



Early Lexicon of the Yoruba Child

Bolanle Elizabeth Arokoyo

Department of Linguistics and Nigerian Languages, University of Ilorin

P. M.B. 1515, Ilorin, Kwara State, Nigeria

Tel: +2348033780568 E-mail: bolakoyo@yahoo.com

Received: 05-07- 2012

Accepted: 19-07- 2012

Published: 03-09- 2012

doi:10.7575/ijalel.v.1n.5p.64

URL: <http://dx.doi.org/10.7575/ijalel.v.1n.5p.64>

Abstract

This paper examines the lexicon of the Yoruba child at the initial stage. We examined the composition of the early lexicon of the Yoruba child and how they are acquired. The research is couched in the Minimalist Programme which believes that language acquisition is a matter of learning vocabulary and determining lexical idiosyncrasies. A quantitative analysis of the data is carried out. The database consisted of longitudinal studies of three children, Damilare, Temiloluwa and Tola, between the ages of fifteen (15) and thirty-six (36) months. We found that there were few lexical items which were gradually built up by the children. We also discovered that the first sets of words to be acquired are verbal items, followed by nominal items. The presence of transitive and intransitive verbs is noted in the utterances of the children and we conclude that the children make use of verbs related to actions and events that they or those around them are involved in.

Keywords: lexicon, minimalist programme, lexical items, verbal items, nominal items, verbs, mental dictionary, transitive, intransitive

1. Introduction

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 words in the language occur. Hróarsdóttir (2003:116) says that evidence from human language studies shows that children learn very complex phenomena in a relatively short period of time during their first language acquisition. The aim of this paper is to examine the composition of early lexicon of the Yoruba child. What composes the early lexicon of the Yoruba child and how are they acquired?

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. 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 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.

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, 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 paper examines the order that the Yoruba child follows in the acquisition of lexical items.

2. Methodology

We examined the corpus of children's early speech. The data consist of a set of spontaneous longitudinal speech of children produced during interactions with parents, siblings, caregivers and other family members. The data is collected from three children, Damilare, Temiloluwa, and Tola who were recorded at home from 18 months to 36 months.

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.

A quantitative and qualitative analysis of the data was carried out. The quantitative analysis uses simple mathematical calculations with the aid of tables and charts. The tables show the percentage of observed phenomena. The charts consist of bar charts drawn from the tables. The bar charts are used to show comparison between different items at a particular point in time.

3. The Lexicon and Minimalist Programme

The Minimalist Programme is the model on which this paper rests. 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). 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 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).

Radford (2000) examines child language from the minimalist perspective. He sees the child language as being perfect. Radford believes 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. 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, verbs and nouns are taken from the lexicon fully inflected. Since the lexicon is made up of lexical items,



we will examine the acquisition of verbal items, transitive and intransitive verbs and nominal items will be examined in the following subsections.

3.1 Acquisition of Verbal Items

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 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).

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.

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). 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.

We assume that the first sets of lexical items the child acquires are verbal items. To test these claims we examined the early verbs of Damilare and Temiloluwa from the one word stage to the early multi-word stage when they have started to merge items. 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. For example:

1.
 - a. sùn Damilare 18 months
sleep
'I want to sleep.'
 - b. t̀ò Damilare 18 months
urinate
'I want to urinate.'
 - c. jẹ̄ isu Damilare 18 months
eat yam
'I want to eat yam.'
 - d. wẹ̀ Temiloluwa 18 months
bathe
'I want to bathe.'
 - e. subú Temiloluwa 18 months
fall down
'I fell down.'
 - f. jòkó Tola 18 months
sit down
'Sit down.'
 - g. wò ó Temiloluwa 18 months
look it
'look at it.'



- h. fún mi Temiloluwa 18 months
 give me
 ‘Give it to me.’

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 below.

$$2. \quad \frac{\text{Verbal Items}}{\text{Total Number of Lexical Items}} \times \frac{100}{1}$$

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.

$$3. \quad \frac{\text{Other Lexical Items}}{\text{Total Number of Lexical Items}} \times \frac{100}{1}$$

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 below show the distribution of verbal items vis-à-vis other lexical items in the early utterances of Damilare, Temiloluwa and Tola respectively.

Table 1. Distribution of Verbal Items in the Early Utterances of Damilare

Age	Verbal Items	Other Lexical Items	No. of 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 2. Distribution of Verbal Items in the Early Utterances of Temiloluwa

Age	Verbal Items	Other Lexical Items	No. of 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 3. Distribution of Verbal Items in the Early Utterances of Tola

Age	Verbal Items	Other Lexical Items	No. of 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 tables above, verbal items in the speech of Damilare was 53% at sixteen (16) months and reduced to 41.3% at twenty-three (23) months. In the speech of Temiloluwa, 47.8% of verbal items were recorded at sixteen (16) months and reduces 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 tables 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 examples that follow present some verbs in the utterances of the children.

4. jẹ	to eat
gbà	to take
nà	to beat him
pòn	to back (baby)
sí	to open
gbé	to carry
sùn	to sleep
tò	to urinate
wẹ	to bathe
wá	to come
yọ	to remove
mu	to drink
yà	to excrete
jòkó	to sit
dìde	to stand
jó	to dance
fọ	to break

3.2 Transitive and Intransitive Verbs in the Early Sentences 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. 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 and are cognitively less complex than events with two or more participants. This section seeks to know the order of acquisition of transitive and intransitive verbs and whether one is more basic than the other. Table (4) below shows the distribution of the first set of twenty verbs in the early speech of Damilare, Temiloluwa and Tola.

Table 4: 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
<i>pòn</i>	<i>to back (baby)</i>
sí	to open
gbé	to carry
<i>sùn</i>	<i>to sleep</i>
<i>tò</i>	<i>to urinate</i>
<i>wẹ</i>	<i>to bathe</i>
<i>wá</i>	<i>to come</i>
yọ	to remove
mu	to drink
yà	to excrete
<i>jòkó</i>	<i>to sit</i>
<i>dìdè</i>	<i>to stand</i>
<i>jó</i>	<i>to dance</i>
fọ	to break

The verbs in bold are transitive verbs while the italicised verbs are intransitive verbs. We can see that the first three verbs are transitive verbs. However, there are eleven intransitive verbs as against nine transitive verbs in that distribution. Table 5 shows in percentage, the distribution of order of acquisition of transitive and intransitive verbs by the three children.

Table 5. Transitive and Intransitive Verbs in the Early Sentences of the Yoruba Child

Child	Age (in months)	% 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 as shown in 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 1 below.

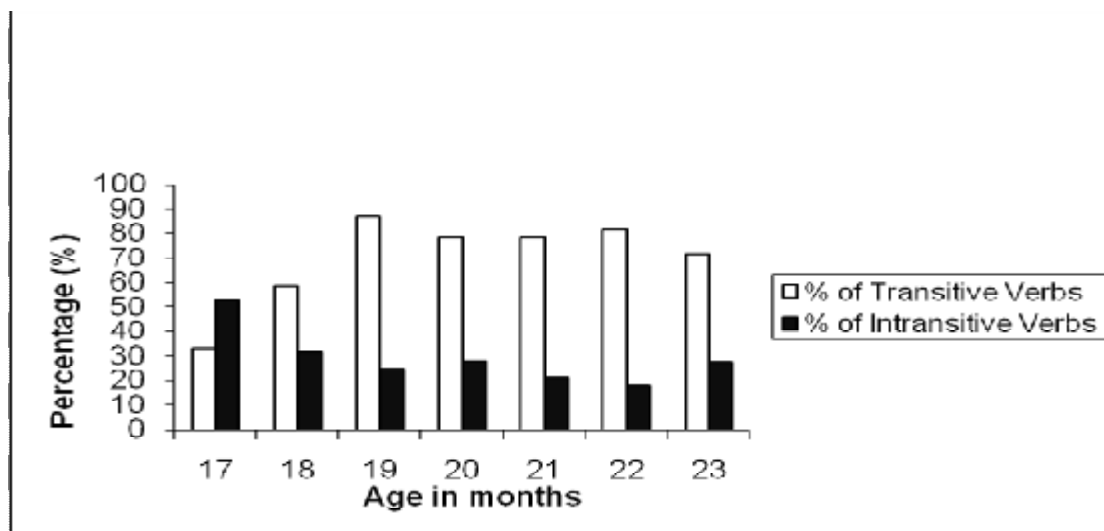


Figure 1. Transitive and Intransitive Verbs in the Early Sentences of Temiloluwa

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.

3.3 Acquisition of Nominal Items

The other major lexical items used by the child are the nominal items. 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.

Cross-linguistic studies have expressed the importance of nominal items in the early speech of children. The examples below show nominal items in Damilare's utterances.

5. Damilare at fourteen months
 Aye 'Taiye'
 me 'goat'



hehe 'goat'
 ita 'outside'
 mēme 'water'
 nana 'Anna'
 mē 'goat'
 jeje 'food'
 keke 'bicycle'

- | | | |
|----|---|-----------|
| 6. | a. mòmì bọl
mummy ball
'Mummy give me the ball.' | 18 months |
| | b. mòmì bag
mummy bag
'Mummy see your bag.' | 20months |
| | c. mà má asọ
mummy clothe
'Mummy wear my clothe for me.' | 20 months |
| | d. Bàbá mọtò
Daddy car
'Daddy has gone to the car.' | 21 months |
| | e. Ifeoma yoyoyo fridge
Ifeoma yoghurt fridge
'Ifeoma put the yoghurt in the fridge.' | 21 months |

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.

$$7. \quad \frac{\text{Nominal Items}}{\text{Total Number of Lexical Items}} \times \frac{100}{1}$$

We did same for other lexical items. Tables 6, 7, and 8 present a paradigm of the acquisition of nominal lexical items vis-à-vis other lexical items by the three children.

Table 6. Distribution of Nominal Items in the Early Utterances of Damilare

Age	Nominal Items	Other Lexical Items	No. of 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 7. Distribution of Nominal Items in the Early Utterances of Temiloluwa

Age	Nominal Items	Other Lexical Items	No. of 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 8. Distribution of Nominal Items in the Early Utterances of Tola

Age	Nominal Items	Other Lexical Items	No. of 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.

$$8. \quad \frac{\text{Verbs}}{\text{Total Number of Lexical Items}} \times 100 = \frac{100}{1}$$

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.

$$9. \quad \frac{\text{Nouns}}{\text{Total Number of Lexical Items}} \times 100 = \frac{100}{1}$$

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 9 below shows the occurrence of nouns and verbs in the utterances of the children.

Table 9. Distribution of Nouns and Verbs in the Early Utterances of Damilare, Temiloluwa and Tola

Child Age (in months)	Damilare		Temiloluwa		Tola	
	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 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 2 displays the distribution of Nouns and Verbs in the speech of Damilare:

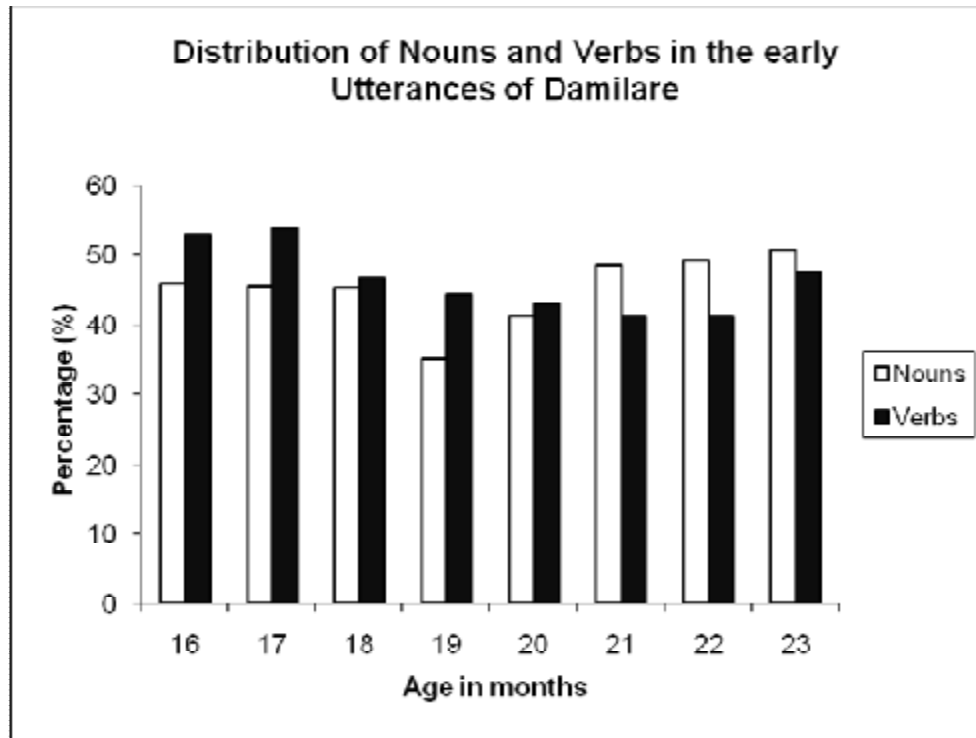


Figure 2: Distribution of Nouns and Verbs in the Early Utterances of Damilare

By 21 months, Damilare’s nouns stand at 48.6% as against 41.3% of verbs. By 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.

4. Conclusion

We found that there were few lexical items which were gradually built up by the children. We discovered that the first sets of words to be acquired are verbal items, followed by nominal items. The statistical representations above show the growth and decline of some features. For example, figure 2 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. The presence of transitive and intransitive verbs is noted in the utterances of the children and we conclude that the children make use of verbs related to actions and events that they or those around them are involved in.

We also discovered that as the children grow there is a decrease in the number of utterances without verbs. This shows that their language is developing normally. Arokoyo (2010:173) relying on cross-sectional data concludes that 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.

Taking a careful look at the data, it was discovered that from the very few words that the children acquired at the initial state when they could not even pronounce the words properly and do not even know the meaning of most of the words, they grow to have very good knowledge of the words in their language. With the development of the lexicon of the children there is an increase in their proficiency and by implication their linguistic competence. They moved from different stages of language acquisition until they acquire adult linguistic competence.



References

- Amfani, A. (2006). 'Operation 'merge' and the formation of the Hausa full verb'. In Ndimele O., C. Ikekeonwu and B. M. Mba (eds.). *Language and economic reforms in Nigeria*. Port Harcourt: M & J Grand Orbit Ltd.
- Arokoyo, B. E. (2010). 'Acquisition of Argument Structure by Pre-School Children in Nigeria'. Unpublished Ph.D Thesis, Department of Linguistics and Nigerian Languages, University of Ilorin.
- Awobuluyi, O. (1979) *Essentials of Yorùbá grammar*. Ibadan: University Press Limited.
- Bamgbose, A. (1967). *A short Yoruba grammar*. London: Cambridge University Press.
- Bloom, L., E. Tinker and C. Margulis. (1994). 'The words children learn: evidence against a noun bias in early vocabularies'. *Cognitive Development*, 8, 431-450.
- Choi, S. (1999). 'Early development of verb structures and caregiver input in Korean: two case studies'. *International Journal of Bilingualism* 3.241-265.
- Chomsky, N. (1995). *The Minimalist Programme*. Cambridge, Mass.: The MIT Press.
- Chomsky, N. (1998). 'Some observations on economy in generative grammar.' In *Is the Best Good Enough? Optimality and Competition in Syntax*. Barbosa Pilar et al. (eds). Cambridge, Mass.: The MIT Press. 115-127.
- Chomsky, N. (1999). 'Derivation by phase'. MIT Occasional Papers in Linguistics 18. Cambridge, Mass: MITWPL.
- Clark, B. (2000) 'First and second language acquisition.'. Proceedings of the Lilian Katz Symposium, Nov. 5-7. *Issues in Early Childhood Education; Curriculum, Teacher Education, and Dissemination of Information*. 181-188.
- Cook, V. (1996). 'Minimalism, vocabulary and L2 learning.' Paper presented at AILA, Jyvaskyla, 1996. www.homepage.ntlworld.com/vivian.c/Writings/Papers/AILA96.htm retrieved on 25th January, 2010.
- Fukuda, S. (2005). *transitivity bias and acquisition of verbs with transitivity alternation in English and Japanese*. Ms. UCSD.
- Fukuda, S. and Choi, S. (2006). 'The Acquisition of transitivity in Japanese and Korean children.' www2.hawaii.edu/~fukudash/JK17_final.pdf retrieved on 14th June, 2012.
- Gopnik, A. (1988). Three types of early word: the emergence of social words, names and cognitive-relational words in the one-word stage and their relation to cognitive development. *First Language*, 8, 49-69.
- Haegeman, L. (1994) *Introduction to government and binding theory*. Oxford: Blackwell.
- Hopper, P. J. and S. A. Thompson (1984). 'The discourse basis for lexical categorization in universal grammar.' *Language* 60, 703-752.
- Hróarsdóttir, T. (2003). 'Language change and language acquisition'. In Dahl Anne, Bentzen Kristine, and Peter Svenonius (eds). *Nordlyd* 31.1 116-131.
- Kessler, C. (1971). *The acquisition of syntax in bilingual children*. Washington DC: Georgetown University Press.
- Langacker, R. (1987). *Foundations of cognitive grammar*. Volume 1. Stanford: Stanford University Press.
- Levin, B. (2007). 'The lexical semantics of verbs i: introduction and causal approaches to lexical semantics representation'. Stanford University: Course LSA.113P
- Lin, J. (2004). Event structure and the encoding of arguments: the syntax of the Mandarin and English verb phrase. PhD Thesis submitted to the Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology.
- Lofti, A. R. (1999) 'Minimalist program revisited: Chomsky's strength to trigger movement.' Presented at the *11th European Summer School in Logic, Language and Information, ESSLLI'99*, Utrecht, August 99 as part of the workshop on *Resource Logics and Minimalist Grammars (C.Retor'e & E. Stabler, organizers)*
- Longa, V. M. and G. Lorenzo (2008). 'What about a 'really' minimalist theory of language acquisition?' in *Linguistics*. Walter de Gruyter GmbH & Co. KG. 46-3, 541-570.
- Martinez-Ferreiro, S. and Mata-Vigara, M. (2007) 'From minimalism to cartography: towards a unified account.' <http://seneca.uab.es/ggt/publicacions/report/pdf/GGT-07-11.pdf>. Retrieved on 1st December, 2009.



- Nelson, K. (1973). 'Structure and strategy in learning to talk'. Monographs of the Society for Research in Child Development, 38, 1-135.
- Radford, A. (2000). 'Children in search of perfection: towards a minimalist model of acquisition'. In *Essex Research in Linguistics*, Vol. 34, 57-74.
- Radford, A. (2004) *Minimalist syntax: exploring the structure of English*. Cambridge: Cambridge University Press.
- Robins, R. H. (1966). 'The development of the word-class system of the European grammatical tradition'. *Foundations of Language* 2, 3-19.
- Scherf, K. S. (2005) 'Infant event representations and the acquisition of verb argument structure.' Presented at the *Biennial Meeting of the Society for Research in Child Development, Atlanta, GA*.
- Stockwell, R. (1977) *Foundations of syntactic theories*. Englewood Cliffs, New Jersey: Prentice Hall Inc.
- Stoll S. , B. Bickel, E. Lieven, G. Banjade, T. N. Bhatta, M. Gaenszle, N. P. Paudyal, J. Pettigrew, I. P. Rai, M. Rai, and Rai, N. K. (2009). 'Nouns and verbs in Chintang: children's usage and surrounding adult speech.' http://www.eva.mpg.de/lingua/staff/stoll/pdf/Nouns&verbs_Chintang.pdf. Retrieved on 28th of January, 2010.
- Tomasello, M. and J. Todd. (1983). 'Joint attention and lexical acquisition style.' *First Language*, 4, 197-212.
- Tomasello, M. and Brooks, P. (1998). Young children's earliest transitive and intransitive constructions. *Cognitive Linguistics*, 9: 379-395
- Uziel-Karl, S. (2001). A multidimensional perspective on the acquisition of verb argument structure. A PhD Thesis submitted to the Senate of the Tel Aviv University.
- Valian, V. (1991). 'Syntactic subjects in the early speech of American and Italian children'. *Cognition* 40, 21-81.
- Wilson, M. S., Fox, B. J. and Pascoe, J. P. (2008). Laureate's language development programs: theory and research. Winooski: Laureate Learning Systems. www.LaureateLearning.com retrieved on 18th January, 2010.