

A Lexicostatistic Comparison of Mbaise Dialect with other Neighbouring Dialects: A Historical Linguistic Evidence



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*Mitochondrial Eve
Journal of Post Graduate
Studies Vol.1 No. 2 (2024);
June, 2024*

Abstract

This paper is a lexicostatistics survey of dialects under the East Central Group of Dialects according to Nwaozuzu (2008,2017). Lexicostatistics normally refers to the statistical manipulation of lexical materials for historical inferences that abstract away from exact dates. The study explores some instances of how the lexical items of the Mbaise dialect and three neighbouring dialects (Obowo, Ehime Mbano, Owerre) are operational in the East Central Group of Dialects and are used with the aim of determining their similarities and differences. The researcher randomly selected a total number of 100 basic vocabularies or lexical items for this study. The data for the study were collected through structured interview from the informants. It was analysed using lexicostatistic method and descriptive method. These informants are natives of these towns under study between the age of 60 and above and who have lived a greater part of their lives in these areas. From the study, it was found out that some of the phonemes that make up these words or lexical items do not really constitute differences. This makes the dialects highly mutually intelligible by all speakers of the four dialects. It could also be deduced that Mbaise and the other dialects around it has much more defined similarities than differences, though relative in some areas. This work has thrown more light to further support the linguistic situation in the East Central Group of dialect identified by Nwaozuzu (2008,2017) as regards the four dialects under study. The similarities in the dialects are due to language contact and geographical location and ethnographic information as in where they meet in markets, rivers etc in the cause of development and movement. This work is an addition to dialectology. It will also serve as a resource to Igbo lexicography project and boost the lexicon.

Key words: Lexicostatistics, Dialects, Cognates, Similarities, Differences.

1. Introduction

1.1 Background of study

This study examines the Mbaise dialect along with Owerre, Obowo and Mbano i.e (Ehime Mbano) dialects. According to Nwaozuzu (2017), These dialects belong to the East Central Group of

Dialects. In Ezikeojiaku (2004:1), “Human language is powerful, unique, and diversified and Languages are always in the state of flux, as they are like organism and keep changing as long as the society continues to grow and develop”. Also, Njoku (2016:1) affirms that as these languages grow, they diversify and as they do, dialects are formed and there is an increase in individual lexical items because of language contact, leading to borrowing from neighbouring linguistic communities and there is the urge for neo-formations for items, ideas or phenomena that may not have existed in the larger speech community, these further estrange the dialects”. Over the years mutual intelligibility between these groups lessens and sooner or later a new language is formed. At the level of dialects, we realize that what used to be same speech forms now have noticeable differences.

Dialectologists such as Nwaozuzu (2017:50), have after a holistic survey grouped Mbaise as one of the East Central Group of Dialect (ECGD) in Igbo. Then, Ikekeonwu (2001:6), classified Mbaise as belonging to the Inland East Igbo (IEI). The wide ecological vegetation of Mbaise dialect and the influence of its neighbours i.e. non-Mbaise people, have galvanized different sections of Mbaise into evolving local variations of culture and dialect and at the same time its basic or core dialect. These variations are evident in the multiplicity of dialects within the group, which is the focus of this study, formed part of the Ohuhu-Ngwa Sub-section or dialect group of the Southern Igbo located within the extensive deciduous forest belt of West Africa. Mbaise is located within the present Imo State of Nigeria. It is situated within Latitude 5-6 degree north of the equator and longitude 7-8 degree east of the Greenwich Mean Time (GMT), Mbaise falls within the Ọlụ section of the Ọka ọlụ uplands with a land area of 404 square kilometres and with an official population of 304,338 as at 1991 census, Njoku (1985,12), the area is predominantly a table land except for the towns of Akabo and parts of Ezinihite watered by ọra mmiri ụkwa and Imo River, respectively.

In fact, over 85% of the area is without rivers. Smock (1971:75), as part of Southern Nigeria, Mbaise is influenced by rain-bearing south-west monsoon winds characterised by rainy season, with heaviest rain experienced between July and September. A short spell of harmattan is noticed intermittently in December and intensifying in January, with dry season spanning from November to March. Mbaise is an artificial creation called forth by the exigencies of colonial administration. In other words, Mbaise has no common putative founder and therefore lack a common traditional

mythology. In the words of Nwala (1978:18), the coming together of all kinship groups under a common political umbrella and administrative unit was secured in 1914.

Mbaise is therefore, a conglomeration of five kinship groups with different migratory routes. And who probably had separate cultures with a peaceful coexistence. According to Njoku (2003:20), the name Mbaise was proposed by Mbaise pioneer politicians like, Joseph Iwunna, Dennis Abii, Pius Nwoga and others in a meeting of chiefs of area presided over by the District Officer, Mr L.E. Chadwick. This means that the name Mbaise was formed by the people and adopted by colonial officers. In essence, the artificial nature of Mbaise is evidenced by the diverse dialectal, cultural and kinship groups to which the component parts belong. But today, Mbaise has no doubt, acquired over the years a sense of common identity especially in terms of culture and worldview and can now be seen as a political unit. Mbaise is made up of three Local Government Areas namely, Abo Mbaise, Ahiazu Mbaise and Ezinihite Mbaise. Which is made up of the following villages like; Ihiteafoukwu, Mpam, Ogbe, Nguru, Mbutu, Laagwa, Amaumara, Okeuvuru, Onicha, Obizi, Udo etc. also, some strategic and periodic markets like Afo enyiogugu, Afo ogbe, Afo oru, Nkwo Mbaise etc. Mbaise people are communal people. The common cultural identity of the area has been enhanced by Christianization, self-help economic developmental projects as well as political activities.

Mbaise shares common geographical and dialectal boundaries with towns like Owere, Obowo, Mbano (Ehime Mbano precisely). This study will try to identify the similarities i.e cognates and differences or divergence in dialects using lexicostatistic comparison with the use of lexical and phonological items based on historical evidence. Mbaise falls under a group of dialects known as East Central Group of Dialects (ECGD). The part of Mbaise that shares common boundaries with Ehime Mbano are Ahiazu Mbaise on the west and Ekwereazu Mbaise on the east.

1.2 A short history of Obowo

Obowo, is a Local Government Area in Imo State of Nigeria. Its headquarters is in Otoko in Umuariam. Other towns in the LGA include Achara, Amanze Umuagu, Ehume, Umungwa, Umulogho, Odenkwume, Okwuohia, Amuzi etc. Former Imo state Governor, Chief Onunaka Sam Mbakwe was born in and died in Obowo. Obowo is located about 45 minutes from Owere, the Imo State Capital. The area is across the Imo River and is less than 30 minutes from Umuahia and Ahiara in opposite directions. With the Amanze seven and half (7 1/2) junction and the popular

Malaysia market landmarks in-between. Obowo LGA is carved out from the mother Local Government Etiti its Headquarters then was Isi-Nweke. To the North lie Ahiazu and Aboh Mbaise LGA, while Eastern boundary separates it from Umuahia in Abia State. The LGA presently houses several autonomous communities. The Obowo people are predominantly farmers and fishermen.

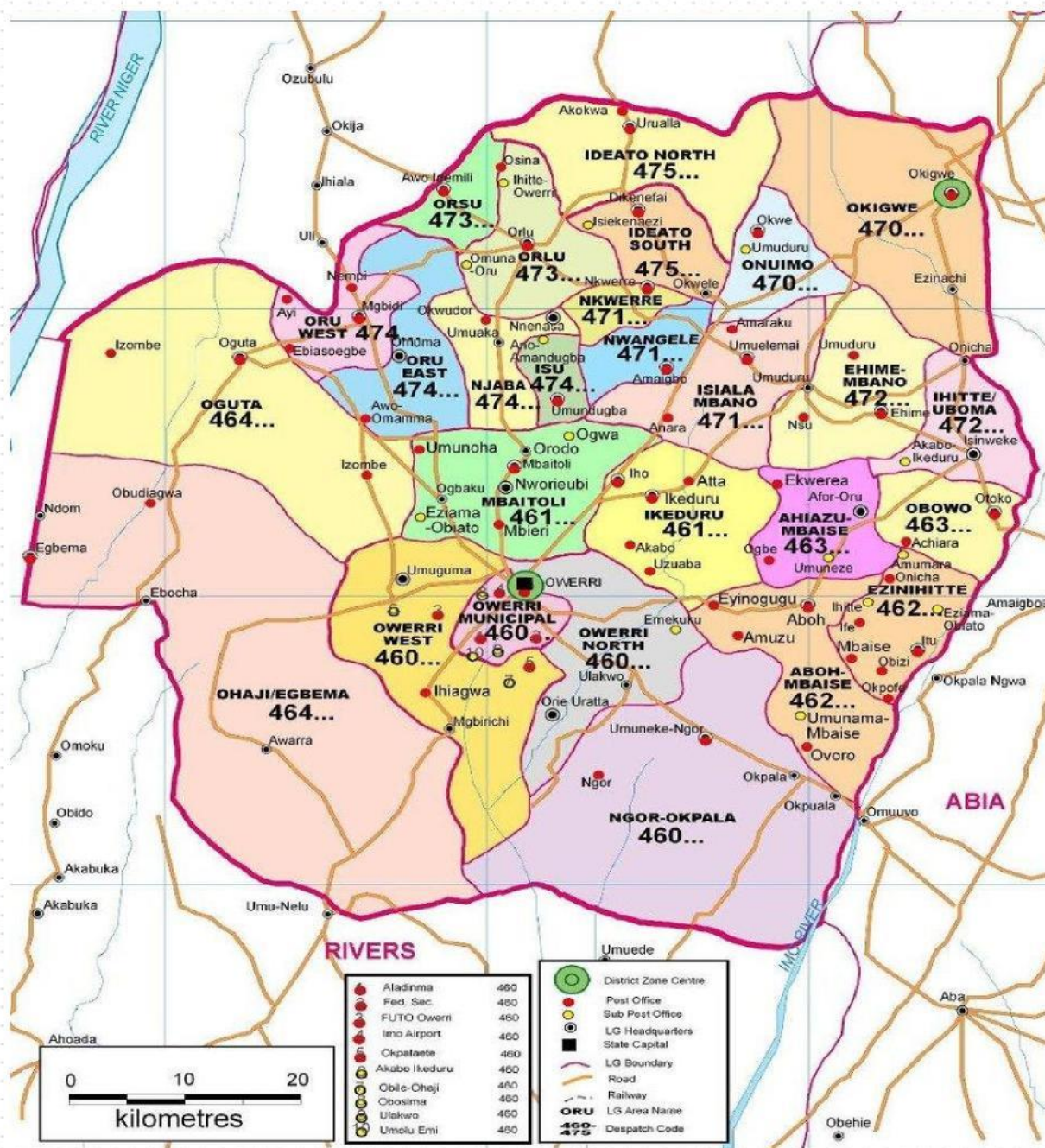
1.3 A short history of Mbano (Ehime Mbano)

Ehime Mbano is a Local government area found in Imo state, Southeast Nigeria and the LGA has its headquarters in the town Umuezeala. Ehime Mbano Local government area shares borders with Onuimo, Ahaizu Mbaise, Isiala Mbano and Okigwe. Ehime Mbano LGA is made up of several towns and villages which include Umueze, Umueleke, Nsu, Agbagbara, Ikpe, Nzerem, Ikpem, Agbaja, Umuakaahia, Umakagu, Umuuanunu and Abosi. The population of Ehime Mbano LGA is estimated at 127,903 inhabitants. They are predominantly Christians. A lot of colourful festivals are held in Ehime Mbano LGA, and they include the Iwa Akwa and iri ji festival. Geographically, Ehime Mbano LGA covers a total area of 169 square kilometres and witnesses both the dry and rainy seasons with a brief harmattan during the dry season. They people are predominantly farmers.

1.4 A short history of Owerre

Owerre town is made up of three local government areas which include, Owerre West, Owerre North, Owerre Municipal. It was a creation of the British colonial masters first, as a Divisional Headquarter later Provincial Headquarter and today a state capital of Municipal status. They have festival like Oru Owerre, Ugu Uzo and Ukazi Emii. Owerre is made up of villages like Emekuku, Egbu, Uratta, Awaka, in Owerre North, Umuoronjo, ikenegbu, Umuoyima, Umuodu in Owerre Municipal, then Avu/umuguma, Obokwu, Emeabiam, Amaoji, all in Owerre West. They Owerre people are predominantly Christians. It has an estimated population of about 1,401,873 as of 2016 and approximately 100 square kilometre in area. Owerre is bordered by the Otamiri River to the east and Nwaorie River to the south. According to Nwaozuzu (2017:56), Owerre dialect belongs to the East Central Group of Dialects (ECGD). With Nasalization, Palatalization, and aspiration as phonemic in the dialect.

THE MAP OF IMO STATE OF NIGERIA



Source: Culled from Nigeria Zip Code Map.

1.5 Objectives of the Research

The multiplicity of dialects in the Igbo language has both positive and negative implications in the development of the language. The idea of cross fertilisation between dialects is based on the principle that no dialect is superior to the other. Trying to identify the point at which a dialect starts, or ends is one of the most difficult tasks in this work, this is where the problem of delineation comes in and this one of the major problems encountered here. But with the help of lexicostatistic method, the level of convergence and divergence can be determined using lexical items.

The thrust of this study is to identify the similarities and differences in lexical items used in Mbaïse dialect and Obowo, Ehime Mbano and Owerre dialects respectively, by looking at their historical and linguistic background. It also examines the mutual intelligibility between these dialects through the identification of the level of cognancy (sameness) and noncognates (Uniqueness) of these dialects using lexicostatistics method. It focuses on the dialectal aspects of linguistics as it has to do with historical and comparative linguistics. It explores the lexical variations and phonological variations between Mbaïse dialect and the three neighbouring dialects using lexicostatistic method and subsequently explains the reasons for the uniqueness and sameness of the lexical items studied.

1.6 Research Questions

Below are some research questions relevant in this study:

- (i) What is the level or percentage of similarities among Mbaïse dialect and the three neighbouring dialects (Owerre, Mbano (Ehime) and Obowo dialects) using lexical items?
- (iii) What are the lexical variations and phonological variations between Mbaïse dialect and the three neighbouring dialects under study using lexicostatistic method?
- (ii) What is the reason(s) for these Uniqueness and Sameness?

(iv) With the use of lexicostatistic method determine the genetic relationship among the dialects under study.

2. Review of Literature

The nature of this study in addition to reviewing some related texts adopts a theoretical approach, lexicostatistics method. This approach will be examined chronologically following the various subsections.

2.1 Dialect and Language

Pei (1970:9) sees “dialect as a specific branch or form of a language spoken in each geographical area differing sufficiently from the language in (pronunciation, grammar, vocabulary, and idiomatic use of words). To be viewed as a distinct entity, yet not sufficiently different from other dialects of the language to be regarded as a separate language”.

Oluikpe (1979:3) views dialect as any speech pattern of a given language that differs in features of phonology, syntax, morphology, and vocabulary from the literary or official form of the language without being intelligible to the members of the language community. In defining dialect too, Ikekeonwu (1986.), has this to say, “it is a wholesome fusion of the two with strong input from various other dialects of Igbo, in terms of its phoneme inventory, it is closer to Onitsha Igbo, Waawa Igbo, and Niger Igbo than to Umuahia, Orlu, Ngwa and Ohafia. In other words, it has more affinity to Inland West Igbo (IWI), WI/Northern Igbo and to Inland East Igbo (IEI) Cluster in this regard. For instance, Enu-Onitsha dialect has twenty-six consonants while Standard Igbo has twenty-seven in identical places of articulation, Ogwu and Udi in West inland Igbo have twenty-six each. Achi has twenty-three while Izii has thirty. Izii consonants include labial affricates {pf,bv} and dental affricates {ts,dʒ}. Some Abakeleke dialects of West Inland Igbo may have more affricates. Dialects of Inland East Igbo have more consonants in their phoneme inventory because of their distinctive use of aspiration, nasalization. Standard Igbo has like most Inland East dialects an eight-vowel system. This is unlike the pattern in Inland West Igbo, WI, and NI where most of the dialects have at least a nine-vowel system.

Nwaozuzu (2008) cites Hartman and Stock (1973:65) as observing as follow: “dialect is a regional or social variety differing in pronunciation, grammar and vocabulary from the standard language which is a social formed dialect”. She further observes that the authors state as follows: “if the

variants differ only in pronunciation, it is often called accent. Sometimes, it is difficult to decide whether a variant constitutes a dialect subdivision as different language since it may be blurred by political boundaries”. Chimaobi Onwukwe, Roseline Ihuoma Ndimele and Onukawa Edith Ngozi (2016) posit that, “the definition of dialect and what criteria are used in determining it have been perennial issues of debate in virtually all persuasion of linguistic study”, according to them, “Igbo, like many other human languages exhibit variations which are consistent with the widely held view among linguists that language of a group of people may show regular variations within the group”.

2.2 Lexicostatistics

According to Morris Swadesh in his work in (1973) titled “Linguistics: The origin and diversification of language’, hypothesized that statistical data could be used to posit accurate subgroupings among related languages. Swadesh counted the cognate lexical forms shared by specific languages to determine to what extent the languages were related. He called his subgrouping technique “lexicostatistics”. Swadesh’s technique is based on several critical assumptions. At the most basic level, the approach presupposes those languages change over time in a systematic way and that similarities among languages are the result of common “genetic” relationships among languages. This genetic analogy makes it possible to speak of parent, daughter, and sister languages, (e.g., Romani and Hindustani share a common parent language, Sanskrit, and are thus considered “sister languages”). By applying lexicostatistical technique, linguists attempt to quantify the rate and extent of lexical change in languages over time and then determine the genetic relatedness of the idioms. In short, lexicostatistics builds on the rudimentary family tree model of language typology. While, the hierarchical, genetic structure of the family tree model is maintained, lexicostatistical methods allow the linguist to organise language subgroups around percentage values of relatedness of 81-100% are “dialects of a language”, languages with a determined relatedness of 28-81% are “languages within a family, ’and so forth, this means that the higher the cognates, the closer the relationship

Embleton (1986) in Ryan Shosted (2000) has this to say also, “Lexicostatistics hinges on the theoretical proposition that languages change in regular ways and that the rate of lexical change remains constant over time. Though lexical change may seem like an uncontrollable process dependent on wide range of variables, Swadesh nevertheless hypothesized that vocabulary turnover occurs at a diachronic fixed rate. The third assumption of lexicostatistics has to do with

the actual lexical forms under analysis-the data used to determine relatedness among languages. Swadesh supports the distinction made between “core” and “peripheral” vocabularies and incorporates these distinctions into his theory. According to Crowley (1997) in Ryan Shosted (2000), views core vocabularies consist of forms like ‘tooth’ and ‘tongue’ that are common to the human experience and therefore show almost universally in the world’s languages. Unlike peripherals forms like antelope and cilantro” cannot be found in every language because, such are tied to the unique characteristics of a linguistic community’s physical environment and material culture.

With these theoretical considerations in mind, my focus can now turn to the technique involved in lexicostatistical analysis of the dialects under study. After counting the number of cognates, determining the lexicostatistical relationship of these dialects is only a matter of arithmetic. Dividing the total number by cognates pairs (e.g., Mbaise word for Yellow (Odo) and Owere (Odo) by total number of words in the wordlist will produce a percentage (‘shared cognate percentage’ or SCP) of linguistic relatedness and also dividing the total number of noncognates pairs (the word for cassava in Mbaise is (ugburu) and in Obowo, it is (akpu) by total number of the wordlist. To this effect, it can be assumed that while lexicostatistics and glottochronology are by no means perfect instruments, they still constitute viable quantitative techniques for analysing the genetic relationships among languages.

Table 1. Linguistic subgroupings based on shared cognate percentage (SCP)

| Level of Subgrouping | SCP in core vocabulary |
|-----------------------------|-------------------------------|
| Dialects of a language | 81-100% |
| Languages of a family | 36-81% |
| Families of a stock | 12-36% |
| Stocks of a microphylum | 4-12% |
| Microphyla of a mesophylum | 1-4% |
| Mesophyla of a macrophylum | 0-1% |

| | |
|-------------------------------|--------------|
| <u> Cognates </u> | <u>X 100</u> |
| Total number of lexical items | 1 |

Bankele (2006) identified three basic assumptions of lexicostatistics approach as follows:

- i. It assumes a basic or core vocabulary which is relatively culture-free, and which is less susceptible to change as other kinds of vocabulary.
- ii. The rate of retention of basic vocabulary is constant through time and as such about 81 percent of the vocabulary will be retained over a millennium.
- iii. The rate of loss is also constant, about 14 percent will be lost over a millennium. The cognation count will surely give information about subgrouping of related languages.

2.3 Cognates

According to David Crystal (2011), “In historical linguistics, cognates or lexical cognates are sets of words in different languages that have been inherited in direct descent from an etymological ancestor in a common parent language, because language change can have radical effects on both the sound and meaning of a word, cognates may not be obvious and often it takes rigorous study of historical sources and the application of comparative methods to establish whether lexemes are cognate. Cognates are distinguished from loanwords where a word has been borrowed from another language”.

Cognates are words that share form and meaning (to some degree) across languages having been used in research for more than four decades. Cognates are important because they may be acquired and processed faster and more accurately by speakers of multiple languages. Nevertheless, a clear-cut definition of ‘cognate’ has remained elusive. How much overlap is required? Earlier research on cognate processing used a binary distinction, while later work has begun to define cognates by degree of cross-linguistic overlap. It can be shared or divergent.

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| | | |
|-------------------------------|---|------------|
| <u>Cognates</u> | X | <u>100</u> |
| Total number of lexical items | | 1 |

Bankele (2006) identified three basic assumptions of lexicostatistics approach as follows Pericliev (2006) carried out a computational lexical similarity analysis between five languages: Xokleng (Southern Brazil), Tagalog and Malay (Southern Asia), Fijian, Samoan and Hawaiian (Languages of Oceania) using 100-wordlists of the basic vocabulary. He found a statistically highly significant resemblance between them which he explained as being historical. He suggested the existence of genetic affinities between Brazilian Indians and Southeast Asian and Oceanic populations.

Matthews (2007), and Chantanaroj (2007) have this to say on Lexicostatistics; “Lexicostatistics aims at establishing linguistic relations based on a quantitative comparison of vocabulary, it is a statistical study of vocabulary to discover whether languages are historically related by counting the percentage of cognates”. Lexicostatistics is a method of comparative linguistics that involves comparing the percentage of lexical cognates between languages to determine their relationship.

Castro, Flaming and Youliang (2012), describes the various known dialects of Western Miao within Honghe, which include Hmong Lens Hmong Dleub, Hmong Dlob, Hmong Bes, Hmong Soud, Hmong Ndrous, Hmong Shib, Hmong Nzhuab, Hmong Buak, Hmong Dlex Nchab and Hmong Sat. They showed that the vocabularies of the Honghe Miao dialects are similar, and many words are historical cognates. They employed “lexicostatistics” method to determine the relative number of historical cognates shared by the different dialects.

According to Arokoyo (2016), “Cognates refer to words that have the same meaning and descended from common ancestors. It is calculated by divided the total number of items multiplied by 100 to obtain percentage cognates”. Based on the tricky and often controversial task of grouping languages into families,

Gudschinsky (1956) in Arokoyo & Lagunju (2019) support three levels approach of cognate scores to determine relatedness in their work as follows:

- i. 0%-35% cognate means separate language family
- ii. 36%-80% cognate means separate language, same family.
- iii. % And above cognate means it is the same language.

With these theoretical considerations in mind, my focus can now turn to the technique involved in lexicostatistical analysis of the dialects under study. After counting the number of cognates, determining the lexicostatistical relationship of these dialects is only but a matter of arithmetic. Dividing the total number by cognates pairs (e.g., Mbaise word for Yellow (Odo) and Owere (Odo) and Mbaise word for Plantain is (abirika) and also (abirika) in Owere. By summing up the total number of words in the wordlist will produce a percentage ('shared cognate percentage' or SCP) of linguistic relatedness and dividing the total number of noncognates pairs by total number of the wordlist. To this effect, it can be assumed that while lexicostatistics and glottochronology are by no means perfect instruments, they still constitute viable quantitative techniques for analysing the genetic relationships among languages.

2.4 Empirical Studies

In this part of literature review, it will show how scholars used lexical items to determine the level of relatedness and historical root in their language of study. Some scholars did a comparative study, and some used the lexical similarity approach of comparison to investigate the extent to which words of two languages are similar with the hopes of making a further correlation to the intelligibility between languages. Furthermore, some scholars did a comparative study in phonology to ascertain the phonology concepts of the language of study. Since our focus is the determination of cognate percentage to ascertain the level of relatedness among the dialects, it is helpful to approach the analysis using a lexicostatistics to determine these cognates.

According to Ikekeonwu (1986.) dialect is a wholesome fusion of the two with strong input from various other dialects of Igbo. In terms of its phoneme inventory, it is closer to Onitsha Igbo, Waawa Igbo, and Niger Igbo than to Umuahia, Orlu, Ngwa and Ohafia. In other words, it has more affinity to Inland West Igbo (IWI), WI/Northern Igbo and to Inland East Igbo (IEI) Cluster in this regard. For instance, Enu-Onitsha dialect has twenty-six consonants while Standard Igbo has twenty-seven in identical places of articulation. Ogwu and Udi in West inland Igbo have twenty-six each. Achi has twenty-three while Izii has thirty. Izii consonants include labial affricates {pf,bv} and dental affricates {ts,dʒ}. Some Abakeleke dialects of West Inland Igbo may have more

affricates. Dialects of Inland East Igbo have more consonants in their phoneme inventory because of their distinctive use of aspiration, nasalization. Standard Igbo has like most Inland East dialects an eight-vowel system. This is unlike the pattern in Inland West Igbo, WI, and NI where most of the dialects have at least a nine-vowel system.

The concept of mutual intelligibility is coined by linguist to describe the level of understanding between two or more varieties of a language or dialect. Intelligibility maybe seen as the ability to make out meaning from an utterance, understand it and what the expression represents according to the social and cultural background where the expression is used. Furthermore, intelligibility is seen as the process by which a listener can understand a speaker in a situation.

In the works of Chinagorom (2010) on Linguistic Isomorphism and patterns of migration and settlement among the Igbo: The Nsuka and Owerre Dialect Clusters. He tried to bring out the relationship between Owerre and Nsuka dialects using historical approach as an evidence to show a comparative analysis of their relatedness and difference. Chinagorom (2010), in his Ph.D. Thesis from the University of Nigeria Nsuka, went further to study the similarities of some speech patterns between Nsuka dialect and Owerre dialect.

In this case, Philip Anagbogu, Benjamin Mbah and Cecilia Amaoge Eme (2008) explain that ‘‘if you understand language A, without being taught that language, it is a dialect (or another variety) of your own language, if you understand language B, or your own language B is a dialect of the one you can understand, A or you speak (A and B) are dialects of some third entity (which is then called a language). But if you do not understand A, it is a different language’’. Notably, the criterion of mutual intelligibility is also ambiguous. The big question is how well people need to understand themselves for what they speak to be called dialects or how wide should the level of intelligibility be for the norm to be classified as a different form of that dialect. Most times people who speak the same dialect but from different communities claim not to understand each other.

According to Anagbogu, Eme and Mba (2010:101), ‘‘in every language, there are some sounds that are so alike and are thought of being alike such that they do not contrast. Such sounds belong to one phoneme and are called allophones’’. ‘‘For example, take the English phoneme /k/. in the initial position in a stressed syllable, the segment becomes aspirated [k'] e.g., Kate, cat, Kite. While following [s] in a stressed syllable and in coming as the last sound, it is unaspirated [k] e.g., skirt, ark. Therefore, [k, k'] are allophones of the phoneme /k/. Another example can be seen in /l/.

its allophones are clear 'l', [l], dark 'l' and syllabic 'l'. [l] is realized before vowels e.g., let, alike; [ɫ] and syllabic 'l'[J]. One allophone of /k/ or /l/ cannot occur where the other should. Even if someone makes a mistake by using one allophone where the other should be, the meaning of the word remains the same. So, sounds that have specific places of occurrence in words and cannot be contrastive are said to be in **Complimentary Distribution**. Thus, [k, k^h] are in complimentary distribution. Likewise [l, ɫ, J] as shown above. When sounds are in complimentary distribution they occur in mutually exclusive environments. This means that each of these sounds has a specific environment where it occurs; its environment of occurrence can easily be predicted".

Anagbogu, Mbah and Eme (2010:102), further state that "sometimes two separate phonemes of a language can be substituted. By this we mean that the two phonemes can occur in a particular word in the same environment without causing any meaning difference. Such phonemes are said to be in **Free Variation**". For example in Igbo, /h,fj/ are substitutable such that we have these realizations: /ahia/; /afia/; /afja/. We say that in Igbo /h,fj/ are in free variation in this context. They are free variants or optional variants. Bearing all these in mind, Onwukwe et al (2016), re-examined Ibeme from a native speaker's perspective, as a distinct dialect. lexicostatistic method with the Swadesh wordlist comprising 100 lexical items as guideline was adopted. With the help of introspection, data were gathered, as native speaker, (that is the lead author), from the report, ethnographic description and some phonemic and morphological variations were identified that Ibeme is a separate dialectal area. The linguistic field method and lexicostatistics method were adopted for the study. It is concluded therefore, that Ibeme is not a patois of Ngwa as claimed by previous study by (Oluikpe), but a separate dialect area.

The Igbo language has a peculiar challenge, which according to Nwaozuzu (2017:2) sum up these challenges as follows: Complexities of topography, settlement, history, interregional communication and prestige or regional centres, dialect boundaries are often vague, complex, and difficult to delineate. Dialect is seldom subject to classification as imposed on them. Based on these challenges, we have chosen to adopt a working definition of a dialect that fits into our Igbo situation. Hence, we define a dialect as a collection of variation across functional areas of language such as phonology, vocabulary syntax/morphology etc. which identify a speech form within a language community but not enough to make the speech form a language of its own. Standard language or dialect is that variety of a language that is used by the state. It is usually a prestige dialect spoken by the educated members of the society.

Furthermore, Ayeomoni (2012) conducted a research on the lexico-syntactic exploration of Ondo and Ikale dialects of Yoruba language. The study was a comparative study with the view to finding the areas of convergence and divergence between the two dialects especially in lexical usage and syntactic structures. Also, they have the same lexical items in both the subject and verbal (predicate) positions and at adjunct position; some of the lexemes are the same in both dialects.

Arokoyo (2016a) conducted a study on the lexicostatistics comparison of Yoruba, Igbo and Olukumi languages. The study carried out a comparative and lexicostatistical analysis of two varieties of Olukumi; Ugbodu and Ukwunzu with Yoruba and Igbo to discover their cognates. The essence of the study was to discover the similarities and differences and to examine the level of mutual intelligibility that exists among them. It was discovered that the two varieties examined are very different from each other thus, a different language; an amorphous language.

Bamigbade and Oloso (2016), while tracing the various clans of the Izon group and accessing the level of mutual intelligibility between Arogbo and main dialects of Ijaw language, employ lexicosemantic approach to judge the level of mutual intelligibility and ascertain the point of divergence of the dialects under study. Their findings show that 63% of the lexical items considered are similar; 21% are the same while 16% are different, hence 84% level of mutual intelligibility between the two dialects of Ijaw.

Olajide (2017) in his study observed that Obulom and Abua languages are not dialects of the same language. However, evidence shows that they belong to the same language family. Going by the percentage of same lexical items (11%) and similar (37%) and the percentage of the lexical items that are different (52%) and considering that Swadesh's principle indicates that languages with less than 80% cognate count should be regarded as belonging to the same language family and not dialects of then same mother language. it is convenient to conclude that Abua and Obulom belong to same family since the cognates count is quite low.

We can identify from the review that some of the scholars used cognate method to determine the level of relatedness and historical root in their language of study; some scholars did a comparative study, some scholars used the lexical similarity approach of comparison to investigate the extent to which words of two languages are similar with the hopes of making a further correlation to the intelligibility between languages. Furthermore, some scholars did a comparative study in phonology to ascertain the phonology concepts of the language of study. Since our focus is the

determination of cognate percentage to ascertain the level of relatedness among the dialects, it is helpful to approach the analysis using a lexicostatistics to determine the cognates.

3.0 Methodology

To achieve these objectives, linguistic field method in the form of structured interviews where informants were made to provide their dialectal variants of the lexical items in the wordlist was adopted for the collection of data and as a native speaker, introspection was used in gathering data. Lexicostatistics method and descriptive method were adopted for the analysis of data. Data were purposively collected among informants of age 60 and above in Owere, Obowo and Ehime Mbano, respectively. They informants were chosen considering that they were born in, live as well as speak the unmixed or undiluted varieties. Lexicostatistics aims at establishing linguistic relations based on a quantitative comparison of vocabulary; it is the statistical study of vocabulary to discover whether dialects are historically related by counting the percentage of cognates. (Romaine 2000). Cognates refer to words that have the same and descended from common ancestors. It is calculated by dividing the total number of items multiplied by 100 to obtain percentage cognates. We compare languages or dialects to discover differences and similarities and establish the percentage of mutual intelligibility.

$$\frac{\text{Cognates}}{\text{Total number of lexical items}} \times \frac{100}{1}$$

Gudschinsky (1956) identified three levels of cognate scores to determine relatedness.

- iv. 0%-35% cognate means separate language family
- v. 36%-80% cognate means separate language, same family.
- vi. % And above cognate means it is the same language.

4..0 Data Presentation

The primary aim of this work is to provide the word lists already given in English in different forms which make up East Central Group of Dialects such as Mbaise, Owere, Obowo, and Mbano

(Ehime Mbano precisely) and then investigate their relatedness, variation and determine their percentage of mutual intelligibility.

Table 1.

Data Presentation:

| S/N | Mbaise | Owere | Obowo | Mbano | Glossary |
|-----|-------------------|--------------------|-------------------|--------------------|-------------------|
| 1 | Hie | zaa | zaa | zaa | sweep |
| 2 | Ọnwa | Ọnwa | Ọnwa | Ọnwa | Moon |
| 3 | Odo | odo | odo | odo | yellow |
| 4 | ah ^w a | aha | aha | aha | Name |
| 5 | Nkume | okwute | nkume | okwute | Stone |
| 6 | Aja | aja | aja | aja | sand |
| 7 | Ujishi | anyasi | anyasi | anyasi | night |
| 8 | ugwu | ugw ^h u | ugwu | Ugwu | hill |
| 9 | mwei | uwe | uwe | uwe | clothe |
| 10 | afỌ | afỌ | afỌ | afỌ | belly |
| 11 | ed̩i | ohe | ezi | ezi | compound |
| 12 | efere | efere | efere | efere | plate |
| 13 | ařa | ařa | ařa | Ařa | breast |
| 14 | ukooru | Ọka | Ọka | ukooru | maize |
| 15 | abirika | abirika | abirika | abirika | plantain |
| 16 | Uha | Ọha | Ụha | Ụha | vegetable |
| 17 | aʔu | at̩u | at̩u | at ^h u | Chewin g stick |
| 18 | k ^h uọ | k ^h u ọ | k ^h uọ | k ^h u ọ | Beat |
| 19 | ep ^h e | Oroma | epe | ep ^h e | Orange |
| 20 | Dée | Dée | dée | Dée | Write |
| 21 | ugb̩r̩u | jaap̩u | akp̩u | akp̩u | cassava |

| | | | | | |
|-----|------------|-------------|------------|------------|-----------------|
| 22. | haafụ | Hara | hapụ | hapụ | Leave |
| 23. | Ogwe m | Onwe m | Ogwe m | Onwe m | myself |
| 24. | nwan?akiri | nwa mpekele | nwatakiri | nwa?a | Small child |
| 25. | umeju anu | Umeji anụ | umeji anu | umeji anu | liver |
| 26. | abha | abha | abha | abha | jaw |
| 27. | vụọ | vụọ | vụọ | bụọ | uproot |
| 28. | uvuru anu | uburu anu | uvuru anu | uburu anu | Brain |
| 29. | Ivu | ivu | ibhu | ibhu | Load |
| 30. | abh9 | abọ | abọ | abh9 | Basket |
| 31. | okirikiri | gburugburu | gburugburu | gburugburu | Round and round |
| 32. | Anyanwu | anyanwu | anyanwu | anyanwu | Sun |
| 33. | 9ku | 9ku | 9ku | 9ku | Fire |
| 34. | Ikpere | ikpere | ikpere | ikpere | Knee |
| 35. | ụkwụ | ọkpa | ụkwụ | ọkpa | Leg |
| 36. | Ishi | ishi | isi | Isi | Head |
| 37. | ibho | ụzọ | ụzọ | Ibo | Door |
| 38. | Ukwa | ụkwa | ụkwa | ụkwa | Bread fruit |
| 39. | Nkwa | nchichi | chiichigba | chichigba | Bush berry |
| 40. | okene | nwanwa | okene | okele | Grand child |
| 41. | aju | ejula | aju | aju | snail |
| 42. | udu | udu | udu | udu | Clay pot |
| 43. | ero | Ero | ero | ero | mushroom |
| 44. | Mgbarila | arila | mgbarila | jimmiri | centipede |
| 45. | arírí | arírí | arírí | arírí | milipede |
| 46. | id3i | id3iid3i | id3i | id3iid3i | flies |
| 47. | 9ghu | 9gu | 9gu | 9gu | hoe |
| 48. | Okpo | uz9 | uz9 | uz9 | route |
| 49. | Ehihie | ogbulo | ehihie | ehihie | afternoon |
| 50. | onyoghonyo | aparí | iberibe | iberibe | imbecile |

| | | | | | |
|-----|-----------|-----------------|-----------|------------|-------------|
| 51. | abubara | abuba | abuba | abuba | feather |
| 52. | Ire | ire | ire | ire | tongue |
| 53. | Olu | olu | olu | olu | neck |
| 54. | Ishi | ushi | ushi | ushi | smell |
| 55. | Mpi | mpi | mpi | mpi | horn |
| 56. | ikpere | ikpere | ikpere | ikpere | knee |
| 57. | Ntakiri | ntí | Ntakiri | ntakiri | small |
| 58. | Ọchi | Ọchi | Ọchi | Ọchi | laughter |
| 59. | Egwu | avụ | Egwu | egwu | dance |
| 60. | Nwunye | nwaanyi | Nwunye | nwunye | wife |
| 61. | nkọ | nkọ | nkọ | nkọ | sharp |
| 62. | ogbugbo | agbỌ | ogbugbo | ogbugbo | vomit |
| 63. | nkpa avụ | nkpa avu | Nkpavavụ | Nkpala apu | arm pit |
| 64. | aki | mkpírí | aki | aki | Palm kernel |
| 65. | ivu | ivu | ibu | ibu | fat |
| 66. | gbuo | gbuo | gbuo | gbuo | kill |
| 67. | nji | nji | oji | nji | black |
| 68. | abụọ | ibụọ | abụọ | mbỌỌ | two |
| 69. | Nwoko | nwoke | nwoke | nwoke | man |
| 70. | igwu | igwu | igwu | igwu | lice |
| 71. | Ọnụ otilẹ | ọ?ụ | Ọtụ | Ọtụ | vagina |
| 72. | Nnaa | Enyi | enyi | enyi | friend |
| 73. | Mmiri nri | ofe | ofe | ofe | soup |
| 74. | mkpurụ | mkpurụ | mkpurụ | mkpurụ | Seed |
| 75. | ekwurekwu | chiichỌ chiichỌ | ekwurekwu | ekwurekwu | talkative |
| 76. | otile | Ike | ukwu | otule | buttocks |
| 77. | okpukpu | okpukpu | okpukpu | okpukpu | bone |
| 78. | agadi | Okii | okenye | agadi | elder |
| 79. | gbuo | gbuu | ugbua | ugbua | now |

| | | | | | |
|---|--------------|------------|-----------|------------|-------------|
| 8 | latirini | otikpiri | otikpiri | Latirini | Pit latrine |
| 8 | Giri ? | Oini? | Gini ? | Gini ? | What? |
| 8 | mvo | nvỌ | nvỌ | mvo | nail |
| 8 | vutuo | patuo | butuo | butuo | Carry down |
| 8 | Efere | Efere | Efere | Efere | plate |
| 8 | Ọhụrụ | Ọhụrụ | Ọhụrụ | Ọhụrụ | new |
| 8 | nwunne | nwanna | nwanna | nwanna | kinsman |
| 8 | tutu | Ihu | ihu | Ihu | face |
| 8 | ose | ose | ose | ose | pepper |
| 9 | mkporo | Ọhia | ikpa | ikpa | forest |
| 9 | ijkazi | ijkad3i | ijkazi | ijkazi | vegetable |
| 9 | Ayara | Ayiya | Ayara | Ayara | crayfish |
| 2 | Elili | egwushi | egwishi | Egwusi | melon |
| 9 | ngaji | ngaji | ngaji | ngaji | spoon |
| 9 | Mkpuru | Njaw | akwa | Akwa | wrapper |
| 9 | mkpírí | ngu | ngu | ngu | lungs |
| 8 | akumgboghurụ | akij bekee | aki oyibo | akij bekee | coconut |
| 9 | ikpuru | nfu | nfu | ndu | maggot |
| 8 | ijdo | Eriri | ijdo | ijdo | rope |
| 9 | ide | Apiti | ide | potopoto | mud |
| 0 | ha | Mwo | ha | Ha | they |

Table 2.

Similarities/ cognates: Based on the data collected from the four dialects that come under the East Central Group of Dialect. The following information was deduced as regards the similarities noticed or what you may call shared cognates in the four dialects under study.

| S/N | Mbaise | Owere | Obowo | Mbano | Glossary |
|-----|--------|-------|-------|-------|----------|
|-----|--------|-------|-------|-------|----------|

| | | | | | |
|----|-------------|-------------|-------------|-------------|-------------|
| 1 | 9nwa | 9nwa | 9nwa | 9nwa | moon |
| 2 | odo | Odo | Odo | odo | yellow |
| 3 | aja | Aja | Aja | aja | sand |
| 4 | af9 | af9 | af9 | af9 | belly |
| 5 | efere | Efere | efere | efere | Plate |
| 6 | afa | afa | afa | afa | breast |
| 7 | abirika | Abirika | abirika | abirika | plantain |
| 8 | kh99 | kh99 | kh99 | kh99 | beat |
| 9 | dee | dee | dee | dee | write |
| 10 | abha | abha | abha | abha | jaw |
| 11 | anyanwu | anyanwu | anyanwu | anyanwu | Sun |
| 12 | 9k9 | 9k9 | 9k9 | 9k9 | fire |
| 13 | ikpere | Ikpere | ikpere | ikpere | knee |
| 14 | ukwa | ukwa | ukwa | ukwa | Bread fruit |
| 15 | udu | udu | udu | udu | Clay pot |
| 16 | ariri | ariri | ariri | ariri | millipede |
| 17 | ire | ire | ire | ire | tongue |
| 18 | olu | olu | olu | olu | neck |
| 19 | mpi | Mpi | Mpi | mpi | horn |
| 20 | Ikpere | Ikpere | Ikpere | Ikpere | Knee |
| 21 | 9chi | 9chi | 9chi | 9chi | laughter |
| 22 | nk9 | nk9 | nk9 | nk9 | Sharp |
| 23 | gbuo | gbuo | gbuo | gbuo | Kill |
| 24 | nwoke | Nwoke | nwoke | nwoke | Man |
| 25 | mkplgV | mkplgV | mkplgV | mkplgV | Seed |
| 26 | 9kp1.lkp1.1 | 9kp1.lkp1.1 | 9kp1.lkp1.1 | 9kp1.lkp1.1 | Bone |
| 27 | efere | efere | efere | efere | Plate |
| 28 | ose | ose | ose | ose | pepper |
| 29 | ngaji | Ngaji | ngaji | ngaji | Spoon |

In order to find the percentage of cognates for Mbaise, Owere, Obowo and Mbano (Ehime), we counted the number of all the lexical items and then find the percentage of cognates from the sum total of all lexical items i.e. the number of cognates divided by the total number of lexical items multiplied by hundred as indicated below.

$$\frac{\text{Cognates}}{\text{Total Number of lexical items}} \times \frac{100}{1}$$

To determine the level of relatedness/ cognates between Mbaise dialect and the three neighbouring dialects (Owere, Mbano (Ehime) and Obowo dialects) using lexical items. We counted 29 Cognates and subject it to a lexicostatistics analysis as follows:

$$\text{Table 3.} \quad \frac{29}{100} \times \frac{100}{1} = 29\%$$

Table 3.

Differences/Non cognates: The following differences or what you may call divergence/ non cognates abound in the four dialects under study.

| S/N | Mbaise | Owere | Obowo | Mbano | Glossary |
|-----|-------------------|--------------------|--------|-------------------|-------------------|
| 1 | hie | Zaa | zaa | zaa | sweep |
| 2 | ah ^w a | Aha | aha | Aha | name |
| 3 | nkume | Okwute | nkume | okwute | Stone |
| 4 | Ujiishi | anyasi | anyasi | anyasi | night |
| 5 | ugwu | ugw ^h u | ugwu | ugwu | Hill |
| 6 | Mwei | Uwe | uwe | uwe | clothe |
| 7 | ed̩ji | Ohe | ezi | ezi | Compound |
| 8 | ukooru | Oka | oka | ukooru | maize |
| 9 | ɸha | ɸha | ɸha | ɸha | vegetable |
| 10 | aʔu | atɸ | atɸ | at ^h u | Chewin g stick |
| 11 | ep ^h e | Oroma | epe | ep ^h e | orange |

| | | | | | |
|-----|-------------------|-------------|-------------------|-------------------|-------------------------|
| 12. | ugburu | jaapu | akpu | akpu | cassava |
| 13. | hafu | Hara | hara | hapu | Leave |
| 14. | ogwe m | Onwe m | ogwe m | Onwe m | Myself |
| 15. | nwan?akiri | nwa mpekele | nwatakiri | nwa?a | Small child |
| 16. | Umeju anu | umeji anu | umeji anu | umeji anu | liver |
| 17. | vuu | vuu | vuu | buu | Uproot |
| 18. | uvuru anu | uburu anu | uvuru anu | uburu anu | brain |
| 19. | ivu | Ivu | ib ^h u | ib ^h u | load |
| 20. | ab ^h o | abo | abo | ab ^h o | basket |
| 21. | Okirikiri | gburugburu | gburugburu | gburugburu | Round round |
| 22. | ukwu | Okpa | ukwu | Okpa | leg |
| 23. | Ishi | Ishi | isi | isi | Head |
| 24. | ib ^h o | uzo | uzo | ibo | door |
| 25. | Nkwa | nchichi | chichigba | chichigba | Bush berry |
| 26. | okene | Nwanwa | okene | okele | Maternal Grand child |
| 27. | mgbarila | arila | mgbarila | jimmiri | centipede |
| 28. | idzi | idzidzi | idzidzi | idzi | flies |
| 29. | og ^h u | ogu | ogu | ogu | Hoe |
| 30. | Okpo | uzo | uzo | uzo | route |
| 31. | ehihie | Ogbulo | ehihie | ehihie | afternoon |
| 32. | Onyonyonyo | apari | iberibe | iberibe | imbecile |
| 33. | Ero | ero | ero | Ero | Mushroom |
| 34. | abubabara | abuba | abuba | abuba | Feather |
| 35. | Ushi | ishi | ishi | Ishi | smell |
| 36. | Ntakiri | ntii | ntakiri | ntakiri | small |
| 37. | Egwu | avu | Egwu | Egwu | Dance |
| 38. | nwunye | nwanyi | nwunye | nwunye | Wife |
| 39. | ogbugbo | agbo | ogbugbo | ogbugbo | vomit |
| 40. | nkpa avu | nkpa avu | Nkpala avu | nkpala apu | Arm pit |

| | | | | | |
|-----|---------------|--------------|-----------|-----------|-------------|
| 41. | aki | mkpiri | aki | akụ | Palm kernel |
| 42. | ivu | ivu | Ibu | ibu | fat |
| 43. | njii | njii | Ojii | njii | black |
| 44. | abuo | ibua | abuo | m bọ | Two |
| 45. | igwu | igwu | igwu | igwi | Lice |
| 46. | onu otile | o?u | otu | otu | vagina |
| 47. | nnaa | enyi | enyi | enyi | friend |
| 48. | Mmiri ri | ofe | Ofe | ofe | soup |
| 49. | Ekwurekwu | chichochicho | ekwurekwu | ekwurekwu | talkative |
| 50. | Otile | ike | ukwu | Otule | Buttocks |
| 51. | Agadi | okiii | okenye | agadi | elder |
| 52. | Gbuo | ugbu | ugbua | ugbua | Now |
| 53. | Latiriini | otikpiiri | otikpiiri | latiriini | Pit latrine |
| 54. | Gini? | Ọiní? | Gini? | Gini? | What? |
| 55. | mv0 | nvỌ | nvỌ | mv0 | nail |
| 56. | Vutuo | patuo | butuo | butuo | Carry down |
| 57. | ohuru | Ọhụ | ohuru | ohuru | New |
| 58. | Nwanne | Nwanna | nwanna | nwanna | kinsman |
| 59. | ih"u | ihu | ihu | ihu | Face |
| 60. | Ọhia | mkporo | ikpa | ikpa | forest |
| 61. | ukazi | ukad3i | ukazi | ukazi | Vegetable |
| 62. | ayara | ayiya | Ayara | ayara | crayfish |
| 63. | elili | egwushi | egwishi | egwusi | Melon |
| 64. | Mkpuru | Nja | akwa | akwa | wrapper |
| 65. | mkpírí | ngu | ngu | ngu | lungs |
| 66. | aku mgboghuru | aki oyibo | Aki bekee | akụ bekee | Coconut |
| 67. | ikpuru | Nfu | nfu | ndu | maggot |
| 68. | udo | Eriri | udo | udo | Rope |
| 69. | ide | apitii | ide | pọtọpọtọ | mud |

| | | | | | |
|-----|-----|-------|-----|-----|-------|
| 70. | eju | ejula | Eju | eju | snail |
| 71. | ha | nwo | ha | ha | they |

Therefore, Percentage difference is:

$$\frac{71}{100} \times 100 = 71\%$$

4. Data Analysis

A lexicostatistical study of the four varieties of the dialects is conducted here to determine their percentage of similarities or differences of the 100 lexical items.

Total number of lexical items =100

Total number of lexical similarities =

29 Total number of lexical differences

= 71 ∴ Percentage similarities:

$$\frac{29}{100} \times 100 = 29\%$$

Therefore, Percentage difference is:

$$\frac{71}{100} \times 100 = 71\%$$

Table 4.

| Cognates | Frequency | Percentage |
|-----------|-----------|------------|
| Shared | 29 | 29% |
| Divergent | 71 | 71% |
| Total | 100 | 100 |

From the analysis, we discovered that there is a higher percentage of non cognates/ divergence / differences between Mbaise and the other neighbouring dialects i.e. Owere, Obowo and Mbano to the level of 71% although, relative. while the level of Similarities / shared/ cognacy between Mbaise and the other neighbouring dialects is lower i.e., 29% as can be seen from the data presented above. We arrived at this by dividing the number of shared lexical items by 100 multiplied by 100 divided by one as shown above.

Furthermore, we are going to identify the various variations observed in the dialects under study. From the above data, the researcher observes that there are some lexical variations between Mbaise and the other dialects. This has to do with the vocabulary of the Igbo language. Lexical variation in this context brings to light objects/concepts that are called by different names in these other dialects other than what they are called in Mbaise dialect. This means that objects/concepts that do not have the same name in Mbaise dialect are adjudged as such. Below is a tabular representation of some of these instances, levels of variations found in the data collected. These variations are lexical and phonological variations. We will discuss lexical variations first.

4.1 Lexical

Variation Table 5

| S/N | English | Mbaise | Owere | Obowo | Mbano |
|-----|-----------------|------------------|-------------|-------|--------|
| 1 | Sweep | hie | zaa | „ | „ |
| 2 | Stone | nkume | okwute | Nkume | okwute |
| 3 | night | ujishii | „ | „ | „ |
| 4 | clothe | mweí | uwe | „ | „ |
| 5 | compound | edzi | ohe | Ezi | „ |
| 6 | maize | Ukooru | Ọka | „ | „ |
| 7 | orange | ep ^{he} | oroma | „ | „ |
| 8 | cassava | Ugburu | jaapu | akpu | „ |
| 9 | Round and round | Okirikiri | Gburu gburu | „ | „ |
| 10 | Leg | ukwu | Ọkpa | „ | „ |
| 11 | Door | ib ^{ho} | uzo | „ | „ |
| 12 | Bush berry | nkwa | nchíchí | „ | „ |

| | | | | | |
|-----|---------------------|---------------|--------------------|------------|----------|
| 13. | Grandchild maternal | okene | Nwanwa | „ | „ |
| 14. | Centipede | Mgbariila | „ | „ | jimmiri |
| 15. | Afternoon | ehihie | Ogbulo | „ | „ |
| 16. | Imbecile | onyoghonyo | apar í | Iberibe | „ |
| 17. | Dance | Egwu | avụ | Egwu | egwu |
| 18. | Palm kernel | aki | mkpírí | akí | akí |
| 19. | Vagina | Ọnụ otile | ọ?ụ | „ | „ |
| 20. | Friend | Nnaa | Enyi | „ | „ |
| 21. | Soup | mmiri ri | Ofe | „ | „ |
| 22. | talkative | ekwurekwu | chichochicho | „ | „ |
| 23. | Buttocks | Otile | Ike | Ukwu | „ |
| 24. | Elder | agadi | ok ^h ii | Okenye | „ |
| 25. | Pit latrine | Latiriini | otikpiri | „ | „ |
| 26. | What? | Giri? | Qiní? | „ | „ |
| 27. | forest | Qhia | mkiporo | kpa | „ |
| 28. | wrapper | mkipuru | nja | akwa | „ |
| 29. | Lungs | mkpírí | ngụ | „ | „ |
| 30. | Coconut | akụ mgbỌghurụ | akíoyibo | ak íbekee | „ |
| 31. | Maggot | ikpuru | nfu | ndu | „ |
| 32. | rope | udọ | eriri | „ | „ |
| 33. | Mud | Ide | ap í | „ | pOtOpOtO |
| 34. | They | ha | mwo | „ | „ |
| 35. | Small child | nwan?akiri | Nwa mpekele | nwantakírí | nwa?a |
| 36. | Melon | Elili | egwushi | „ | „ |

Talking about lexical variations in the data above we can observe that there are lexical items which are entirely different from the other dialects. For example, In Mbaïse dialect, the word for 1. ‘sweep’ is /hie/ while others call it /zaa/. 2. The word for ‘stone’ is /Nkume/ in Mbaïse and Obowo while, /okwute/, in Owere and Mbano dialects. 3. The word ‘Night’ is /Ujishii/ in Mbaïse and /anyasi/ in the others. 4. That of ‘Clothe’ is /mwei/ in Mbaïse and /uwe/ in the others. 5. For the word ‘compound’ the Mbaïse dialect word for it is /edgi/ while Owere dialect is /ohe/, an entirely different word. 6. Then, ‘Maize’ is /Ukooru/ in Mbaïse and /Qka/ in the others. 7. ‘Orange’ is /ep^he/ in Mbaïse and /oroma/ in the others. 8. ‘Cassava’ is /ugburu/ in Mbaïse dialect and /jaapu/ in Owere dialect and /akpu/ in Obowo and Mbano respectively. 9. The word ‘round and round’ / okirikiri/ in Mbaïse and /gburugburu/ in the others. 10. ‘Leg’ is /ukwu/ in Mbaïse and /okpa/ in others. 11. Then, ‘Door’ is /ib^ho/ in Mbaïse and /uzo/ in others. 12. ‘bushberry’ is /nkwa/ in Mbaïse and /nchichi/ in Owere and /chichigba/ in Obowo and Mbano. 13. ‘Grandchild’ is /okene/ in Mbaïse and Obowo and /nwanwa/ in Owere while /okele/ in Mbano. 14. ‘Centipede’ is

/mgbariila/ in Mbaïse and Obowo then /jimmiri/ in Mbano and /arila/ in Owere. 15. Then, ‘afternoon’ is /ehihie/ in Mbaïse, Obowo and Mbano, while /ogbulo/ in Owere. 16. ‘imbecile’ is /onyoghoonyo/ in Mbaïse and /apari/ in Owere then, /iberibe/ in the others. 17. ‘Dance’ is /egwu/ in Mbaïse, Obowo, and Mbano while Owere it is /avũ/. 17. ‘Palm kernel’ is /aki/ in Mbaïse, Obowo and Mbano as against /Mkpiri/ in Owere. 18. Then the word ‘Vagina’ is /9nũ otile/ in Mbaïse and /9?ũ/ in Owere, in Obowo and Mbano is /9tũ/. 19. The word for ‘Friend’ is /Nnaa/ in Mbaïse and /enyi/ in the others. 20. Then, ‘soup’ is /mmiri ri/ in Mbaïse and /ofe/ in others. 21. ‘Talkative’ is /ekwurekwu/ in Mbaïse, Obowo and Mbano while, /chich9chich9/ in Owere. 22. The word ‘buttocks’ is /otile/ in Mbaïse and /ike/ in Owere and /ukwu/ in Obowo and Mbano respectively. Also, 23. ‘Elder’ is /agadi/ in Mbaïse and Mbano, /ok^hii/ in Owere and /okenye/ in Obowo. 24. The word ‘Pit latrine’ is /latiriini/ in Mbaïse and Mbano while /otikpiri/ in Obowo and Owere. 25. The Wh word ‘what?’ is ‘Giri?’ in Mbaïse and ‘Gini?’ in Obowo and Mbano while Owere is ‘Qin ?’. Furthermore, the 26. word ‘Forest’ is /Ohia/ in Mbaïse and /mkporo/ in Owere while in Obowo and Mbano is /kpa/. 27. ‘Mēlon’ is /elili/ in Mbaïse and /egwushi/ in Owere then /egwisi/ in Obowo and /egwusi/ in Mbano. 28. The word ‘Wrapper’ is /mkpuru/ in Mbaïse and /nja/ in Owere then /akwa/ in Obowo and Mbano. Then, 29. ‘lungs’ is /mkpiri/ in Mbaïse and /ngũ/ in others. The word for 30. ‘coconut’ is /akũ mgb9ghũrũ/ in Mbaïse and /akũ oyibo/ in Owere, then, /aki bekee/ in Obowo and Mban9. 31. The word ‘maggot’ is /ikpuru/ in Mbaïse and /nfu/ in Obowo and Owere while /ndu/ in Mban9. 32. The word ‘rope’ is /ud9/ in Mbaïse, Obowo and Mban9 while, Owere is /eriri/. 33. The word ‘mud’ is /id^he/ in Mbaïse and Obowo while, /apiiti/ in Owere and /p9t9p9t9/ in Mban9. 34. The demonstrative pronoun ‘They’ is /ha/ in Mbaïse, Obowo and Mban9 and /mwo/ in Owere. Finally, on this, the word 35. ‘small child’ is /nwan?akiri/ in Mbaïse and /nwa mpekele/ in Owere , then, /Nwatakiri/ in Obowo and /nwa?a/ in Mban9.

These differences or variances are relative and are pointers to show where the speaker hail from among the speakers of the various dialects. These are some of the lexical variations in the various dialects under study.

4.2 Phonological Variation

This is a form of pronunciation variation that has an impact on the phonemic level of grammar, which include things like syllable shape, secondary articulation, vowel alternations etc. Before we go further, let us look at some of the phonological differences found in the various dialects under study.

Table 6

| S/N | English | Mbaise | Owere | Obowo | Mbano |
|-----|---------------|---|---|------------------------------------|-----------------------|
| 1 | Name | ah ^w a | Aha | „ | „ |
| 2 | Hill | ugwu | ugw ^h u | „ | „ |
| 3 | vegetable | u ^h ha | Q ^h ha | „ | „ |
| 4 | Chewing stick | a [?] u | at ^u | „ | at ^h u |
| 5 | Leave | haf ^u | Hara | „ | hap ^u |
| 6 | Myself | Ogwe m | Onwe m | „ | „ |
| 7 | Leave | Umeju an ^u | Umeji an ^u | „ | „ |
| 8 | Uproot | v ^u u | „ | „ | b ^u u |
| 9 | Brain | u ^v u ^r u an ^u | u ^b u ^r u an ^u | | |
| 10 | Load | Ivu | „ | ibhu | , |
| 11 | Basket | ab ^h o | ab ^o | „ | „ |
| 12 | Head | Ishi | Isi | „ | „ |
| 13 | Door | ib ^h o | „ | , | ibo |
| 14 | Mushroom | Ero | ero | „ | „ |
| 15 | Hoe | og ^h u | Og ^u | „ | „ |
| 16 | Nail | mv ^o | nv ^o | „ | „ |
| 17 | Carry down | vutuo | patuo | butuo | „ |
| 18 | New | o ^h uru | Q ^h uru | „ | „ |
| 19 | Crayfish | ayara | ay ⁱ ya | „ | „ |
| 20 | Face | ih ^w u | ihu | „ | „ |
| 21 | Small child | nwan [?] akiri | Nwa mpekele | nwatak ⁱ r ⁱ | l. nwa [?] a |

1. The voiceless glottal fricative /h/ sound as in / ah^wa/and /ih^wu/ i.e. ‘name’ and ‘face’ in Mbaise is labialized while it is not in the other dialects under study.

2. The voiced labialized velar plosive /gw/ sound as in /ugw^hu/ i.e., ‘hill’ in Owere dialect is aspirated and in the voiceless bilabial plosive /t/ in /at^hu/ ‘chewing stick’ in Mbanò and the voiced bilabial plosive /b/ as in /ib^hu/ i.e., ‘load’ in Obowo, including, /ab^ho/ in Mbaise i.e., ‘basket’ and /ib^ho/ as in ‘door’ and /g/ in the voiced velar plosive /og^hu/ as in ‘hoe’ in Mbaise dialect accordingly.
3. The glottal stop /ʔ/ are found in words like /aʔu/, /nwanʔakiri/ in Mbaise dialect and /nwaʔa/ in Mbanò, i.e. chewing stick, and small child respectively while, Owere and Obowo it is realised as /t/ a voiced bilabial plosive /atu/ while it becomes aspirated /at^hu/ in Mbanò.
4. The verb ‘leave’ which is realised as the following by the various dialects:

Mbaise Owere Obowo Mbanò

/hafu/ /hara/ /hapu/ /hapu/

Morphologically, we can observe that the active verb has different verbal extension realisations in different dialects as can be seen above.

5. We can observe here that the word for this type of vegetable known as /uha/, we can see from the data that, the initial back vowel sound /u/ in /uha/ is realised as /o/ in the other dialects under study i.e., /oha/.
6. This form of substitution can be seen in the word for ‘myself’ also, In Mbaise dialect it is called /ogwe m/ while in others it is /onwe m/. instead of voiced labialized velar plosive /gw/ others have it as labialized velar nasal /nw/.
7. The word ‘liver’ is called /umeju anu/ in Mbaise dialect while others have it as /umeji anu/ We can observe that the final syllable /ju/ changes to /ji/ in Owere, Obowo and Mbano dialects, respectively.
8. We can also observe that in the word ‘uproot’, Mbaise, Owere and Obowo have it as /Vuu/ as against Mbano that has it as /buu/, so, you can observe here that in the word ‘brain’ in Mbaise and Obowo it is /uvuru anu/ while, in Owere and Mbano it is /uburu anu/. Also, in the word ‘load’ in Mbaise and Owere it is /ivu/ while it is /ib^hu/ in Obowo and Mbano. From this, we can clearly observe that in Mbaise, Owere and Obowo, the voiced labiodental fricative /v/ changed to voiced aspirated bilabial plosive /b^h/ in Mbano. We can also see another instance in the word ‘load’, where in Mbaise and Owere, the sound /v/ also changed to aspirated bilabial plosive /b^h/ in the word /ivu/ and /ib^hu/ respectively. Also,

in the word ‘basket’, in Mbaise and Mbanò, it is /ab^ho/ while in Owere and Obowo it is /abɔ/. So, we can see that you have the aspirated voiced bilabial plosive /b^h/ as against the unaspirated voiced bilabial plosive /b/. In Mbaise, we have for the word ‘door’, /ib^ho/ and in Mbanò it is /ibo/ which means that the sounds /b^h/ and /b/ are allophones here and as such in complimentary distribution. But coming to Owere and Obowo it is another word entirely /uzɔ/, in the word ‘head’ in Mbaise and Owere it is /ishi/ while it /isi/ in Obowo and Mbanò. What happened here is that the voiceless palatoalveolar fricative /ʃ/ in Mbaise and Owere becomes voiceless alveolar fricative /s/ in Obowo and Mbanò.

9. In the word for ‘Mushroom’ Mbaise , Obowo and Mbanò it is /ero/ while in Owere it is /Ero/. So, what happened here is that the sound /e/ and /E/ are in free variation or what you may refer as optional variants since the presence of either sound does not alter the meaning of the word. Then, in the word ‘hoe’ in Mbaise it is /ɔg^hu/ while in Owere , Obowo and Mbanò it is /ɔgu/. so, we can see that the voiced velar plosive /g/ is aspirated in Mbaise and it is not in others.
10. The word for ‘nail’ in Mbaise and Mbanò is /mvɔ/ while it is /nvɔ/ in Obowo and Owere. The bilabial nasal /m/ changes to alveolar nasal /n/. the word ‘carry down’ is /vutuo/ in Mbaise and /patuo/ in Owere while, in Obowo and Mbanò it is /butuo/. Here, the first syllable changes in from /vu/ in Mbaise to /pa/ in Owere and /bu/ in Obowo and Mbanò respectively.
11. The word ‘new’ is /ɔhuru/ in Mbaise, Obowo and Mbanò while Owere has it as /ɔhuu/ so we can, therefore, observe a kind of consonant elision of the consonant sound /r/ in-between the two vowel [sounds. so](#), we now have V¹C¹V²V³ in Owere as against V¹C¹V²C²V³ in Mbaise, Obowo, and Mbanò respectively. The word ‘crayfish’ is /ayara/ in Mbaise and /ayiya/ in Owere, Obowo and Mbanò respectively. So, /a/ changes to /i/ in Mbaise, Obowo and Mbanò not removing the fact that both vowels are front vowels. The word for ‘face’ in Mbaise is /ih^wu/ while in Owere, Obowo and Mbanò it is /ihu/. So, we can observe here that the voiceless glottal fricative sound /h/ is labialized in Mbaise dialect as against others.
12. Finally, the word for ‘child’ in Mbaise is /nwan?akírí/ while in Owere it is /nwampekele/ and in Obowo it is /nwatakiri/ and /nwa?a/ in Mbanò. We can observe a constant initial syllable /nwa/ in all. then, in the second syllable we can see different realizations as in Mbaise, you have -n?a-, in Owere you have -mpe-, in Obowo you have -ta- while in Mbanò

you have -?a-. we can also see that in Mbaise, Owerre and Obowo have their final syllable realised as (kiri, kele, kiri) while that of Mbano did not have this suffix in form of enclitics at the end of the word. This is to show that there is no semantic implication per say.

The reasons for these uniqueness and sameness are not far-fetched, the reasons could be because of language contact, where they meet in places like rivers, markets etc. Geographical location and ethnographic information as regards to border lines in where they meet in the cause of movement and development etc.

4.3 Discussion and Findings

From the analysis, we could identify some variations in form of lexical and phonological variations. In lexical variations, which is a situation whereby a different word or phrase is used to refer to the same objects/concepts in a dialect. Evident in this work as we can see are several instances of lexical variations spread across the four dialects under study. For example, in Mbaise dialect, the word for 'Maize' is /Ukooru/ while in the other dialects it is called /Qka/. Also, the verb 'to sweep' is /hie/ in Mbaise as against /zaa/ by the other neighbouring dialects. Another example among several others is the word for 'talkative', in Mbaise, Obowo and Mbano dialects it is /ekwurekwu/ while in Owerre dialect it is /c̣h cḥoch cḥo/. For example, In Mbaise dialect, afternoon is /ehihie/ while in Owerri dialect it is /ogbulo/ an entirely different word altogether. So, we can see that some of these objects/concepts have an entirely different name from the other dialects, or even what they are called in the standard Igbo. This lexical variation is a very productive one in the language because, it has helped in filling the lexical gaps and beefing up the Igbo lexicon.

In addition, there are also instances of phonological variations identified in this work. Phonological variation is a situation where the choice among expression is phonologically conditioned and this can occur due to the difference in manner of articulation, e.g (secondary articulation) prosodical variation, vowel alternations and even tone. This is evident in some of the sounds found in some of the lexical items used for this work. For example, the English word 'name' in Mbaise dialect, it is /ah^wa/ The voiceless glottal fricative /h/ sound is labialized here while in the other dialects it is not. Hence, we have /aha/. Another instance can be seen in words like /ugwu/ i.e., hill. Here, the voiced velar plosive /gw/ sound in /ugw^hu/ i.e., is aspirated in Mbaise and Owerre dialects while, it is not in the others. Aspiration can also be perceived in the voiceless bilabial plosive /t/ in /at^hu/

‘chewing stick’ in Mban̄ and just /atu/ in Owere and Obowo. While, in Mbaise the /t/ becomes a glottal stop hence, we have /aʔu/ and the voiced bilabial plosive /b/ as in /ib^hu/ i.e., ‘load’ in Obowo, including, /ab^ho/ in Mbaise i.e., ‘basket’ and /ib^ho/ as in ‘door’, and /og^hu / as in ‘hoe’ in Mbaise, the voiced velar plosive /g/ is also aspirated. Among several others.

These variations notwithstanding, the dialects remain highly mutually intelligible among the native speakers of the four dialects under study. The percentage cognates were done to determine the level of relatedness of the four dialects. It was discovered that there are more similar lexical items among the four dialects than there are differences though, relative. This can be seen from the number of similar lexical items shown in the tables above. It was also discovered that there is intelligibility despite the various phonological variations. Meanwhile, the differences or variances discovered are pointers to where the speaker hail from among the speakers of the various dialects. It is more of accent than dialectal.

To determine the level of genetic relationship among the dialects under study using the lexicostatistic method, it was discovered that the four dialects under study are genetically related following the classification by Ikekeonwu (2001) and Nwaozuzu (2010 & 2017), where they grouped these dialects under the Inland East Igbo (IEI) and East Central Group of Dialects (ECGD) respectively with the identification of some phonological features found in these dialects in the form of Palatalization, Nasalization, Labialization, Aspiration and Glottalization etc. having descended from one parent language the Igbo language under Kwa sub branch group of Niger-Congo family. They dialects are said to be genetically related.

5.0 Conclusion

This work has thrown more light to further support the linguistic situation in the East Central Group of Dialect identified by Nwaozuzu (2008,2017) as regards to the four dialects under study. The similarities in the dialects are due to language contact, geographical location, and ethnographic information as regards to border lines in where they meet in markets, rivers etc in the cause of development and movement. The differences or variances in the various dialects is used to identify and establish the ethnographic information as it regards to where a particular speaker hails from among the speakers of the various dialects. This work is an addition to dialectology and scholars of dialectology. It will also serve as a resource to Igbo lexicography project and boost the lexicon.

5.1 Recommendations

- i. This work is an addition to dialectology and scholars of dialectology.
- ii. This work will also serve as a resource to Igbo lexicography project.
- iii. It will also boost the Igbo vocabulary/lexicon.
- iv. This kind of study should be encouraged to preserve our local dialects by making it available for the younger generations to identify with.

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