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SYNTACTIC ANALYSIS OF NUMERALS IN ENGLISH AND IZHIA: A MINIMALIST APPROACH

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Abstract

This paper investigates the Izhia Numerals and those of the English language, and examines how the numerals in both languages could enter into relationship with the nouns to form a determiner phrase. The study uses the Contrastive analysis and the minimalist program as tools for identifying, predicting and generalizing functional and structural similarities and dissimilarities within the two languages which may pose difficulties in second language learning or ease second language learning. Data used in this study were obtained through oral interviews. Findings reveal that numerals in both languages are split into cardinal and ordinal and are functionally similar but structurally dissimilar, as the English numerals occur only in pre-position in their DP system while in Izhia the reverse is the case as the numerals appear in post-positions in their DP system. The study also reveals that there isco-occurrence of determiners in Izhia DP with numerals which is not common in English. The study brings to the fore the fact that nouns can co-occur with cardinal numerals in the two languages under discourse. On this premise, it is realized that the knowledge of the dissimilarities in the structures of the L1 and the L2 can enhance proficiency and good performance in the teaching and learning of English language as a second language as far as Izhia speakers of English are concerned.

Key Words: Numerals, Cardinal, Ordinal, DP System, Minimalism.

Introduction

Language documentary is a relatively new area of research endeavor in linguistics. According to Ogomaka (2005, p35), `In the last fifteen years, we have seen the emergence of a brand of linguistics which has come to be called documentary linguistics. It is concerned with the

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making and keeping of records of the world's languages and the pattern of use'. Ani (2020) is of the view that the aim of language documentary is to provide a comprehensive record of the linguistic practices characteristics of a given speech community. The major purpose being to ensure that the future generation of that speech community will have a reference material for their language and some form of linkage to their root. Furthermore, Ani (2020) and Aleke (2023) observe that Nigerian indigenous languages are at the verge of extinction courtesy of the new trend of nursery schools. One of such Nigerian indigenous languages is Izhia language. Languages are different and as a result, a second language learner may be confronted with some challenges in the process of learning the target language hence the need for a contrastive study. This study serves as a medium for the contrastive work on the area of the numerals in English and Izhia and how the numerals enters into relationship with the nouns to form determiner phrases.

Nigeria, like other countries in Africa, has many indigenous languages and like many African countries, Nigeria has adopted the English language as a second language. The language has gained the status of an official language in the country. Nigeria's National Policy on Education (2013) has authorized the use of more than one language in educational instruction. Thus, it advocates the learning of English and at least one Nigerian language at the primary school level, at which level, the learners are incapable of mastering enough of the English language and express the language poorly, especially in writing. In the words of Emenanjo (1978, p112), the English language 'should be taught early enough in our school system to allow for effective understanding and performance by the learners'. It is a fact that problems generally occur when two or more languages are brought into contact and it is particularly the case with language learning in which two languages are involved. A typical example is English and Izhia.

Numerals

Numerals are words used for counting. Etu (2018) observes that counting is required in any natural language. According to Crystal, (1997), they are one, two three, first, second, third etc. In the words of Eka (1998), Ndimele (2003), numerals are split into cardinal (one, two, three etc. and ordinal, first, second, third etc.). While cardinal numerals are used to indicate the number of noun words, the ordinal numerals are used to show positions (Nweze, 2014). In English and Izhia, numerals are words or

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

symbols used for counting and can also function as determiners of the noun. Determiner is a broader term for articles, quantifiers, possessives, demonstratives and numerals (Ndimele 2003, Eka 2018). This study concentrates on an aspect of the determiners numerals and examines how they go into relationship with nouns to form determiner phrases. Numeral is that sign or symbol that stands for a particular number in the counting system of a language. In the words of Hammarstrom, (2009), a numeral system is a spoken normed expression used to denote the exact number of objects for an open class of objects in an open class of social situations with the whole speech community in question. This definition explains that numeral systems are focused on the written forms of spoken numbers with acceptable semantics within the majority of a language group. In addition, numeral system is relevant to a wide range of applications such as counting and monetary transaction (Akinade, 2014).

As a system, each language has a set of rules, principles and properties that govern the formulation and existence of numbers, names and numerals other than the basic ones (Ogomaka, 2005). Akinade (2014) opines that despite the fact that numbers are represented differently across languages employing different computational techniques with varying complexities, numeral systems still share some common properties. This paper looks at numerals as determiners, their functions and structural positions in phrases in the two languages- English and Izhia.

The Izhia Language

Izhia is the name of the people and the language they speak. The language is spoken by a population of about (180,000) one hundred and eighty thousand people. The language is predominantly spoken in Ohaukwu Local Government Area of Ebonyi State. It is a dialect of Igbo language. Izhia is the 2nd largest tribe in Ebonyi State. Izhia belongs to the Igboid subgroup within the Benue Kwa in the New West Benue Congo. Pockets of Izhia speaking communities are also found in Ntezi in Ishielu Local Government of Ebonyi State as well as a village in Otukpo in Benue State.

Research Methodology

This study targets Izhia-English bilinguals. Data for this study were gathered through oral interview. The interview lasted for an hour, in three different sections, within two days interval. Those interviewed include His Royal Majesty, Eze David Ogbaekirigwe, who is minimally educated in

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www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
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RESEARCH

English, Dr. James Ani and Dr. Aleke Matthew. To achieve the aim of this study, analytic method was adopted. The study was analyzed in three phases; the English phase, the Izhia phase and the comparative phase. The study also translated DPs with numerals in Izhia language into English. It examined the different numerals in both languages and their processes of entering into relationship with nouns to form determiner phrases.

Determiner Phrases in English and Izhia

Determiners are important elements in language studies. Nweze (2014) posits that determiners remain the indicator of given new information in many languages and needs to be accounted for. Similarly, Crystal (1997) and Berk (1999) observe that determiner is a grammatical category which includes number or rather different kinds of words that always precede a noun and an adjective. Mbah (2011, p211) observes that 'a noun cannot project into a phrase whose nucleus is a verb or a preposition'. 'A determiner is a word which signals the presence of a noun' (Ndimele 2003, p102). According to this source, the determiner is a cover term for articles (e.g. a, an, the), demonstratives (e.g. this, that, these, those), possessives (e.g. my, our, their, his, your), quantifiers (e.g. some, every, any, much, few, a few, several) and numerals (e.g. one, two, three, first, second, third). A determiner projects into a determiner phrase by entering into a relationship with a noun. By so doing, the determiner becomes the head while the noun serves as the complement.

Uzoigwe (2011), notes that languages could have the pre-modifier where the modifier is placed before the head and a post-modifier where the modifier is after the head. According to the author, the English language is a good example of a pre-modifier situation. This means that, in the English language, the determiners occur in pre-position. It is important to note that singular determiners take singular NP complements and plural determiners take plural NP complements.

Determiners are one of the elements that are found within the domain of the NP. Erichsen (2010) defines determiner as a type of word that refers to a noun and determines which object, person or other entity the noun represents. Also, the author asserts that determiners have little meaning apart from the nouns they refer to. In some languages like English, French and Spanish, determiners are usually placed before the noun, in other words, they are pre-posed before the noun they refer to, while in other languages like Igbo, Yoruba, Anaang, Ibibio and Izhia, they are post-posed. The above description is a justification of the intent behind this

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study, to ascertain the structural position of numerals in Izhia in comparison with that of the English language.

In Izhia, determiners invariably post-pose the nouns they refer to. This is to say that the determiners in Izhia occur in post-position with the exception of the demonstratives which can occur in both positions.For the purpose of this study, the focus is on one aspect of the determiners: numerals.

Theoretical Bases

The theoretical framework adopted for this study is the Minimalist Program, and also Lado's (1957) Contrastive Analysis Approach.

The Minimalist Program

The Minimalist Program (MP) is a modification of the Principles and Parameters Theory (PP) earlier known as Government and Binding Theory (GB) advanced by Chomsky (1989, 1993 and 1995), where Chomsky presents a Minimalist inquiry into linguistic theory. It is an offshoot of the government and binding grammatical levels of representation: D-Structures, S-Structure, Logical Form (LF) and Phonetic Form (PF) to interface levels, that is, just PF and LF. In this theory, Chomsky minimizes syntactic entities and principles for a plausible linguistic expression and explanation (interpretation). The PF interacts with sound/motor articulatory-perceptual faculties whereas the LF interfaces the meaning and conceptual modules of cognition like inference and conceptual-intentional reasoning. The MP is designed in such a way that all the superfluous apparatuses which may constitute a problem in the syntactic description are removed.

This theory was developed when the emphasis on syntactic description began to shift from the constraint-based grammar of the Government and Binding framework to notions of economy and simplicity (Luraghi and Parodi, 2008). GB had focused on "limiting the scope of generative power by increasing the role of constraint grammar and limiting the power of Generative rules" (Carnie, 2007: p22). This led to the formulation of a lot of theories such as the Binding theory, the Case theory, and others, which in the GB era became cumbersome.

In the work, *Minimalist Program for Linguistic Theory* (1995), Chomsky proposes a theory of syntactic study which embodies economy, simplicity, and elegance (Hendrick, 2003). The principle of economy is central to the Minimalist Program. The notion of economy ensures that

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www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
ISSN: 1813-222 © June 2024
RESEARCH

everything that appears in a sentence serves a purpose (Cook & Newson, 2007). This eliminates all superfluous elements in sentences.

Movement operation is integral to the MP. A key proposal of the minimalist program is that displacement and plane structure-building are established by one operation, Merge (Chomsky 1995). Movement is forced by the requirement that a phrase appears in the minimal syntactic domain of a functional head to achieve feature checking (Radford 2004). The restriction on movement to cases where a phrase is raised to a minimal domain of head for feature checking is called the principle of last resort. This constraint constitutes part of the definition 'Move alpha'. Features that are uninterpretable at LF (such as Case) are eliminated after checking. They cannot appear at the LF as their presence would result in a violation of the interface condition of Full Interpretation (FI) (Cook and Newson 2007). Chomsky describes a derivation that yields an ill-formed interface as that which 'crashes'. Interpretable features like categories and semantic features are not eliminated after checking, and so, may enter into subsequent checking relations. The feature of the head that forces overt movement is uninterpretable (Carnie 2007).

Merge introduces substantive heads into positions where they can assign theta roles to their complements and certain specifiers (SPECs) and complements into configurational positions, where they can receive theta-roles from substantive heads. In a Determiner phrase, the D is the head. Its features are inherited by the Head Feature Principle (HFP), which states that 'the head features of a headed phrase are identical to those of its head daughter (Adger 2003).

The concept of computational system is well developed in the MP. This is the operation where the fully formed words selected from the lexicon are combined in pairs through the process of "select and merge" (Luraghi and Parodi, 2008). Operation Select means the derivation begins from an Array (A) which is an unordered list of lexical items selected from the lexicon, for example,

Array {Boys, the……} forms a grammatically correct DP as follows;

The boys.

The unordered list such as the example (which formed the DP) is called Numeration. This is because it shows the number of times a particular item occurs in an array. Each lexical item (LI) is taken from a tree formation which forms a set of the syntactic object (SO). Operation 'merge' therefore, is the merger of two syntactic objects (SO), (that is, the

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

item that can undergo syntactic operations). Operation Merge involves combining two lexical items and where the merging is successful, the output is said to converge, but where they are unsuccessful, the output is said to have crashed. This is illustrated below,

i. {boys the} this merging is unsuccessful as the output has crashed.
ii. {The boy} this merging is successful as the output could be said to have converged.

The operations Move and Merge which have combined the two lexical items {|boy} and {the}, to form boythe is not successful, the final output has therefore crashed (i.e formed a wrong construction). Then the ill-formed construction is deleted and operation merge will carry out further combinational activities to ensure successful constructions otherwise there will not be continuity in the construction of sentences or phrases hence the second construction.

In the MP, a lexical category heads a phrase and where a phrase is headed by a determiner, that determiner is referred to as the lexical projection for the determiner category, while a phrase headed by a determiner is referred to as maximal projection. For example :

The students

The determiner 'the' is a lexical projection while the whole phrase (the students) is a maximal projection. The head of a phrase and the entire phrase have the same syntactic distribution in the syntactic construction. It, therefore, means that both the head which is the lexical projection and the head and its satellites can occupy the positions of subject and object in any syntactic construction. In the MP, all categories, whether lexical or functional can head a phrase. Nouns, verbs, adverbs and adjectives which are lexical categories function as the phrasal heads. Functional categories like conjunction (and, but, etc.), determiners and prepositions (on, in to, by, beneath, etc.) can also be heads of their phrases. Even such syntactic elements as questions, qualifiers, tense, determiners and negators can perform the function of heading a phrase (Chomsky, 1995). This theory is therefore relevant to this study.

The Contrastive Analysis Approach

The Contrastive Analysis Hypothesis is pedagogic as it compares and contrasts the similarities and differences in languages and the proper assessment with an adequate method of diagnosing the problems.

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
ISSN: 1813-222 © June 2024
RESEARCH

Contrastive analysis hypothesis is dependent on the belief that languages are different, and because of the differences, the second language learner may face difficulties in the process of learning the target language. The language "contrast" is a juxtaposition or comparison showing striking differences. Wilkins (1972) posit that if a contrastive study of the target language and that of the mother tongue is carried out, then the dissimilarities and similarities between the two languages can be revealed or shown. The essence of contrastive analysis is, therefore, to help in second language learning by, revealing the similarities and dissimilarities that exist between two or more languages which make it possible to understand possible learning problems and possibly proffer solutions to them.

The status accorded English as a second language in Nigeria makes it pertinent for the continual need for contrastive studies of this language and Nigerian languages to investigate some of the learning problems of the speakers of such languages. Since English is accorded the prestige of an official language in the country, there is need to carry out contrastive studies on the languages of Nigeria like Izhia and the second language with which it co-exists to ascertain the processes of learning and the possible difficulties in learning the English language. In learning a foreign language, contrastive analysis is very necessary since structures and cultures of languages differ (Udegbuna, 2004). To lessen learning difficulties of Izhia learners of English, it is pertinent to compare and contrast the similarities and dissimilarities of the languages concerned, hence the need for this study.

The Determiner Phrase Hypotheses

Syntactic theory is highly intricate and always evolving. Since the publication of Chomsky's *Syntactic Structure* (1957) and *Aspect of the Theory of Syntax* (1965), syntactic theory has been in a steady state of change and development. Chomsky's Lectures on Government and Binding (1981) and Minimalist Program (1995) paved way to re-interpreting several syntactic concepts and terms and introducing new ones.

One of the recently introduced concepts in the long diversified and rich timeline of the tradition of syntactic analysis is the notion of the determiner phrase contained in Abney (1987) DP hypothesis. This hypothesis claims that what we traditionally think of as a noun phrase (NP) (e.g. the book) has the determiner as its head not the noun as earlier canvassed by Chomsky and others therefore is a determiner phrase and not

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

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RESEARCH

a noun phrase. In this kind of analysis, the NP is, in fact, a complement of the D. Radford (2009: p, 454) succinctly states that within this hypothesis, 'all definite expressions have the status of DPs not just nominals like 'the President' which contains an overt determiner, but also proper names like 'John'. Now, within the framework of minimalist syntax, this hypothesis has become the standard for syntactic analyses'. This is to say that within the minimalist syntax, the DP hypothesis has become the standard for syntactic analysis. In this study, the DP hypothesis is used in the analyses of DPs in two natural languages focusing on the numerals to find out any possible cross-linguistic application of this hypothesis. The DP is not an alternative but a mandatory hypothesis for a consistent and valid syntactic analysis of the English sentence (Sideeg, 2016). According to Bernstein (2001; p,537), 'the DP hypothesis resolves what was a theoretical inconsistency between the treatment of noun phrase and clauses, that is, according to this approach, nouns like verbs project into a functional category. The head as a syntactic category is the most important element from a grammatical point of view'.

The English Numerals

Numerals are words used for counting. According to (Crystal, 1997), they are one, two, three, first, second, third etc. In the words of Eka (1998) and Ndimele (2003), numerals are split into cardinal (one, two, three etc) and ordinal (first, second, third etc.). While cardinal numerals are used to indicate the number of noun words, the ordinal numerals are used to show positions (Nweze, 2014).

The English Cardinal Numerals

Cardinal numerals are words used for counting. They include one, two, three, four, five etc. (Crylal, 1997). For example: in the determiner phrases 'one book' and 'two books', the cardinal numerals 'one' and 'two' signify the number of the noun word thereby demonstrating the fact that the noun 'book' is just one in the former and two in the latter.In the same vein, in the determiner phrases 'three bottles' and 'four boys', the cardinal numerals 'three' and 'four' forms the head(s) of the respective phrases and are used to signal the number of nouns in the phrases. Likewise in the determiner phrase 'five cups of rice', the cardinal numeral 'five' is the head of the phrase and is used to demonstrate the number of entities in the phrase.

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www.universalacademicservices.org

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ISSN: 1813-222 © June 2024
RESEARCH

The analysis here portrays the fact that English cardinal numerals are determiners used for counting as they are used to depict the number of nouns in a phrase or sentence. Below are their structural analyses in tree configurations using the examples earlier cited:

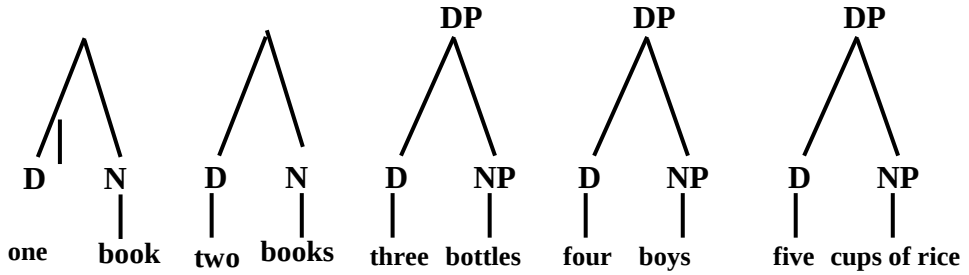

Fig. **Fig.** **Fig.** **Fig.** **Fig.**

InFig. 1, the cardinal numeral ‘one’ is the head of the phrase ‘one book’ and is used to signal the number of the entities in the phrase while the noun ‘book’ is the complement of the head and the determiner `one’ occurs in pre-position.

In Fig. 2, the cardinal numeral ‘two’ is the head of the phrase ‘two books’ and is used to demonstrate the number of entities in the phrase while the plural noun ‘books’ is the complement of the head and the numeral `two’ appears in head-first or pre- position.

In Fig. 3 and 4, the cardinal numerals ‘three’ and ‘four’ form the heads of the DPs ‘three bottles’ and four boys respectively, while the nouns ‘bottles’ and ‘boys’ constitute their respective complements, and the numerals `three’ and `four’ appear pre-posed in the constructions.

Finally, in Fig.5, the cardinal numeral ‘five’ occurs in pre-position and is the head of the DP ‘five cups of rice’, while the NP ‘cups of rice’ forms the complement. The analyses here show that English cardinal numerals are used to show the number of noun words in the phrase and they occur in pre-position, thereby buttressing Bernstein (2001) stand that “the English language is a good example of pre-modifier situation”.

The English Ordinal Numerals

Ordinal numeral in the words of Ndimele (2003), Nweze (2014) are determiners used to show positions. They include; first, second, third, fourth, fifth etc. as in:

(i) first person

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www.universalacademicservices.org

(ii) second person
(iii) third bus
(iv) fourth flight
(v) fifth item

In example (i), the ordinal numeral first is the head of the DP 'first person' and shows the position of the noun 'person'. Likewise, in example (ii) the ordinal numeral 'second' is the head of the DP 'second person' while the noun `person' forms the complement.

In example (iii) 'third bus' the ordinal numeral 'third' is used to signal the position of the noun 'bus' while the noun 'bus' forms the complement, and in example (iv) the ordinal numeral 'fourth' is the head of the DP 'fourth flight' and is used to depict the position of the noun 'flight' while the noun 'flight' complements it.

Finally in example (5), the ordinal numeral 'fifth' is the head of the DP 'fifth item' and is used to demonstrate the position of the noun 'item' as its complement.

The analysis here simply tells us that English ordinal numerals are used to indicate positions as Nweze (2014) makes us to know. It is worthy of note that English ordinal numeral like cardinal numerals occur in pre-position in the DP system. Below are their structural analysesin tree configurations:

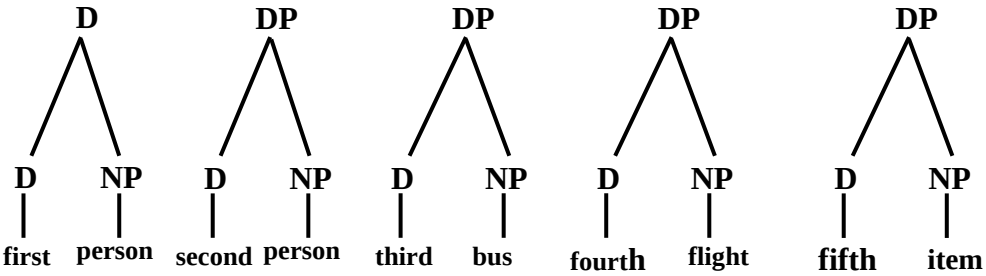

Fig.6 **Fig.7** **Fig.8** **Fig.9** **Fig.10**

In Fig (6), the ordinal numeral 'first' is the head of the DP 'first person' and occurs in pre-position, and in Fig (7), the ordinal numeral 'second' is the head of the DP 'second person' and appears in head-first position. Likewise in Fig (8), the ordinal numeral 'third' is the head of the DP 'third bus' and appears in pre-position, and in Fig (9) the ordinal

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ISSN: 1813-222 © June 2024
RESEARCH

numeral 'fourth' is the head of the DP 'fourth flight' and it occurs at the head- first position.

Finally, in Fig 10, the ordinal numeral 'fifth' is the head of the DP 'fifth item' and it appears at the head-initial position. The analyses show that English ordinal numerals indicate position and like the cardinal numerals occur in head-first position thereby supporting Bernstein (2001) assertion that English language is a good example of pre-modifier situation.

Izhia Numerals

In izhia language, numerals are the counting words. It has cardinal and ordinal numerals. Cardinal numerals in Izhia include; *naanu* (one), *ẹbọ* (two), *ẹtọ* (three), *enọ* (four), *ise* (five) etc. while ordinal numerals include; *ke mbu* (first)), *ke ebọ* (second), *ke ẹtọ* (third), *ke enọ* (fourth), *ke ise* (fifth) etc. While the cardinal numerals are used to indicate the number of noun words, the ordinal numerals are used to signal position.

Izhia Cardinal Numerals

Izhia cardinal numerals include *naanu* (one) *ebọ* (two) *etọ* (three) *enọ* (four), *ise* five etc. Their examples in DP structure are:

i.	*Ekwa naanu*	egg one	-	One egg
ii.	*Ekwo ebo*	book two	-	two books
iii.	*Umadu etọ*	person three	-	three persons
iv.	*Alim enọ*	orange four	-	four oranges
v.	*Ụnu ise*	bird five	-	five birds

In example (i) the Izhia cardinal numeral *naanu* (one) is the head of the phrase *Ekwa naanu* (one egg) and is used to indicate the number of the noun *ekwa* (egg) in the phrase and it occurs in post-position while in example (ii) the cardinal numeral *ebọ* (two) is the head of the DP *ekwo ebo* (two books) and is used to demonstrated the number of the noun *ekwo* (book) in the phrase and occurs at the head last position while the noun *ekwo* (book) complements it. Likewise, in example (iii) *umadu eto* (three persons), the cardinal numeral *etọ* is the head of the phrase and is used to signal the population of the noun *umadu* (person) in the phrase and it appears at the head last position while the noun *umadu* (person) serves as its complement.

In example (iv) and (v) the cardinal numerals *enọ* and *ise* (four and five) are the heads of the phrases *alim eno* (four oranges) and *unu ise* (five birds) respectively and are used to depict the number of the noun(s) *alim*

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www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
ISSN: 1813-222 © June 2024
RESEARCH

(orange) and *unu* (birds) in their respective phrases and they occurs in post-position that is, head-last. Below are their structural analyses in tree configurations:

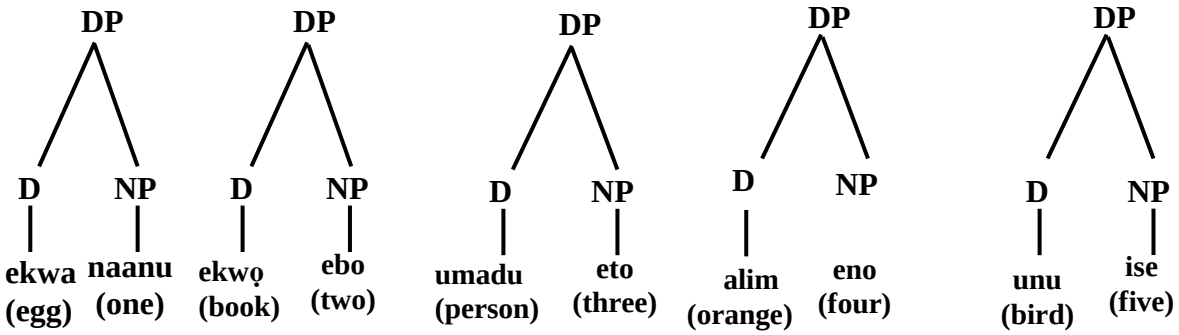

Fig.11 **Fig.12** **Fig.13** **Fig.14** **Fig.15**

In Fig 11, the Izhia cardinal numeral *naanu* (one) is the head of the DP *ekwa naanu* (one egg) and it appears in post-position. Likewise in Fig 12, the cardinal numeral *ebọ* is the head of the DP *ekwo ebọ* (two books) and it appears in head-last position.In Fig 13, the cardinal numeral *etọ* (three) is the head of the phrase *umadu etọ* (three persons) and is in head last position while the noun *umadu* (person) is the complement. Furthermore, in fig.14 and 15, the cardinal numerals *enọ* and *ise* (four and five) form the head of their respective phrases and they are in post-position while the nouns *alim* and *unu* (oranges and birds) respectively are their respective complements. This simply means that Izhia cardinal numerals unlike their English counterparts occur in post-position in their DP system.

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
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LWATI: A Jour. of Contemp. Res.
ISSN: 1813-222 © June 2024
RESEARCH

Izhia Ordinal Numerals

According to Nweze (2014), ordinal numerals are determiners used to indicate positions. Examples in Izhia include:

Ke mbu (the first)
Ke ebo (the second)
Ke eto(the third)
Ke eno (the fourth)
Ke ise (the fifth) etc. As in:

1. Onye ke mbu → person the first → first person
2. Ugboali ke ebo → vehicle the second → second vehicle
3 Ugboali ke eto → vehicle the third → third vehicle
3. Ekwo ke mbu ehu lofu → book the first that all → all his first book
4. Ekwo ke mbu e naanu → book the first his one → one of his first book

Their structural analyses in tree configurations are as follows:

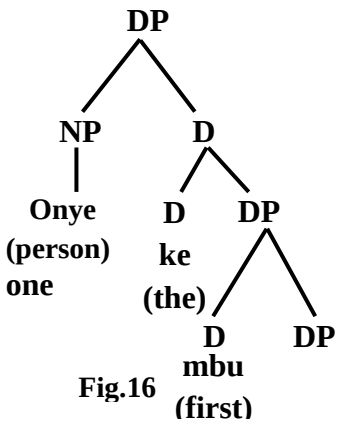

Fig.16

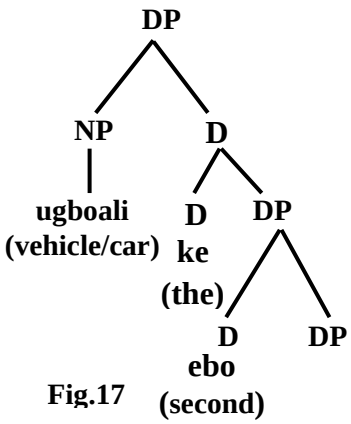

Fig.17

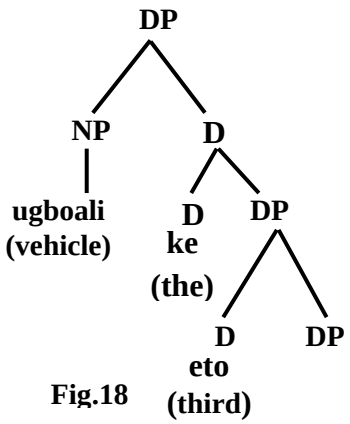

Fig.18

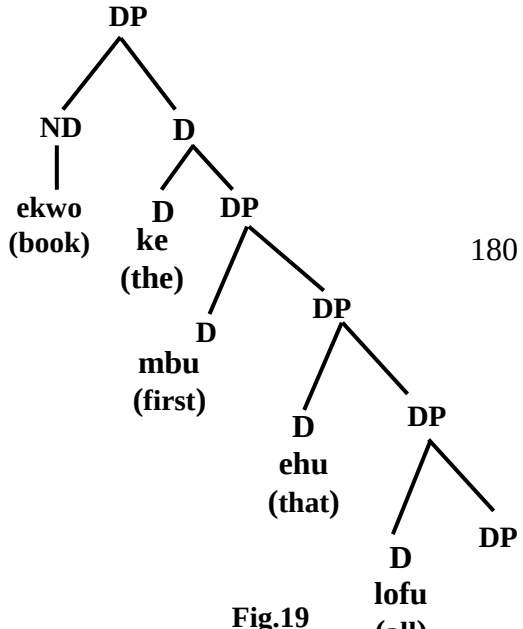

Fig.19

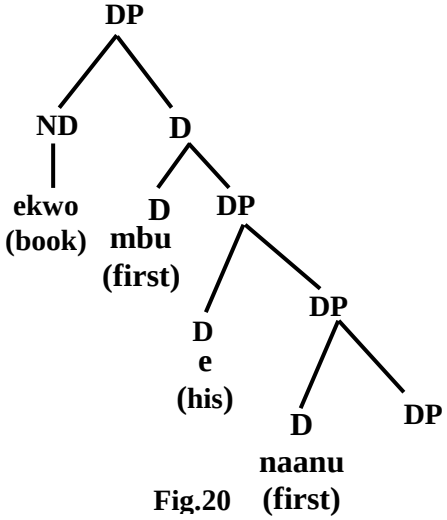

Fig.20

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

Fig (16) has two determiners *ke* (the) and *mbu* (first) post-modifying a noun *onye* (person). While the first is the article, the second is the ordinal. Fig. (17) has two determiners *ke* (the) and *ebo* (two) also post-modifying a noun *ugboali* (car/vehicle). While *ke* is the article *ebo* is the ordinal. Also, Fig.(18) has two determiners *ke* (the) and *eto* (third) post-modifying a noun *ugboali* (car\vehicle). While *ke* is the article, *eto* is the ordinal. In fig.(19) and (20) we notice the presence of four determiners *ke* (the) which is the article, *mbu* (first) which is the ordinal, *ehu* (that) which is the demonstrative and the quantifier *lofu* (all) in the former and three determiners *mbu* (first)ordinal, e (his), possessive determiner and *naanu* (one) the cardinal in the latter all post-modifying a noun *ekwo* (books).

This means that structurally, Izhia ordinal numerals unlike their English counterparts occur in post-position. In Fig.16, the complement *onye* (person) (a noun) merges with the determiners *ke* and *mbu* to form the DP *onye ke mbu* while in Fig.17 the noun *ugboali* merges with the determiners *ke* and *ebo* to form the DP *ugboali ke ebo*. In Fig.18, the noun *ugboali* merges with the determiners *ke* and *eto* while in fig.19, the noun *ekwo* merges with the determiners *ke mbu ehu lofu* to form *ekwo ke mbu ehu lofu*. Finally, in Fig.20, the noun *ekwo* merges with the determiners *mbue* and *naanu* to form the DP *ekwo mbu e naanu*. This is because the determiners have the selectional property that they can select a noun to form a DP. The merger of the determiners is rightward as all the determiners occur in post-position. This also shows that in Izhia more than one determiner can co-occur, that is, merge to form a grammatical construction

Comparative Analysis of English and Izhia Numerals: Cardinal Numerals

In both English and Izhia, we have different ways of accounting for ordinal and cardinal numerals. These are determiners used to signify the number of nouns in a phrase, clause or sentences. Cardinal numerals in English and Izhia include: one, two, three, four, five etc. from English perspective and *naanu, ebo, eto, eno, ise* etc. from the Izhia perspective. Below are DPs with English and Izhia Cardinal Numerals:

	Izhia	**English**
1.	*ekwa naanu* (egg one)	one egg
	NP D	D NP
2.	*ekwo ebo* (book two)	two books

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
ISSN: 1813-222 © June 2024
RESEARCH

	NP	D	D	NP
3.	*umadu*	*eto* (person three)	Three	persons
	NP	D	D	NP
4.	*Alim*	*eno* (orange four)	four	oranges
	NP	D	D	NP
5.	*unu*	*ise* (bird five)	five	birds

The above phrases signify that both English and Izhia cardinal numerals are used to indicate the number of nouns in their DP system. For example, in DP (1) *ekwa naanu* in Izhia and 'one egg' in English, the cardinal numeral *naanu* (one) is used to show the number of the noun *ewka* (egg) in the phrase in both languages, and the determiner occur in pre-position in English and in post-position in Izhia. In DP (2) *ekwo ebo* in Izhia and (two eggs) in English, the cardinal numerals *ebo* and `two' in the two languages respectively are used to signal the number of the noun *ekwo* books in the phrases and the determiner appears post-posed in Izhia and pre-posed in English. In DP (3) *umadu eto* in Izhia and 'three persons' in English, the cardinal numeral *eto* (three) is used to demonstrate the number of the noun *umadu* (person) in the phrase and the determiner appears in head- initial position in English while in Izhia the reverse is the case as it occurs in head-last position. Also in DP (4), *Alim eno* in Izhia and 'four oranges' in English, the cardinal numeral *eno* 'four' appears rightward in Izhia and leftward in English. Finally, in DP (5), *unu ise* in Izhia and 'five birds' in English, the cardinal numeral *ise* in Izhia emerged in post-position while its English counterpart 'five' occurs in pre-position.

The above structures express the fact that Izhia cardinal numerals unlike their English counterparts are post-posed in its DP system while cardinal numerals in English are pre-posed in its DP system. This means that Izhia and English cardinal numerals are functionally similar but structurally dissimilar as they are used to demonstrate the number of noun words in the two languages, while structurally they occur in post-position in Izhia and pre-position in English.

Comparative Analysis of English and Izhia Ordinal Numerals

English ordinal numerals include; first, second, third, fourth, fifth etc. while Izhia ordinal numeral are *ke mbu* (the first) *ke ebo* (the second), *ke eto* (the third), *ke eno* (the fourth), *ke ise* (the fifth) etc. Below are examples of DPs with Izhia and English ordinal numerals.

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
ISSN: 1813-222 © June 2024
RESEARCH

	Izhia	**English**
1.	*Onye ke mbu* (person the first)	first person
2.	*Ugboali ke ebo* (car the second)	second car
3.	*Ugboeli ke eto* (flight the third that)	third flight
4.	*Ekwo ke mbu ehu lofu* (book the first that all	all his first books
5.	*Ekwo mbu e naanu* (book first his one)	one of his first book

The above structures exemplify the fact that ordinal numerals in both languages are used to depict position. For example: In DP(1) *Onye ke mbu* in Izhia and `first person' in English, the ordinal numeral *ke mbu* in Izhia and 'first' in English is used to show the position of the noun *Onye* (person) in the phrase and it occurs in post-position in Izhia and in pre-position in English.

In DP (2) *Ugboali ke ebo* 'first car/vehicle,' the Izhia ordinal numeral *ke ebo* and its English counterpart 'second' issued to signal the position of the noun *Ugboali* 'car/vehicle' and it in head-first position in English and head-last position in Izhia. Likewise in DP(3), *Ugboeli ke eto* 'third flight' the Izhia numeral *ke eto* and its English counterpart 'third' is used to indicate the position of the noun *Ugboeli* 'flight' and it surface leftward in Izhia and rightward in English.

DP (4) *ekwo ke mbu ehu lofu* (all his first books) has four determiners modifying a noun. The ordinal numeral *ke mbu* in Izhia and `first' in English is used to denote the position of the noun *ekwo* (book) and is in post-position in Izhia and in pre-position in English.

Finally, DP (5) has three determiners modifying a noun and the Izhia ordinal numeral *ke mbu* 'first' and the English counterpart 'first' is also used to portray the position of the noun *ekwo* and appear in post-position in Izhia but its English counterpart occur in pre-position supporting Nweze (2014) stand that English language is a good example of pre-modifier situations.

Summary of Findings and Conclusion

This study has examined syntactically the English and Izhia numerals in their DP structure. The paper notes that numerals in the two languages are split into cardinal and ordinal, and that while cardinal numerals are used to show the number of nouns in phrases, clauses and sentences, the ordinal numerals are used to demonstrate positions that is, the position of the noun words in the phrases, clauses or sentences. The study makes a comparative analysis of the functions as well as the

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

structural position of numerals in the two languages. The study discovers that numerals both cardinal and ordinal in English and Izhia are functionally similar but structurally dissimilar as they occur in pre-position in English and in post-position in Izhia. The paper also reveals that nouns can co-occur in DPs with cardinal numerals in the two languages. Using the minimalist trees for structural analysis, the study reveals that numerals in the two languages are structurally dissimilar as they occur leftward in English and rightward in Izhia. The study also shows that there is co-occurrence of determiners in izhia DP system with ordinal numerals while such is not obtainable in English as such co-occurrence is ungrammatical in English. Still in the minimalist parlance which is the theoretical basis of this study, the data reveal that English numerals occur in head-first while Izhia numerals appear in head-last position and the complement occur rightward in English and leftward in Izhia. This means that Izhia DP with numerals is NP + D while in English the reverse is the case as it is D + NP. These differences have the potential to constitute learning difficulties for Izhia learners of English. From the cardinal numeral perspectives, my field research shows the preponderance of such expressions as;

(1) 'I have hired fifteen worker to clear the farm land' against the English version'I have hired fifteen workers to clear the farm land'.
(2) 'My two son are in the United States of America', against the English version'My two sons are in the United States of America'.
(3) 'The two boy I sent to the farm are yet to come back', against the English version'The two boys I sent to the farm are yet to come back'.
(4) 'As a king, I have over one hundred plot of land', against the English version'As a king, I have over one hundred plots of land'.
(5) 'The immediate past Governor gave me four car; two SUV and two sports car', against the English version'The immediate past Governor gave me four cars; two SUVs and two sports cars'.
(6) 'I had a meeting with eight village head yesterday', against the English version'I had a meeting with eight village heads yesterday'.
(7) 'My two sister visited me yesterday', against the English version'My two sisters visited me yesterday'. Below are the expressions from the ordinal numeral perspective:
(8) The fist car I bought is a Mercedes Benz.
(9) The third son of mine is late.
(10) The second house I built is a duplex.

LWATI: A Journal of Contemporary Research 2024, 21 (2): 167-187
www.universalacademicservices.org

LWATI: A Jour. of Contemp. Res.
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RESEARCH

The sentences from the cardinal numeral perspective are ungrammatical as they lack the `s' plural inflection, while the constructions from the ordinal numeral perspective may be considered grammatical though with little of the first language interference in the structure, as the speaker starts every of his sentence with the definite article `the' followed by the ordinal numerals `first, third and second', corresponding with the structure of Izhia ordinal numeral that goes with the definite article `the' in its DP system. This is to say that the major challenge is with the cardinal numerals and should be given proper attention by the English teachers. Teachers should draw up a course plan to see that these differences are efficiently handled in order to make the learners proficient in both the source and the target language.

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