níbẹ̀
tí kò bá sá, moto a gba ni
ó jọ moto Orlando
èmi bẹ̀rù Mọ́mì
èmi ò rí owó mi
èmi fi ra nkan
èmi ra ẹran
Mọ́mì ti gbé asọ mi wọlé
Èmi ń gbọn ìgbẹ́ mi
Èmi ń gbin
Èmi sọ fún ẹ ni
Èmi wọ moto yí
iwọ ni ó dé ibẹ̀
èmi tigbé kiní yí
gbogbo wọn ò gbé lọ
èmi rà á fúnra mi
mo ti se é pẹ̀lù itọ́
mo ti gbé e si pada
dádì ẹ bá mi se
èmi ti rí titèmi báyì
èmi fi ẹnu gbá tébù
èmi mu ní school
èmi mu jáde lọ
èmi mu jáde
èmi lọ kí wọn
èmi yarí fún un, èmi se báyì
tani ó ń rùn
tani yẹ́n jẹ́
èmi lọ gba titèmi

èmi fẹ́ gbe lọ sí ilé mi
èmi lọ tún un se
èmi ó gbe lọ báyì
2:10   Thirty-two Months
Èyàn kan ló ń sunkún
Èmi ò jẹ ǹkankan
Phone dádì ò jabọ́ lánà
wọn ti da lóhùn báyì
àwọn ò da lóhùn ni?
Èmi ń fẹ́ omi
Mi ò fẹ́ yẹn
Ó dàànù
Omi tútù ni èmi ń fẹ́
Èmi ti jẹ kiní yẹn tán
Mo ti jẹ isu yẹn tán
jé èmi wo ìran
sé ìwọ ò ri, ilẹ̀ ti sú
Mọ́mì ò ní lọ
ẹ kọrin fún mi
ẹ má dákẹ́
kiní yí ni ó fọ́
phone yẹn ti fọ́ o
èmi kọ́ ló yọ ọ́
èmi ò yọ ọ́
èmi fẹ́ gbé ẹ lọ sí ilé ni
èmi ti tún un se
èyí kéré
omi ló dà sí mi lára
Dàmọ́lá ló sọ
Sé ó ní ìbọn ni?
ẹ dúró dè mí
èmi subú
ẹ sún sí èyìn, èmi fẹ́ rìn
èmi fẹ́ jẹ isu yẹn ná
bàbá Aliya ni
lará ò jòkó, ó sùn
Mọ́mì, anti mi ma ń nà yàn
2:11   Thirty-five Months
ẹ gbe kúrò níbẹ̀
èmi ò tọ̀ sí orí bẹ́ẹ́dì
kò sí school ni?

Mọ́mì sọ fún mi nísìyí
Èmi pa fan yẹn
Èmi ló pa ás
ẹ wò mí
ọwọ́ yín ò ní omi
ẹ bọ́ọ̀lẹ̀
ó ti ń se indomie
kò tíì jinná
Mọ́mì

Temiloluwa
15 months -1:3
 fún mi
N fé e
Wè
 subú
Bá mi mu
 Nà á
16 months-1:4
Má gbe
N ti i
N wè
Gbémi jé a lo
Jé a lo
À lo
 gé mi je
Wò ó
N yo
N fé é
N sòkalè
N kojá
Ma nà é dáda
17 months-1:5
Aso mọ́mì
Ó ti tò sí ara
Ó ti yàgbé
Ó ti tò
Ó ti babe
Taya
Sá lo
O ti jade
Gbémi ti tò

Mà á mu
Á je eja
Òjòyò
Òjì rò
Gbemi ni yi
E fún mi eja
Mo ti yà ìgbé tán
A fé wè
Tèmi
18 months -1:6
Ti mọ́mì   ni (giving mọ́mì 's dress to
her.)
On ni yẹn
O wa ni ile
Òjò yọ,
òjò yọ ni
Ti daddy ni
A fẹ tọ
Ẹyẹ ti fò
Fẹ tọ
Temi ti n bọ
Maa jẹ
gbe ẹsẹ kuro
ó gbà lọ́wọ́ mi
mo ti ya á
kò sí
mìì ma lọ
ẹ má kọ orin
a bá mi mú bèbí
a bá mi mú u
a bá mi wò ọ́
nn tẹ́ ọwọ́ mi
nn fẹ́ yẹn
19- 1:7
Gbé ẹsẹ̀ kúrò
Màá fọ̀ eyín mi
Mo ti yàgbẹ́
Mo ti mú ẹ̀wù
ẹ gbà dádì
n ma lọ
ẹsẹ̀ ti n dùn mi

mii fi sí ẹnu
20 months-1:8
sé mọ́inmọ́ín yeyeyi
omí ti hó ni
mà á nà wọ na
o fẹ́ wọ̀ ọ́ ni
o fẹ́ wọ̀ ọ́ bàtà
gbémi ti sùn
anti Kẹ́mi ti gbà lọ́wọ́ mi
tì ẹ kọ́
ó gbé omi sáré
a wá fún mi
gbémi ti fi ọwọ́ kan
mo fẹ́ mu ọsàn
gbà a
ó gbà a lọ́wọ́ mi kọ́bù mi
21 months – 1:9
Tolú mo fẹ́ mu omi
Tí o bá fọ eyin maa nà ẹ́
ẹ tan iná fìláfìlá
ẹ tan fìláfìlá
daddy, ẹ wo kòkòrò
bàtà ẹ
mi ì lọ sí parlour
tí o bá túù maa ná ẹ́
tí o bá jáa màá nà ẹ́
sé kí n mú u
mo fẹ́ lọ sùn
ẹ bá mi bu tíì si
mo fẹ́ mu omi
mi ì fi ọwọ́ kán
sé wọ lo ni ọsàn
mà á lọ sọ fún mama mo fẹ́ mu tíì
22 months – 1:10
níbo ni o wà
mà á kàn nà ẹ́ ni
mà á jẹ apa
sé wọ ni ó nìí
mọ́mì ni ó ní
mọ́mì ni ó fún mi
mì í mọọ sí ìlẹ̀kùn

jẹ́ kí n kà ìwé mi
jẹ́ kí n wo ti tìẹ
mama ẹ dúró dè mí
gbémi ti jẹ gbogbo ẹ̀ tán
23 months – 1:11
aago ti lù
ẹ jẹ́ á lọ wo aago
ẹ dẹ̀ wá fún mi
sebí ago ti lù
ó ti mu ìka
mà á jẹ bikiti
mà á mu tíìì
mò n bọ̀
kò ní rí àyè jade mọ́
gbémi, àà ní dúró dè ẹ́
mọ́mì , ẹ wá gba báágì yín
dady, mo fẹ́ jẹ bikiti
ó wà ni sia
tí bá mú ẹ, wà á jẹ ẹgba
mà á fi nà ẹ́
ìfọyín wà ni bathroom
mìì sùn sí àyè ẹ
mo mọ̀ ọ sí
ìgbà tí wọ́n n lo ògùn fun ni
mọ́mì mà á wẹ oru mú mi
péèlí tí mà á wẹ̀
ọmọ yẹn ó sunkún
mìì tí jẹun lánà
a wo àlùbọ́sà kékeré
mo fẹ́ mu omi tutu
24 months – 2:0
ẹn tí n bá wẹ̀ tán
baby máà pọ̀n
pẹ́pẹ́yẹ ti n bọ̀
wá nà mí
gbé ọmọ sọ̀kalẹ̀
òjò ò n yọ̀
mìì mọ ibi tí ó wà
25 months -2:1
màá sọ fún mọ́mì pé mo ni jẹ
mọ́ínmọ́ín

foyínfoyín wà
Ó wà síi
27 months – 2:3
Ti tèmi dàgbà ju tì ẹ lọ
Gbémi oò lọ gbé ọmọ ẹ
28 months – 2:4
Bóyá èmi náà ò ní fi nkan seré mọ́
O sọ pé òun fẹ́ lọ bá mama ẹ̀
O rí i bí àwọn Tolú se n sere
Mi ò ní jẹ́ kí ó fò lọ
Òjùjú á gbé ẹ
31 months – 2:7
Daddy ẹ wo nkan tí ó wà lókè
Kò sí ẹni Kankan tí ó níí
32 months – 2:8
daddy, ẹ wo gbémi bí ó se gbé kiní sí ojú
gbémi lọ sápamọ́ sí kitchen
mọ́mì   ẹ má lọ
màá ní kí ẹ padà sí ilé
mi ti gbàgbé orin tí wọ́n n kọ ní sọ́ọ̀sì wa
jẹ́ kí a wo ẹni tí ó gbé kòkòrò sí àbúrò ẹ
láyà
o rí kòkòrò
eléyì bọ́ bàtà ẹ̀
kò bọ́ bàtà ẹ̀, elèyí
omi n ta sí ilẹ̀
mo ti pa Tómi dé
ó gbé báágì dání
èyí tí àwọn olú wò ní ẹ̀kan
miì t`ií di ọmọ school tẹ́lẹ̀tẹ́lẹ̀ tí mà á ma
se left, left
mọ́mì   náà ma n sọ pé Islamiya
ẹ bá mọ́mì   lọ aṣọ wọn
33 months – 2:9
Gbémi wá wo kiní tí ó n wọ ilé
Ti gbémi ni ó kékeré, titèmi ló dàgbà
jẹ́ n lọ ya irun fún ọmọ mi
ọmọ má tẹ̀lé wa lọ o
sé ó ti tẹ̀lé wa lọ?
kò tíì tẹ̀lé wa lọ
ó fi orí gbá ni

màá na ọmọ yìí
taló ni kóo jẹ́ kí ó fi orí gbá
ẹ má jẹ́ kí ó fi orí gbá o
tí o bá jẹ́ kí ó fi orí gbá màá nà ẹ́
ọmọ wa ni ó fi orí gbá
gbémi gbé ọmọ mi wá
se bí ọmọ ẹ ni
a n gbe lọ sí mọ́tò
o ti na ọmọ o ti nàá
sebí ó tọ̀ sí ara ni
ó tọ̀ sí ara, màá na lémi
34 months 2:10
òjùjú wá na ọmọ yí
torí orí n fọ
gbémi sé wà á gbé onjẹ wá fún mi
ẹ wo Olúmidé, ó sápamọ́ fún wa
daddy, gbémi ti ya Olumide ní èèkánná
ẹ wò Gbémi ní kí n ma bọ̀
35 months 2:11
a ti dé ibi rédìo yín
sé ẹ́ẹ́kú fún mi
ẹ̀ẹ́kú fún mi
ó ti sùn
ilẹ̀ ti sú
Tola
15 months 1:3
je
    jìyà
Wà á jìyà
N féé
    jòkó
 je isu
    sùn
16 months – 1:4
Wà a jìyà
Bá mi mú
N fé é
Wò ó
Á jòkó
N sọkalẹ̀
Bá mi mu

Ó ti je tán
Gbà
17 months – 1:5
Bá mi mu
Wá wò
Ó ti tó
Bàtà mi ni
Pépéyẹ jade
Á jẹ
Á jẹ rice
18 months – 1:6
A ti yaá
Èmi (in response to a question)
Gbé elẹ̀
A fẹ́ tọ̀
19 months -1:7
N jẹ ẹja
pépéyẹ ti jade
20 months 1:8
Kíkí ti sùn
Mà á nà ẹ́ daddy
Bukì ti tọ̀
A wá fún mi o gbọ́
21 months 1:9
A ti fún mi
Wá sí ìlẹ̀kùn
Ó ti kà ìwé
O ti fi ọwọ́ kán
Kò tí ì sùn
Má géjẹ mi
Tí bá mú mi
22 months 1:10
Tí bá mú ẹ
Ti tì ẹ ni
Kò jẹ́ kí n jẹun
Tí ò bá ma lọ
23 months 1:11
Ago ti lù
Kò sí bikítì
Òjò rọ̀ nìyẹn
Fi sí ibẹ̀

O fẹ́ kà ìwé ni
Sé ki n mu sí ibẹ̀
Mo ti mu fún Búkì
O fẹ́ wọ bàtà ni
O fẹ́ gé èèkánná ni
Ó ti já ẹ ní èèkánná
ẹ wo Búkì
o pe mọ́mì
ó fẹ́ pe mọ́mì
ọmọ yẹn ó sunkún
ọmọ yẹn ó fẹ́ sunkún
ó ti jẹun lánà
24 months – 2:0
ọmọ kúù sá eré
ọmọ kúù sá eré lọ
ọmọ kúù kan sá eré lọ ni
màmá ni ó rà á fún mi
òjò n rọ̀ ni
25 months – 2:1
fọyínfọyin mi
Ti tèmi dàgbà ju tit ì ẹ lọ
Ó sẹ̀sẹ̀ jí ni
28 months- 2:4
Bukky wá se ti tì ẹ
Daddy, ó ní òun fẹ́ lọ bá màmá ẹ̀
Bukky wá wò ó bóyá kò sí ní ibẹ̀
Nítorí `emi gun bẹ́dì òun náà fẹ́ gun bẹ́dì
Wá jẹ́ kí ó fò lọ
Bukky, jẹ́ kí á lọ se eré ní parlour
Màá dé bí
Mo ti dé bíí
31 months – 2:7
Ó ti lọ wẹ̀
Ó ti fẹ́ wẹ̀ tán
Ó sọ pé òun ti fẹ́ wẹ̀ tán
O sọ pé òun fẹ́ lọ ya ìgbẹ́
32 months – 2:8
A ti fẹ́ sáájú àwọn Búkì
Daddy, ẹ wo Búkì bí ó se n já mi ní
èèkánná
Màá sápamọ fún Búkì

Se bí kòkòrò kó ni eleyi
Se bí eja ni eleyi
Ó wá fẹ́ lọ sí church
O máa dúró sí ilé
Ó yá sọ orúkọ báàgì yí
sọ orúkọ daddy
tí ilẹ̀ bá ti sú aa tètè sùn
ta ni óún sọrọ̀
islamiya, sọ pé anti Islamiya
sebí mọ́mì ti lọ aṣọ wọn
mo ti gbé ounjẹ wá
ẹ wo Olumide, óún sápamọ́ fún wa

33 months – 2:9
Mọ́mì tani ó ra ọ̀gẹ̀dẹ̀ yí
Òjùjú ni mo fẹ́ nà
Torí orí n fọ
ọmọ mi ti jábọ́
35 months – 2:11
Màmá sé aṣọ tí ẹ fẹ́ wọ̀ lọ sí church nì yí
ìyẹn tí ò wà ní village
mọ́mì ẹ gbé Jídé wá
taló kun àwọn ojú ẹ
ó ti gbóná
ó ti sùn

APPENDIX B

Longitudinal Data Tables and Figures

Null Subjects of Transitive and Intransitive Verbs of Damilare and Temiloluwa

Child	Age	% of Null Subjects of Transitive Verbs	% of Null Subjects of Intransitive Verbs
Damilare	1;5	85.2%	71.4%
	1;6	83.3%	45.5%
	1;7	65.7%	56.2%
	1;8	60.6%	40%
	1;9	47.8%	25.8%
	1;10	39.1%	35..4%
	1;11	35.2%	24.6%
Temiloluwa	1;5	7.7%	23.1%
	1;6	11.1%	16.7%
	1;7	16.7%*	0%
	1;8	8.3%	0%
	1;9	0%	0%
	1;10	0%	0%
	1;11	0%	0%

Figure 15: Null Subjects of Transitive and Intransitive Verbs of Damilare and Temiloluwa
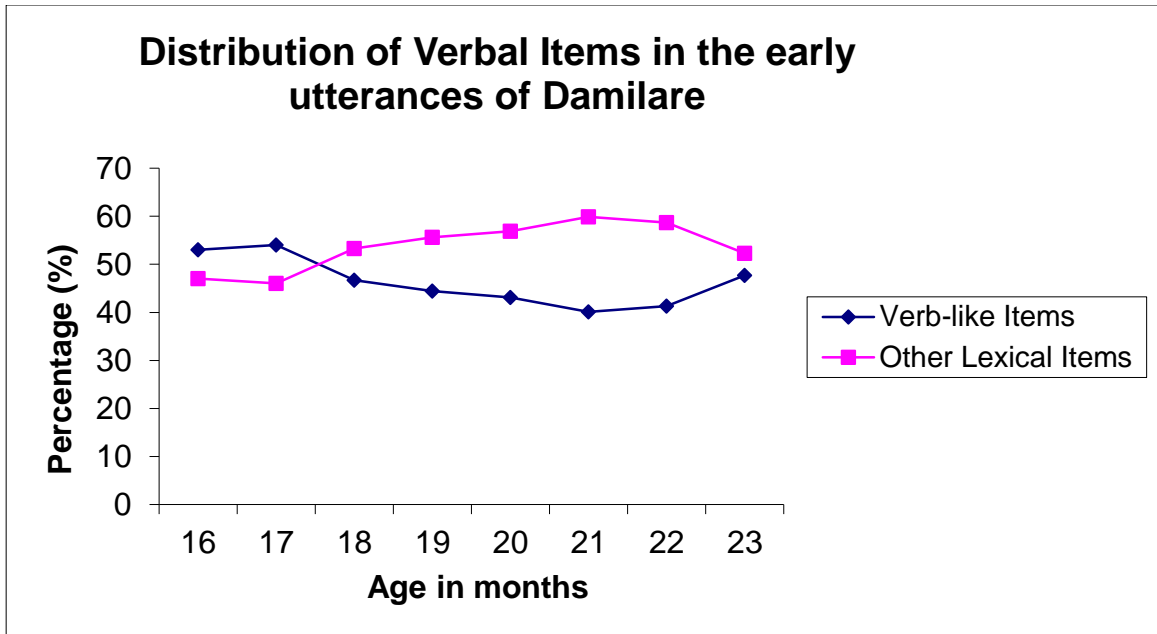
Figure 16: Distribution of Verbal Items in the early utterances of Damilare
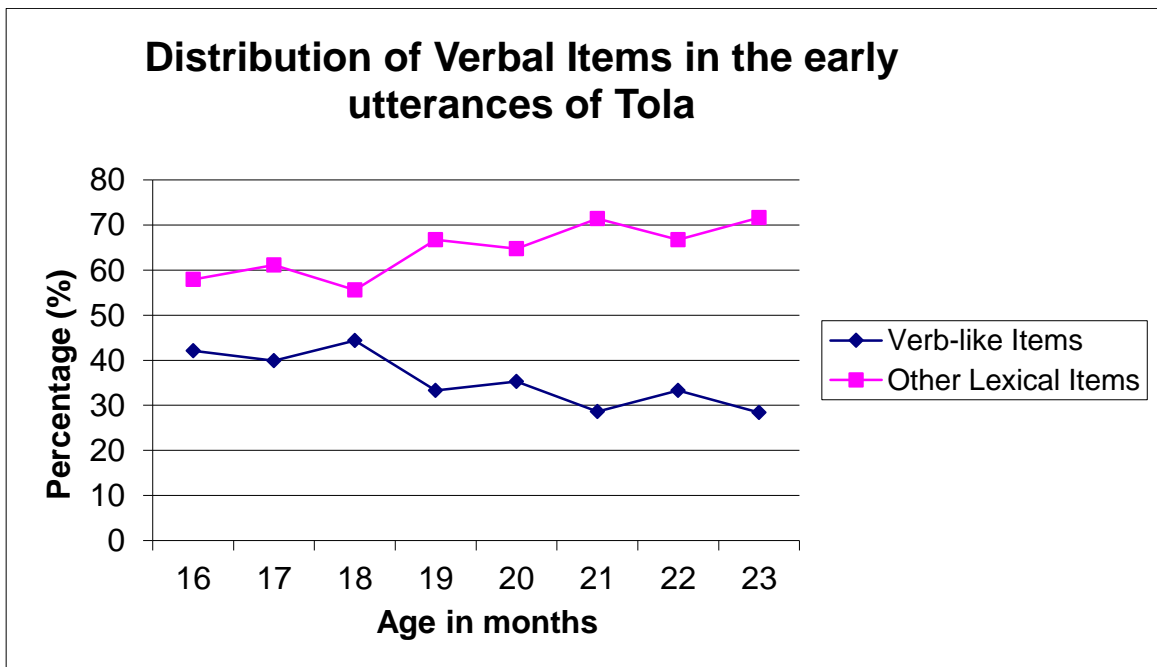
Figure 17: Distribution of Verbal Items in the early utterances of Tola
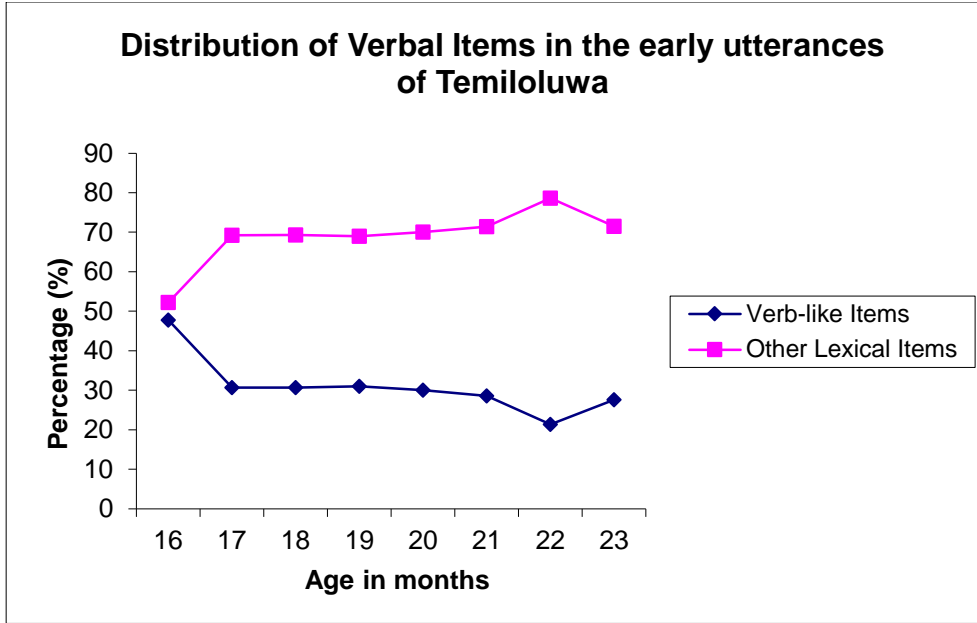
Figure 18: Distribution of Verbal Items in the early utterances of Temiloluwa
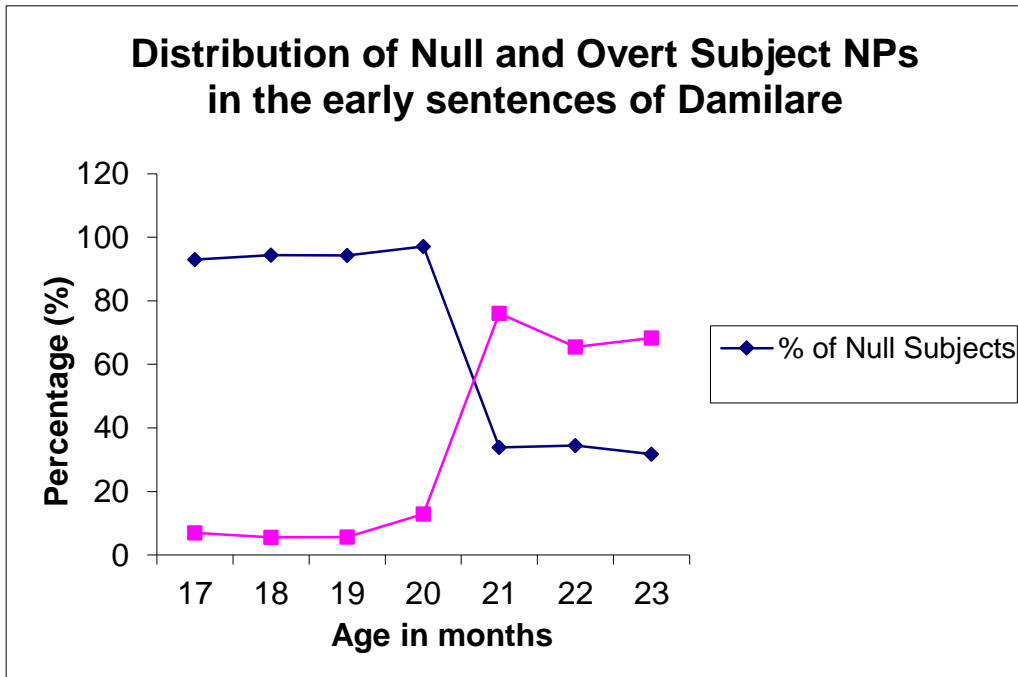
Figure 19: Distribution of Null and Overt Subject NPs in the early sentences of Damilare
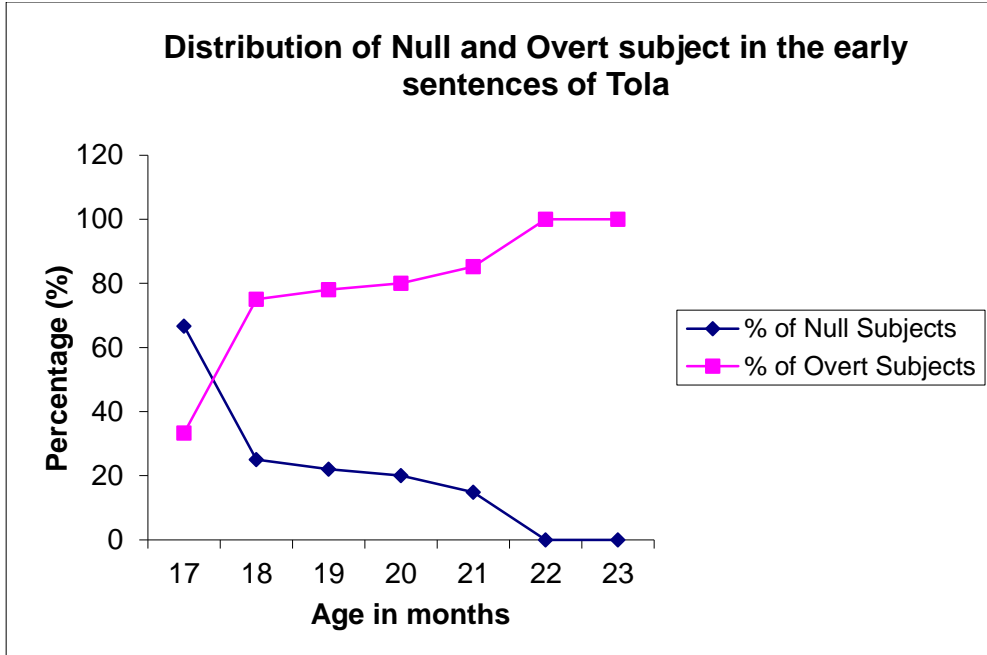
Figure 20: Distribution of Null and Overt subject in the early sentences of Tola
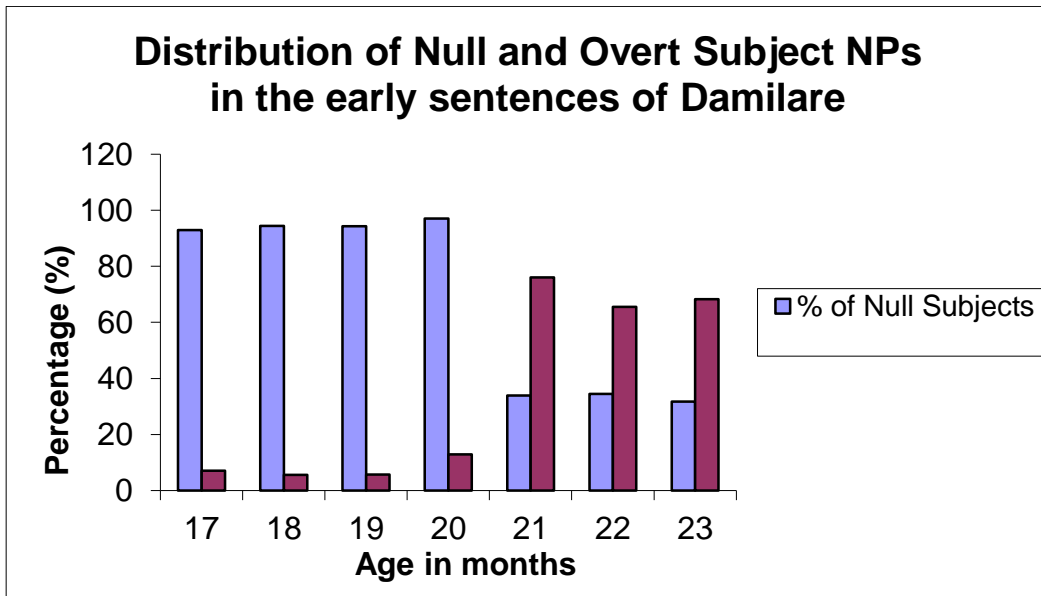
Figure 21: Distribution of Null and Overt Subject NPs in the early sentences of Damilare

Distribution of Null and Overt Subjects NPs in speech of Temiloluwa
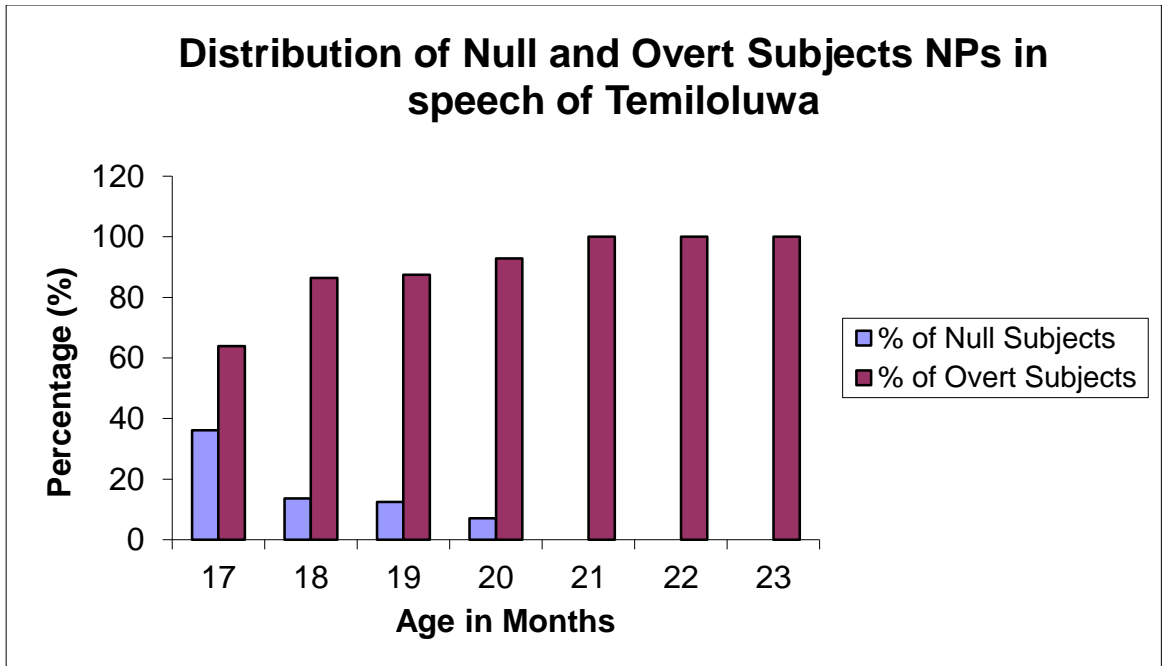
Figure 22: **Distribution of Null and Overt Subjects NPs in speech of Temiloluwa**

Distribution of Verbal Items in the early utterances of Tola
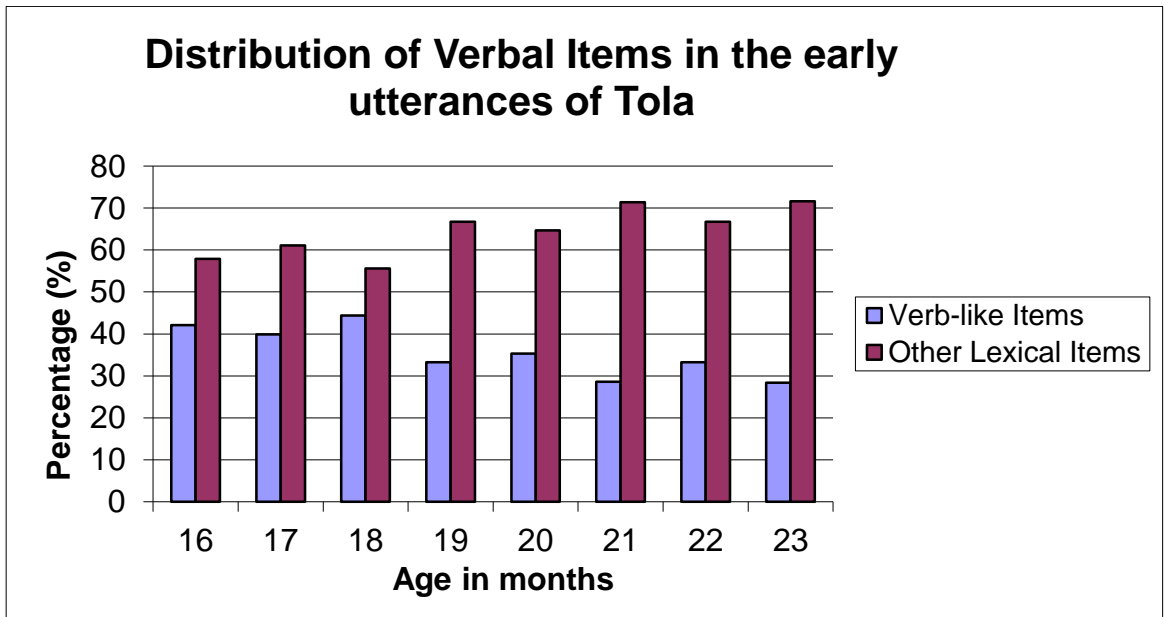
Figure 23: **Distribution of Verbal Items in the early utterances of Tola**
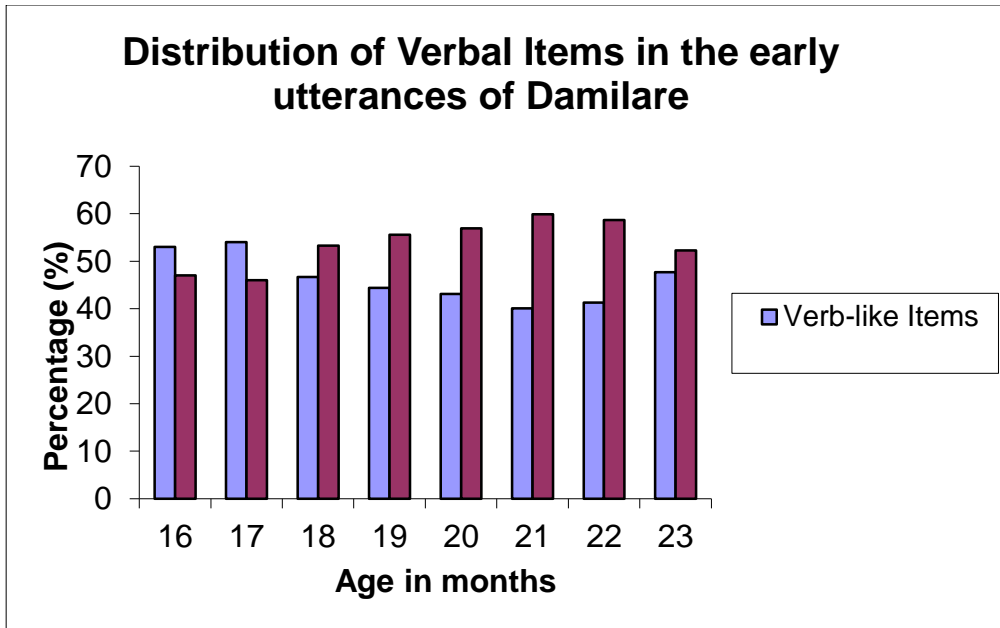
Figure 24: Distribution of Verbal Items in the early utterances of Damilare
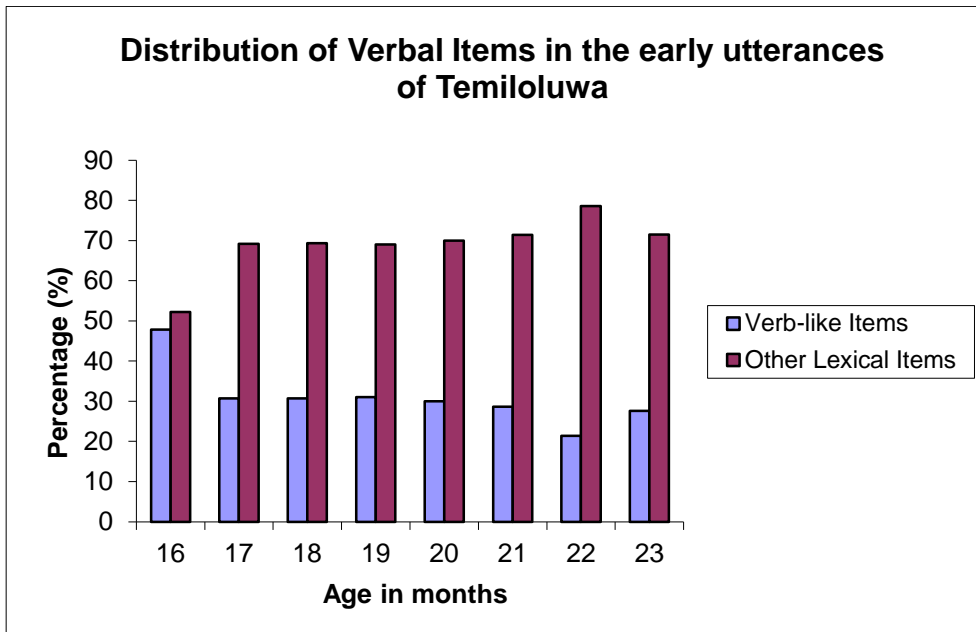
Figure 25: Distribution of Verbal Items in the early utterances of Temiloluwa
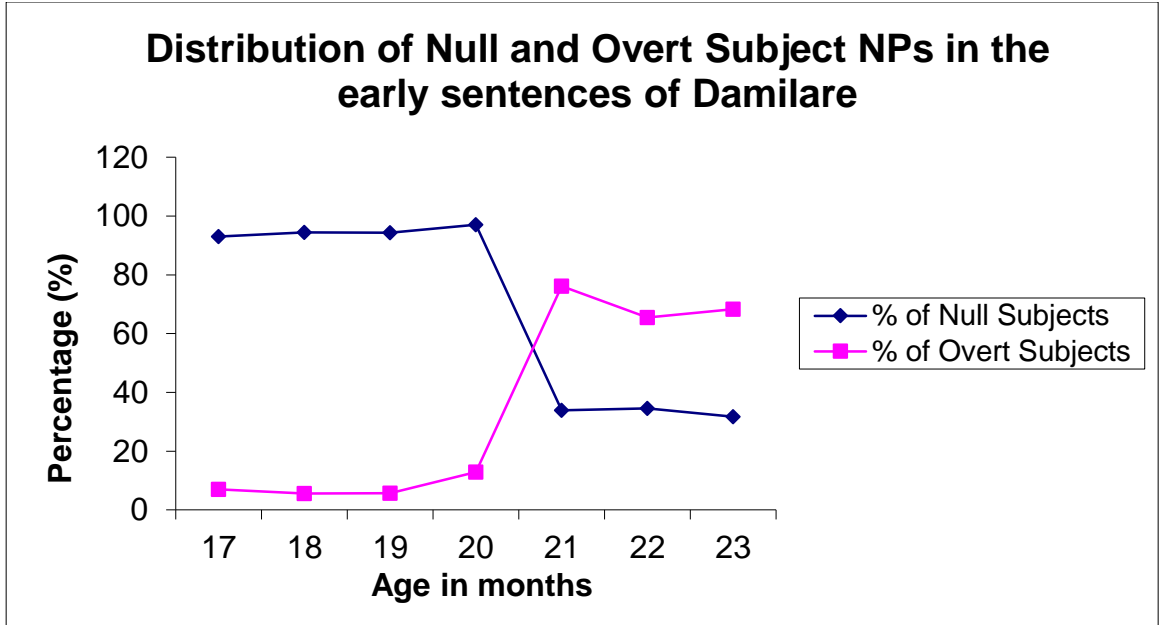
Figure 26: Distribution of Null and Overt Subject NPs in the early sentences of Damilare
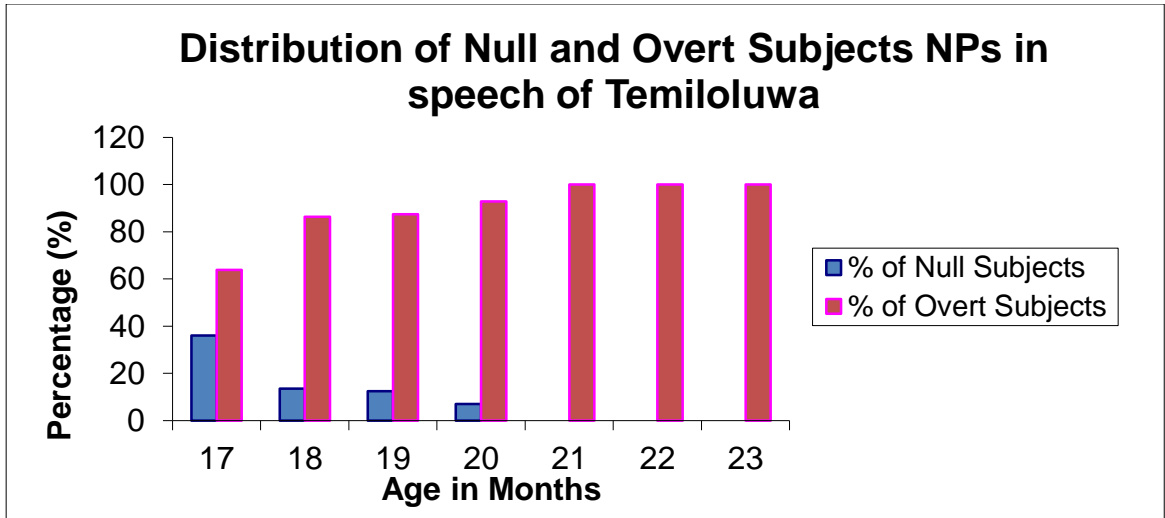
Figure 27: Distribution of Null and Overt Subjects NPs in speech of Temiloluwa
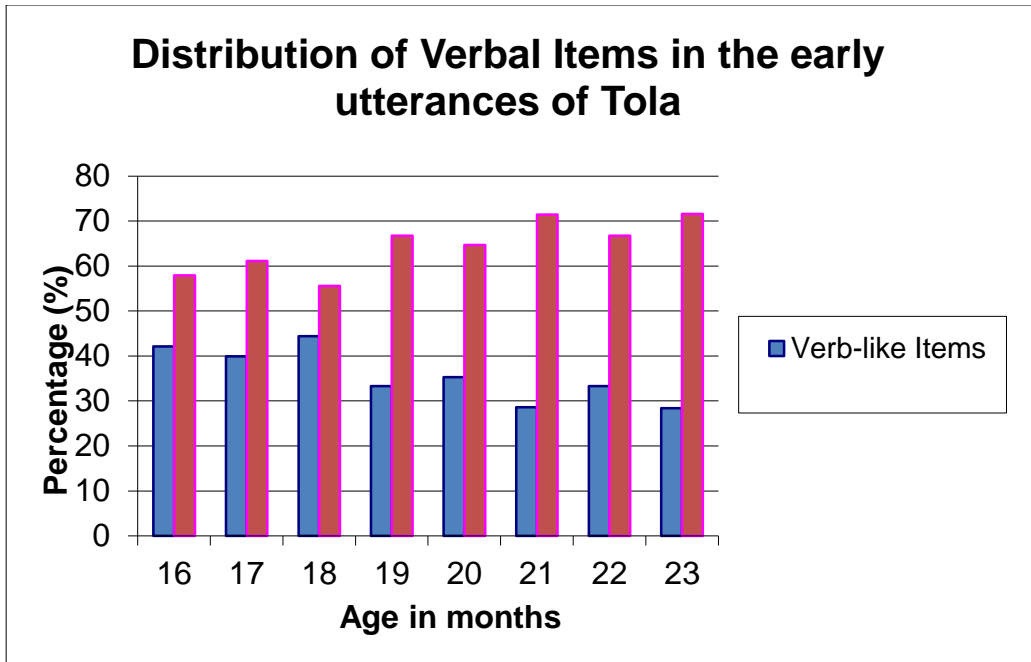
Figure 28: Distribution of Verbal Items in the early utterances of Tola
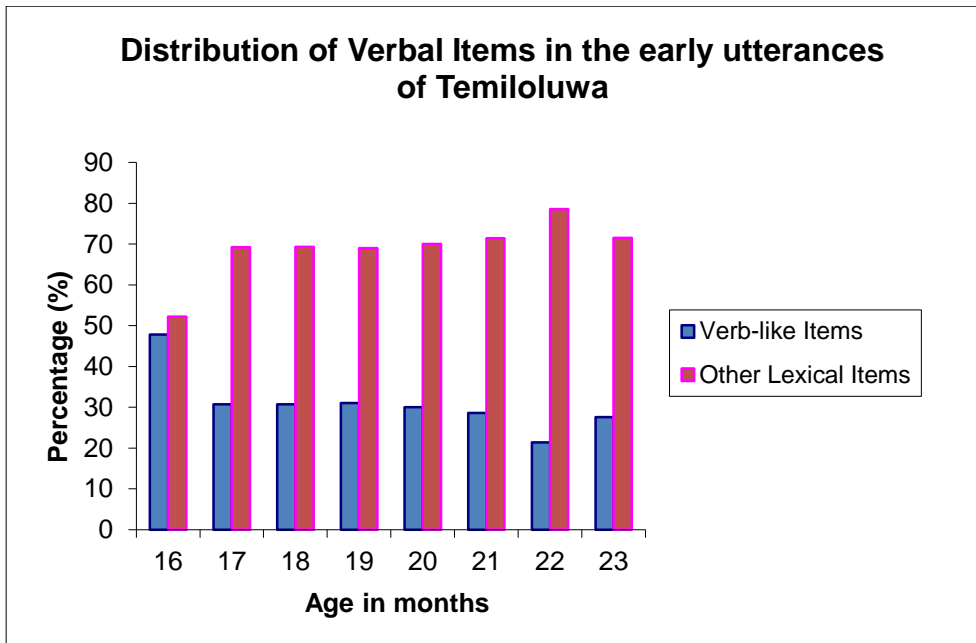
Figure 29: Distribution of Verbal Items in the early utterances of Temiloluwa

APPENDIX C

Experimental Data (Cross-section of participants)

Precious 3:2
Ó ń se nkan
Ó ń ya foto
Ó ń sùn
Ó ń ta ọfa
Wọ́n n gun abẹrẹ
Ó ń lu ilu

Ayomide 3:2
Ó ń gun iyan
Ó ń ya foto
Ó ń gun abẹrẹ
Ó ń sùn
Ó ń lu ilu
Ó ń kọ isẹ
Wọ́n n se ere
Ó ń draw
Ó ń jẹ carrot
Ó ń rin
Wọ́n n rin
Wọ́n n gba ball
Wọ́n n duro
Wọ́n joko
Ó ń rin ẹrin
Wọ́n wa machine
Wọ́n n wa kẹkẹ
Wọ́n n kọlu
Wọ́n n wo fiimu
Ó ń da omi
Ó ń gba ilẹ
Ó fọ́ glasi

Toyosi 3:3
No response

David 3:3
No response

Wisdom 3:4
Ó ń da ina
Ó ń yọ oju
Ó ń wo oke
Ó ń se nkan
Ó ń se flower
Ó ń se call
Ó ń se jangirofa
Ó ń sùn
Ó ń lu ilu
Ó ń kọ isẹ
Ó ń sùn
Ó ń se rọba

Adewunmi 3:4
Ó ń ta ata
Ó ń gun iyan

Fẹranmi 3:4
Ó ń gun iyan
Ó ń gba ilẹ
Ó ń gbe ẹru
O joko
Ó ń woke
Ó ń ya foto
O sùn
Ó ń gun abẹrẹ
O lu ilu
Ó ń sùn
Ó ń dana
Ó ń kọsẹ
O duro
Ó ń jo
Ó ń jẹ carrot
Ó ń sa ere
Wọ́n n rin
Wọ́n n gba ball

Wọ́n fẹ gba bọọlu

Wọ́n n ja

Ó ń mu ice cream

Wọ́n n se ere

Wọ́n duro

Wọ́n n wa kẹkẹ

Ó ń kọọlu

Wọ́n tẹ ọwọ, Wọ́n la ẹnu

Wọ́n n wo fiimu

Ó ń gba ilẹ

O fọ igo

Ó ń sùn ẹkun

O da ina

Mariam 3:4

O gbe kini ka ilẹ

Ó ń sùn

O fẹ wọ ile

O fẹ jẹ kini yi

O fẹ sùn

O mu kini dani

O fẹ jade

O ru isu

Ó ń gba ilẹ

O ru igi

Ó ń gun iyan

N ja ewedu

O sùn

O gbe baagi dani

O gbe kini dani

O gbe television dani

O mu irin dani

O mu nkan dani

O gbe ọwọ si ibẹ

O joko si ibi blackboard

Ó ń kọ isẹ

O joko

O gbe kini si eti

Ó ń kọ isẹ

Ó ń jẹ ẹran

N lọ

N wẹ

Ó ń lọ ile iwe

Ó ń wẹ

Ó ń sa ere

Ó ń gba bọọlu

Ó ń se kini

O gbe irin si oke

Ó ń na ọwọ

Ó ń kọ ilẹ

Ó ń jẹ kini

O joko

Ó ń na ọwọ

Ó ń wọ mọto

O ka ẹsẹ si ori bẹẹdi

Ó ń rin ẹrin

O fi ọwọ mu igi

O duro

O mu television dani

O de koto

Ó ń gun kẹkẹ

Ó ń foonu

O fẹ wọle

O ya ẹnu

O wọ inu ile

Wọ́n joko

Wọ́n n wo television

Wọ́n da ẹkọ

Mubaraq 3:5

Ó ń bo pineapple

Wọ́n sùn

Wọ́n n lọ ile

Wọ́n n sa ere

Wọ́n n gun iyan

Wọ́n n gba ilẹ

Wọ́n ko kini Wọ́n wa n lọ

Ó ń sa ewe

Wọ́n n camera

Wọ́n n ta ọfa

Wọ́n n se inawo

O sùn

Ó ń se kini

Ó ń fọ abọ

Wọ́n n kọ isẹ

Wọ́n n kọ orukọ

Ó ń sọ ọrọ

Ó ń ya asọ

Ó ń se ọwọ

Ó ń sa ere lọ ibi kan

Ó ń wẹ

Ó ń se ere

Wọ́n n gba bọọlu

O wa ni swimming pool

Wọ́n n se isẹ

Ó ń fo si oke

Ó ń fo si ilẹ

O fẹ fo lati ilẹ

Ó ń mu ice cream

Wọ́n fi ọwọ kan ilẹ

Wọ́n to

Wọ́n n se tyre

Wọ́n n se kini

O jabọ si inu odo

Wọ́n to

Wọ́n n sọ ọrọ

Wọ́n n ta ayo

Wọ́n n se ere kaadi

Wọ́n n gun kẹkẹ

Wọ́n sa ere gun kẹkẹ

Ó ń kọọlu

Ó ń tọ igi

ilẹ ti su

Wọ́n n lọ ile

Wọ́n n wo fiimu

Ó ń fọ abọ

Ó ń se isẹ

O da omi si inu kisini

Ó ń gba ilẹ

O fọ igo

Sodiq 3:5

Ó ń ta pineapple

Ó ń se pineapple

Ó ń sùn

Ó ń lọ ibi kan

Ó ń gun iyan

Ó ń ko yẹkpẹ

Ko se nkan kan

Ó ń sa flower

Ó ń wo fiimu

Ó ń sùn

Ó ń lu ilu

Ó ń kọ lẹta

Ó ń gun jangirofa

Ó ń sisẹ

Ó ń se asọ

Ó ń se kini

Ó ń sa ere

Wọ́n n wẹ

Wọ́n n se exercise

Wọ́n n gba bọọlu

Ó ń o

Ó ń mu ice cream

Ó ń gun oke

Wọ́n n play kini

Wọ́n to

Wọ́n n ta kaadi

Wọ́n n se isẹ

O wa ninu omi

Wọ́n n wa kẹkẹ

Gbogbo Wọ́n n wa kẹkẹ

Ó ń foonu

Ó ń gun igi

Wọ́n n wo ara wọ́n

O da omi si inu ike

Wọ́n n wo fiimu

O fọ igo

Ó ń gba ilẹ

Toyọsi 3:5

Ó ń se nkan kan

Ó ń fọ asọ

O mu umbrella

O mu kini dani
O wọ aṣọ

Nafisa 3:6
O sùn si ori bẹẹdi
O sùn si ori bẹẹdi

Rofiat 3:6
Ó ń gun iyan
Ó ń ya foto
Ó ń pa ẹyẹ
O se abẹrẹ
Bebi n sùn
Ó ń sùn
 Wọ́n n kọ iwe
Ó ń jẹun
Ó ń sa ere
Wọ́n n rin
Wọ́n n gba ball
Wọ́n n ja
Ó ń fo
Ó ń jẹ ice cream
O se jangirofa
Ó ń ta card
Ó ń rin ẹrin
Ó ń ta ọfa
Wọ́n wa kẹkẹ
Wọ́n n wo fiimu
O fọ igo mọ ilẹ
Wọ́n bu omi si inu ike

Rukayat 3:6
Wọ́n n gun iyan
Wọ́n n gba ilẹ
Ó ń ta ọfa
Wọ́n n ka iwe
Ó ń ya foto
Ó ń pa ẹyẹ
O se abẹrẹ
Bebi n sùn

Ó ń sùn
 Wọ́n n kọ iwe
Ó ń jẹun
O fẹ sa ere
Wọ́n n rin
Wọ́n n gba ball
Wọ́n n ja
Ó ń fo
Wọ́n n mu ice cream
Wọ́n n se kaadi
O se jangirofa
Ó ń ta card
Ó ń rin ẹrin
Ó ń ta ọfa
Wọ́n wa kẹkẹ
Wọ́n n kọọlu
Wọ́n n wo fiimu
Ó ń da ina
O fọ igo mọ ilẹ
Wọ́n bu omi si inu ike
Wọ́n fọ igo

Ahmed 3:6
Wọ́n n ta nkan
Wọ́n n sùn
Ó ń yọ oju
O fi ọwọ si ni eri
Wọ́n n lọ
O fẹ mu kini
N lọ
O sùn
Ó ń lọ
O ru igi
O ru koko
Ó ń gun iyan
O gbe alubọsa dani
O wa fẹ gba a ni ọwọ rẹ
Ó ń lọ
O gbe baagi
O gbe kini ni ọwọ
O fa kini dani

Awǫn ǫmǫ ile iwe
N lu ilu
Ó ń na ǫwǫ
N kǫ isę
Wǫ́n fa ara Wǫ́n ni ǫwǫ
N rin ęrin
Wǫ́n kǫ isę
Ó ń ję kini
O ko si inu omi
Ó ń gba bǫǫlu
Wǫ́n fa ara Wǫ́n ni ǫwǫ
O gbe igi si oke
O na ǫwǫ
Ó ń lǫ
N gun oke
Ó ń ję kini
AWǫ́n n se kini
Ó ń gun oke lǫ
Ó ń to kini ni ǫwǫ
Wǫ́n gbe mǫto dani
Ó ń rin ęrin
O gbe ęsę si ori kini
Wǫ́n n lǫ ile iwe
Wǫ́n n se kini
Ó ń sùn
O de koto
O gun kękę
N foonu
O fi ǫwǫ mu igi
Wǫ́n ya ęnu
Wǫ́n n wo fiimu
Wǫ́n n sǫ ǫrǫ
N rǫ omi si inu ike
N rǫ tii si inu flaski
N gba ilę

Semia 3:6
Wǫ́n n se ere
Wǫ́n sùn
Wǫ́n n na ǫwǫ
Ó ń gun iyan

Ó ń gbe ęru si ori
Wǫ́n n se ere
Ó ń gba ilę

Afusa 3:7
O to igba ka ilę
O gbe ǫwǫ le eri ęni yi
Ó ń yǫ oju
O fę dide
Ó ń lǫ
O fę sa ere
O sùn ilę lę
Ó ń kiri lǫ
Ó ń gba ilę
O ru koko
Ó ń gun iyan
O mu ewe ni ǫwǫ
Ó ń sùn
Ó ń lǫ
Ó ń ka iwe
Ó ń ya foto
Ó ń ta ǫfa
O gbe ǫmǫ ni ǫwǫ
Wǫ́n fę fun ni abęrę
Ó ń kǫ A
Ó ń kǫ B
Wǫ́n fa asǫ ara Wǫ́n ni ǫwǫ
Wǫ́n n sǫ ǫrǫ
Ó ń kǫ B
Ó ń ję nkan
Ó ń sa ere
O wa si inu ojo
AWǫ́n eyiun n lǫ
Wǫ́n n gba bǫǫlu
Wǫ́n fa asǫ mǫ ara wǫ́n
Wǫ́n n da ina
Ó ń na ǫwǫ
Ó ń mu ice cream
Wǫ́n n wu ilę
Wǫ́n fę kǫ oko
O fę ya foto

Ó ń rin ẹrin
O fẹ gun oke
O fẹ way a foto
Wọ́n kunlẹ
Wọ́n joko le eri chair
Wọ́n n ta nkan
Wọ́n dide
Wọ́n gun kẹkẹ
Gbogbo wọ́n gun kẹkẹ
Wọ́n ya ẹnu
Wọ́n gbe ọmọ ni ọwọ
Wọ́n n se ere
Wọ́n wa fẹ ya foto
Wọ́n bu omi si inu kọbu
Wọ́n n gba ilẹ
Wọ́n fọ igo

Alao 3:7
Wọ́n n ta nkan
Ó ń sùn
 Ó ń yọ oju
Ó ń gbe eri si
Ó ń pọn ọmọ
Ó ń gba ilẹ
Ó ń sa lọ
Ó ń sùn
O gbe igi
Ó ń gun iyan
O gbe igi dani
O ru onjẹ
O lọ joko
Ọmọ n sùn
N wo fiimu
Ó ń fa irin
N lu ilu
Wọ́n n se kalẹnda
Awọn eyiun n kọ nkan
Wọ́n n ja
Ó ń kọ orin
Wọ́n n maaki isẹ
Ó ń jẹ un

Ó ń lọ suku
Gbogbo wọ́n n gba bọọlu
Gbogbo wọ́n tun n gba bọọlu
Wọ́n n se nkan fún ara wọ́n
Wọ́n gun igi lọ
Ó ń sùn ẹkun
O fi kini si ẹnu
Eleyi un gun igi
Eleyi fẹ gun igi
Wọ́n lọ inu kilaasi
Wọ́n rin ẹrin si ara wọ́n
Wọ́n wọ aṣọ ọlọpa
Ó ń ta kọmputa
Wọ́n de koto
Eleyi gun kẹkẹ
Gbogbo wọn gun kẹkẹ
Wọ́n ti de ile
Eleyi n foonu
Eyi un na n foonu
awọn eyiun n gun igi
Wọ́n ya ẹnu
Eyi un n sọ ọrọ
awọn mejeeji n wo fiimu
Ó ń rọ tii si inu flski ti wọ́n mọ n gbe lọ
sku
Ó ń gba ilẹ

Musili 3:7
Wọ́n fi ọwọ kan ara wọn ni ori
N lọ
O kọ ọmọ lọrun
N na ọwọ
N sùn
O ru igi
O fi ọwọ kan ilẹ
N gun odo
O ru ike
O gbe alubọsa dani
O fẹ gba a
Ó ń sùn
N lọ

O duo
N wo iran
O fa igi dani
O kọ ẹyin si ibi
O fa asọ mọ ẹni kan ni ọwọ
O sùn
N lu ilu
N kọ isẹ
Wọ́n fa ara wọn ni ọwọ
O gbe sẹẹti si eti
N jẹ un kan
N lọ
N wẹ omi
Wọ́n n lọ
Wọ́n gba bọọlu
N wẹ
N gba bọọlu
Wọ́n fa ara wọn ni asọ
Wọ́n gbe igi si oke
Ó ń na ọwọ
O fa igi dani
Ó ń jẹ nkan
O se ilẹ
Ó ń ka iwe
Ó ń rin ẹrin
O gbe ẹsẹ si inu omi
Wọ́n to
Wọ́n joko
Wọ́n n rin ẹrin
Wọ́n sùn
Wọ́n gun kẹkẹ
Wọ́n gun masini
Ó ń foonu
O fa igi
O ya ẹnu
Wọ́n n kiisi ara wọ́n
Wọ́n n wo iran
Ó ń wa mọto
Ó ń rọ tii si inu flaski
Ó ń gba ilẹ
Ó ń joko lẹ

Amira 4
O to igba
Ó ń lọ
Wọ́n fa ara wọ́n ni eri
O duro
O sùn
O gbe igi dani
Ó ń gba ilẹ
Ó ń fọ asọ
Ó ń se bagi
O gbe alubọsa dani
O sùn
Ó ń lọ
O duro
O gbe nkan dani
O fẹ fun wọn ni abẹrẹ
Ọmọ sùn
N lu ilu
Wọ́n n kọ isẹ
Wọ́n fa ara wọ́n
O gbe nkan si oke
N jẹ nkan
N lọ
O ko si inu omi
Ó ń gba bọọlu
Ó ń wẹ
O fa igi dani
N na ọwọ
O fo si oke
N lọ si oke
Ó ń mu nkan
O fa igi dani
O mu mọto
Ó ń rin ẹrin
Wọ́n to
Wọ́n n rin ẹrin
Wọ́n joko
Wọ́n mu nkan dani
Wọ́n gun kẹkẹ
Wọ́n gun masini

Wọ́n n foonu
Wọ́n fa igi dani
Wọ́n ya ẹnu kalẹ
Wọ́n n wo fiimu
Wọ́n bu omi si inu ike
Ó ń gba ilẹ
O kun ilẹ

Amina 4:2
O to igba
Ó ń lọ
Wọ́n n lọ
Wọ́n fa ara wọn ni eri
O duro
O sùn
O gbe igi dani
Ó ń gba ilẹ
Ó ń fọ aṣọ
Ó ń se bayi
O gbe alubọsa dani
O sùn
Ó ń lọ
O duro
O gbe nkan dani
O fẹ fun wọn ni abẹrẹ
Ọmọ sùn
N lu ilu
Wọ́n n kọ isẹ
Wọ́n fa ara wọ́n
O gbe nkan si oke
N jẹ nkan
N lọ
O ko si inu omi
Ó ń gba bọọlu
Ó ń wẹ
O fa igi dani
N na ọwọ
O fo si oke
N lọ si oke
Ó ń mu nkan
O fa igi dani

O mu mọto
Ó ń rin ẹrin
O gbe igi dani
Wọ́n to
Wọ́n n rin ẹrin
Wọ́n joko
Wọ́n mu nkan dani
Wọ́n gun kẹkẹ
Wọ́n gun masini
Wọ́n n foonu
Wọ́n fa igi dani
Wọ́n ya ẹnu kalẹ
Wọ́n n wo fiimu
Wọ́n bu omi si inu ike
Ó ń gba ilẹ
O kun ilẹ

Ramat 4:3
Ó ń to igba
Ó ń sùn
Ó ń ya ọwọ
O fẹ bọ ode
O la ọwọ ka ilẹ
O ya ẹnu ka ilẹ
Ó ń sùn
O mu ọpa ni ọwọ
Ó ń la igi
Ó ń gba ilẹ
O duo jejẹ rẹ
Ó ń gun iyan
O bu omi
Ó ń gba abẹrẹ
O gbe kini ni ọwọ
Ó ń kọ aWọ́n ọmọ ni isẹ
Ó ń ya fọto
O fa igi ni ọwọ
O gbe ọmọ ni ọwọ
O fi fila fun ọmọ
Ó ń da ina
Ó ń kọ A
Wọ́n fa ara wọn ni ọwọ
Wọ́n n se ere

O ya ọwọ ka ilẹ
Ó ń kọ biro
Ó ń jẹ kini
Ó ń sa ere
O bọ ẹwu ka ilẹ
Wọ́n n lọ
Wọ́n n gba bọọlu
Wọ́n fa ara wọn lẹwu
Wọ́n yọ ọwọ ka ilẹ
O duro
Ó ń sùn
Ó ń jẹ kini
Wọ́n n wo eyi
O fẹ gun oke
Ó ń ya fọto
Wọ́n joko
Wọ́n n rin ẹrin
O fẹ gun igi
Wọ́n n gba bọọlu
Wọ́n joko
Awọn naa joko
Wọ́n n rin ẹrin
Wọ́n gun kẹkẹ
Wọ́n n yi kẹkẹ
Wọ́n n foonu
Wọ́n fẹ gun igi
Wọ́n ya ẹnu ka ilẹ
Ó ń kọ kini
Wọ́n joko
Wọ́n n wo blackboard
O fẹ ju oko mọ ilẹ
Ó ń gba ilẹ
Ó ń bu omi
Eyii na n bu omi

Idowu 4:5
Ó ń ta ọgẹdẹ
O sùn
Ó ń na ọwọ
Ó ń wo oke
Ó ń sa lọ

Ó ń gun iyan
Wọ́n n gba ileẹ
Ó ń kiri
Ó ń ta igi
Ó ń sa flower
Ó ń rin
Ó ń lọ
Ó ń ya foto
O mu kini dani
Wọ́n n fọ aṣọ
Ó ń sùn
Wọ́n n lu ilu
Wọ́n n kọ kini
Wọ́n n se isẹ
Wọ́n n se ere
Wọ́n n ta tebu
Wọ́n n kọ orin
Wọ́n n se isẹ
Wọ́n fi kini si ẹnu
Wọ́n fi kini to wa ni ọwọ rẹ si ẹnu
Wọ́n n rin
Wọ́n n wẹ
Wọ́n n gba bọọlu
Wọ́n n joko
Ó ń ta igi
O wa ni oke
Ó ń kọ orin
O fẹ gun ori oke
Ó ń ya camera
Ó ń tọ igi
Wọ́n n fi nkan se ere
O fẹ gun jangirofa
Wọ́n duro
Wọ́n fẹ gba bọọlu
Wọ́n joko
Wọ́n n se isẹ
Wọ́n joko lẹ
Wọ́n de koto
Wọ́n wọ masini
Wọ́n fẹ kọlu
Wọ́n gun igi

Wọ́n n pa ariwo
Wọ́n n se isẹ ni ọwọ
Wọ́n n wo ori oke
Wọ́n n rọ omi
Wọ́n n gba ilẹ Wọ́n fọ igo

Esther 4:11
Wọ́n n ta pineaple
Ó ń yọ oju
Ó ń gba adura
Ó ń lọ ibi kan
Ó ń gun iyan
Ó ń gba ilẹ
O fun ni pineapple
O gbe ẹru dani
Ó ń ya foto
Ó ń ta ọfa
Ó ń gun abẹrẹ
 O gbe ọmọ dani
Wọ́n n fun ni abẹrẹ
Ó ń sùn
Ó ń lu ilu
Ó ń ka iwe
Ó ń kọ iwe
Wọ́n n jo
Ó ń kọ orin
Ó ń jẹ carrot
Ó ń sa ere
O wa ninu omi
Wọ́n n rin lọ
Wọ́n n gba bọọlu
Wọ́n n ja
Wọ́n gbe igi si oke
Ó ń pe eyan
Ó ń fo
Ó ń mu ice cream
Ó ń jẹ un
Wọ́n n fi igi se ere
Ó ń gun oke
Wọ́n to
Wọ́n joko

Wọ́n n sọrọ
Wọ́n n wa kẹkẹ
Wọ́n n wa kẹkẹ ati mọto
Ó ń kọọlu
Wọ́n n pariwo
Wọ́n n wo fiimu
O fọ igo
Ó ń gba ilẹ
Ó ń da omi si ike
Ó ń da omi si abọ

Toyin 4:5
Ó ń da ina
Ó ń sùn
O lọ gbe igi
O na ọwọ si oke
Ó ń wo oke
Ó ń sa lọ
Ó ń gun iyan
O ru kini si ori
O ru pọọtu si ori
Ó ń gba ilẹ
O mu pineapple dani
O gbe baagi dani
O mu kini dani
Ó ń ya foto
Ó ń fa igi
Ó ń ta aṣọ
Ó ń sùn
Ó ń kọ orukọ
O fi ọwọ si inu rẹ
Ó ń kọ orin
Ó ń kọ iwe
Ó ń jẹ carrot
 Ó ń rin
O wa ninu omi
 Wọ́n n rin
Wọ́n n gba bọọlu
Wọ́n n fa ara wọ́n
Wọ́n n se ere
Ó ń se ere

Ó ń fo si ori oke
Ó ń mu ice cream
Wọ́n mu igi dani
Ó ń gun igi
Ó ń kọ iwe
Wọ́n n to kini
Ó ń rin ẹrin
O fẹ gun oke
Wọ́n to
Wọ́n n sọrọ
Wọ́n n se isẹ
Wọ́n n ka a
O de koto
Wọ́n n wa machine
Gbogbo wọn n wa machine
Wọ́n n kọọlu
O sùn si ori igi
Wọ́n n pa ariwo
Wọ́n n sọ ọrọ
Wọ́n n wo television
Ó ń wo nkan
O fọ igo
Ó ń gba ilẹ
Ó ń bu omi si inu rọba
Ó ń bu omi si inu kọbu

Precious 4:8
Wọ́n n ta ọgẹdẹ
Wọ́n n sùn
Ó ń yọ oju
Wọ́n n lọ
Wọ́n n rin
Wọ́n n gun iyan
Ó ń gba ilẹ
Ó ń ta isu
O gbe ẹru si ori
O fun ni apple
Wọ́n n lọ sọọsi
Ó ń kamẹra
Ó ń ta ọfa
O bi ọmọ

Ó ń sùn
Wọ́n lu ilu
Ó ń kọ isọ
Wẹn n se ere
Wọ́n n jo
Ó ń kọ orin
Ó ń draw isẹ
Ó ń jẹ carrot
Ó ń lọ ibi kan
O wa ninu omi
Wọ́n n lọ ibi kan
Ó ń gba bọọlu
Wọ́n n se ere
Ó ń na ọwọ
O wa ni oke
O mu ice cream
Wọ́n n se nkan ni ọwọ
Ó ń gun igi
Ó ń camera
Wọ́n n se kini
Wọ́n n rin ẹrin
Ó ń gun oke
Wọ́n n kọ orin
O fo ni oke
Ó ń to mọto
O fẹ gun oke
Wọ́n wa kẹkẹ
Wọ́n n kọọlu
O gun igi
Wọ́n n pa ariwo
Wọ́n n wo ara wọn
Wọ́n n wo fiimu
Wọ́n rọ omi si inu ike
Wọ́n rọ omi si inu rọba
Wọ́n gba ilẹ
O fọ gilaasi
O fọ
Igo fọ

Saka 4:9
Wọ́n joko

APPENDIX D

The Elicitation Task Experiment: Picture Tasks

PICTURE 1   Ó n jẹ carrot
              She PROG drink ice cream
              'She is drinking ice cream.'

PICTURE 2   Ó n mu ice cream
              She PROG eat carrot
              'She is eating carrot.'

PICTURE 3   Wọ́n ń wo television
              they PROG watch television
              'They are watching television.'

PICTURE 4   wọ́n ń sọ̀rọ̀ sí ara wọ́n
              they PROG talk to body them
              'They are talking to each other.'

PICTURE 5   ẹrù bà wọn
      fear catch them
      'They are scared.'
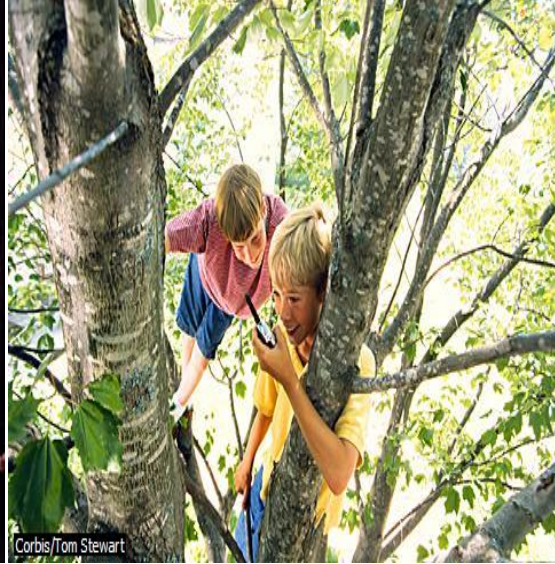
PICTURE 6   Wọn gun igi
      they climb tree
      'They climbed the tree.'

PICTURE 7   Ó n call
      She PROG call
      'She is calling.'

PICTURE 8   Wọn gun kẹkẹ
      They climb bicycle
      'They are riding bicycles.'

PICTURE 9   Wọ́n ń wo ǹNkan
They PROG look something
'They are looking at something.'

PICTURE 10   Wọ́n ń ta ayò
They PROG play game
'They are playing games.'

PICTURE 11   Wọ́n ń rín ẹ̀rín
They PROG smile smile
'They are smilng.'

PICTURE 12   Ó ń rín ẹ̀rín
He PROG smile smile
'He is smiling.'

PICTURE 13   Wọ́n jòkó
They sit
'They are sitting.'

PICTURE 14   Wọ́n tò
they queue
'They are on a queue.'

PICTURE 15   ó ń gun òkúta
She PROG climb rock
'She is climbing a rock.'

PICTURE 16   ó ń gun òkè
She PROG climb up
'She is climbing a mountain.'

PICTURE 17 Wọ́n ń sere
They PROG play
'They are playing.'

PICTURE 18 ó ń to nkan
he PROG arrange something
'He is arranging something.'

PICTURE 19 Wọ́n ń gbin igi
They PROG plant tree
'They are planting a tree.'

PICTURE 20 ó fò sí òkè
He jump to up
'He jumped up.'

PICTURE 21 ó ń fò
He PROG jump
'He is jumping.'

PICTURE 22 ó fi ọwọ́ kan ǹnkan
she use hand touch something
'She is touching something with her hand.'

PICTURE 23 Wọ́n gbé igi sí òkè
they carry stick to up
'They raised up sticks.'

PICTURE 24 Wọ́n ń jà
they PROG fight
'They are fighting.'

PICTURE 25   Wọ́n ń sáré lé bọọlu
They PROG run after ball
'They are running after the ball.'
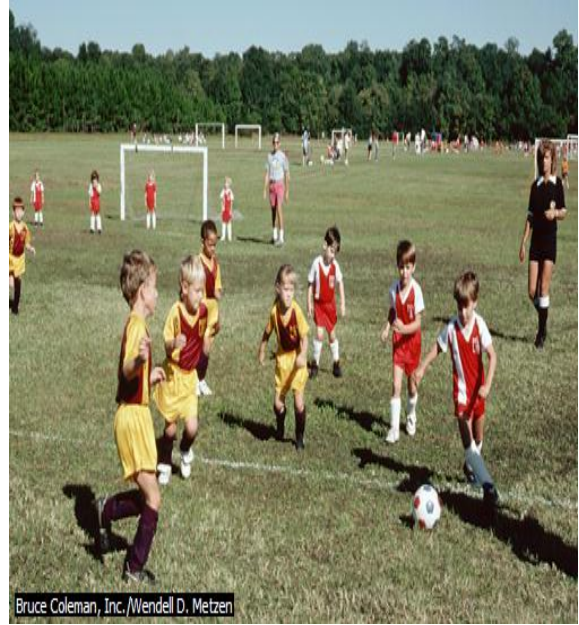
PICTURE 26   Wọ́n ń gbá bọọlu
They PROG play ball
'They are playing ball.'

PICTURE 25   Wọ́n ń rìn
They PROG walk
'They are walking.'

PICTURE 26   ó ń sáré
she PROG run
'She is running.'

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PICTURE 27 ó ń ya ǹkan
           she PROG draw something
           'She is drawing.'

PICTURE 28 ó ń kọ ǹkan
           she PROG write something
           'She is writing.'

PICTURE 29 Wọ́n n kọ ǹkan
           they PROG write something
           'Thye are writing.'

PICTURE 30 Wọ́n ń kọ orin
           He PROG sing song
           'He is singing.'

PICTURE 31 Wọ́n ń jó
they PROG dance
They are dancing.'

PICTURE 32 ó ń lu ìlù
He PROG beat drum
'He is drummimg.'

PICTURE 33 Bébì ń sùn
Baby PROG sleep
'Baby is sleeping.'

PICTURE 34 Ó ń gún ọmọ ní abẹ́rẹ́
she PROG give child injection
'She is giving the child injection.'

PICTURE 35 Ó ń ta ọfà
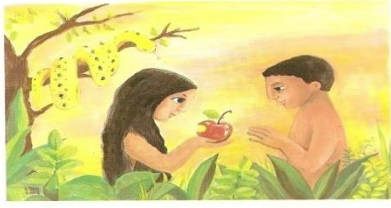He PROG shoot arrow
'He is shooting an arrow.'

PICTURE 36 Ó ń ya fọ́tò
He PROG snap picture
'He is snapping pictures.'

PICTURE 37 Ó gbé ìwé dání
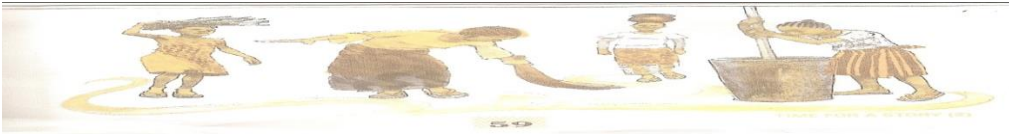She carry book at hand
'She is holding a book.'

PICTURE 38 Ó gbé báàgì àti ìwé dáání, ó ń rìn lọ
She carry bag and book at hand, she PROG walk go
'She is going with her bag and book.'
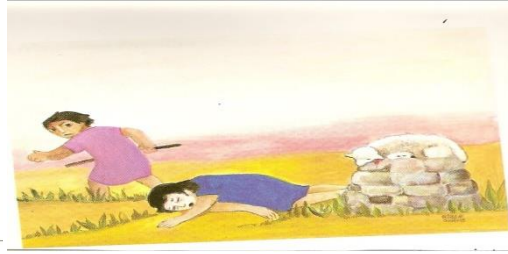
PICTURE 39 ó fun un ní èso   PICTURE 40 ó ń sa lọ
                She give him fruit   He PROG sun go
                'She gave him an apple.'   'He is running away.'
                                      PICTURE41 Ó subú sí ilẹ̀
                                      He fall to ground
                                      'He fell down.'

PICTURE42 ó gbé igi sí orí
             She carry wood on head
             'She carries wood on her head.'

PICTURE43 ó ń gbá ilẹ̀
             She PROG sweep ground
             'She is sweeping.'

PICTURE44 o gbé igbá sí orí
             She carry pot on head
             'She carries a pot on her head.'

PICTURE45 ó ń gún ǹnkan
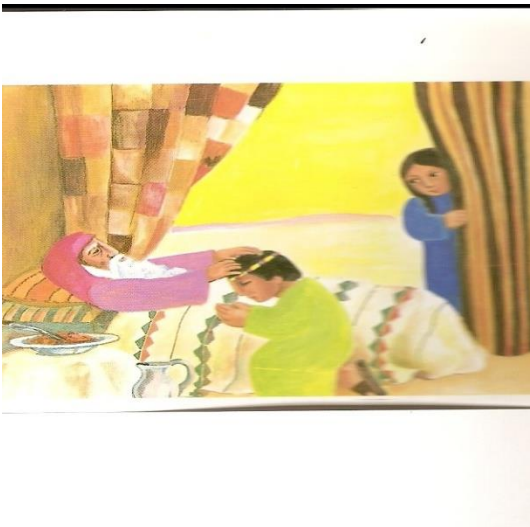   She PROG pound something
             'She is pounding.'
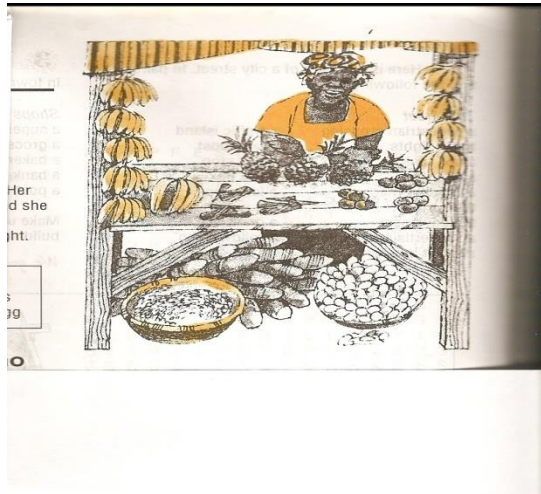
PICTURE46 ó ń wo òkè
He PROG look up
'He is looking up.'

PICTURE47 Bàbá ń na ọwọ́ si ǹkan
Father PROG point hand
'The old man is pointing his finger at the mound

PICTURE48 ọmọ gbé igi dání
Child carry wood at hand
'The boy is carrying wood.'

PICTURE49 bàbá gbé ọwọ́ le ní orí
Father carry hand on head
'The man placed his hand on his head.'

PICTURE50 ó ń ta ǹnkan
she PROG sell something
'She is selling fruits.'

Video: Snapshots of Video CG lips. (Video clips included in a CD-Rom.)