

Exploring Issues of Mutual Intelligibility in Dialects of Kuteb: A Phonological Perspective

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<https://doi.org/10.56201/ijelcs.vol.11.no7.2026.pg76.90>

Abstract

This paper is a phonological investigation, which aims at verifying the degree of mutual intelligibility in dialects of Kuteb language. Kuteb language of Takum, Ussa local government and Yangtu development area of Taraba state Nigeria. Descriptive research design is employed in the study while, Quasi research method is used for data analysis. Purposive sampling technique is utilised in the administration of the instruments for data collection. The instruments include: Interview, questionnaires and elicitation. The research population is based on Kregie & Morgan and, the theoretical frame work are; Lexicostatistics and Labov variationist theory, where by one hundred Swadesh word-list were aligned and analysed by using six (6) phonological processes. The findings demonstrated high degree of cognates (similarities) and therefore concluded that; The dialects of Kuteb have not evolve into separate languages rather, they are mutually intelligible and should therefore be identified as different styles of the same proto language. It recommends that government and stake holders should encourage research on indigenous languages to enhance standardization and revitalisation of indigenous languages in Nigeria.

Keywords: *Cognate, Dialects, language, lexicostatistics, Mutual Intelligibility, Variationist theory.*

1. Introduction

Mutual intelligibility is an important concept in linguistics for determining the extent to which speakers of related language varieties can understand one another without formal learning or

special effort. Globally, it provides a basis for examining linguistic relationships, dialectal differences, and the distinction between dialects of the same language and separate languages. Hudson (2003) posits that a high percentage of cognates between two speech varieties may indicate mutual intelligibility and their classification as dialects of the same language. However, mutual intelligibility may vary across related varieties, and limited comprehension may indicate substantial linguistic differences. In Nigeria, linguistic diversity is reflected in numerous indigenous languages with distinct regional and dialectal variations. Kuteb, an East Benue-Congo language spoken predominantly in Takum and Ussa Local Government Areas and the Yangtu Development Area of Taraba State, is among the languages whose dialectal relationships warrant systematic investigation (Mgbe, 1997; William, 2009). Historical accounts suggest that Kuteb-speaking clans originated from a common ancestry and subsequently relocated to different mountainous settlements, potentially contributing to linguistic variation. An early record of Kuteb appears in Koelle's *Polyglotta Africana* (1854), which contains approximately 200 words from the Askean and Arubur dialects (Williams, 2000). Phonological and lexical variations are important indicators of linguistic differences among speech communities. Chomsky (1957) observes that individuals do not pronounce sounds, syllables, and words identically. Such variations may result from phonological processes, including assimilation, deletion, and sound alternation, which can influence pronunciation and lexical recognition. Examining these features comparatively can therefore provide insights into the linguistic relationships and mutual intelligibility of Kuteb dialects. Despite the linguistic and cultural importance of Kuteb, insufficient comparative documentation of its dialects creates uncertainty about their similarities, differences, and implications for communication. This gap also limits evidence-based decisions concerning orthography development, instructional materials, dictionary compilation, and language preservation. Furthermore, the possibility that some varieties have developed substantial differences raises questions about their continued classification as dialects of one language. Therefore, this study aims to investigate the degree of mutual intelligibility among selected dialects of Kuteb. Specifically, it seeks to: (i) compare the lexical items of the selected dialects to identify similarities and differences; (ii) establish the percentage of phonological relationships reflected in their lexical items; and (iii) determine the extent to which the dialects are mutually intelligible varieties of the same language or exhibit differences suggestive of separate languages. The study is significant because it will contribute to the documentation of Kuteb dialects, provide evidence for understanding their linguistic relationships and support language standardisation, literacy development, educational material production, and future language preservation and revitalisation initiatives.

2. Literature Review

2.1 Conceptual Review

Cognate: are words of the same origin or ancestry. Schepens (2013). Meaning they are words that are historically from same source with shared etymological background. Costa et al (2000) view it as range of identical word across language. Li, & Gollan, (2018) words that shares meaning and forms as well as identical phonology and orthography. Cognate are easily identified and distinguished by regularities of the sound changes in a lexical item.

Dialect: The world book Encyclopaedia volume five (five) sees dialects as; Variation in language used by a particular group of speakers which indicates that, there is a form of a language that, speakers of the dialects do not follow. Dialects involves differences in pronunciation and vocabulary, similarly Newton (1972) further affirms that Dialect is consequences of historic changes, acting on an originally uniform language, while chamber and Trudgill (1974) viewed it as; Erroneous deviation and aberration of correct or standard

language. This research viewed dialect as unconscious alteration, deletion, assimilation and transposition of some sounds from the lexicon of the proto language.

Dia-system: is a framework that is used for comparing and establishing a degree of relationship or differences by adopting lexicostatistics Abubakar (1983) it investigates phonological variables inherent in two or more dialects of the same language by examining utterances and pronunciation whereby the same words are aligned and compared.

Language: Bowen (2009) defined language as; ‘Symbolization of thought, it is a learnt code or system of rules that enable human to communicate ideas and express wants and needs, reading, writing, gesturing and speaking are all forms of a language. Chomsky (1957) sees language in form of performance which indicates the production of actual sentences use in real life situation which includes; speaking by means of pronouncing all forms of discourse.

Variation: Variation is typically the vehicle of language change Trask (2005). Variation is seen in two ways; The casual variation which effect only the linguistic item and, the systematic variation affects language in a more fundamental way. phonological variation is a situation where by two or more words that have the same spellings and meaning are pronounced differently for instance in Kuteb language; ‘Three’ [ita] [itar] [itae] likewise, there are diverse way to call the same thing/concept Fog [ku:bum] [mbuk] [ita:zu] all the three words means and refers to the same thing, but their differences is as a result of some variations.

2.2 Empirical studies

Ahmad and Mohammed (2022) studied three dialects of Hausa language. Hausa is a Nigerian language which spread across many African countries. It is the largest member of the Chadic language family of Afro-asiatic phylum. The grammatical, lexical and phonological divergence of Sokoto, Kano and Katsina dialects are understandable to all speakers of the three dialects as investigated by the researchers, which signified they are mutually intelligible. Data was collected through large corpora of digitized spoken dialect data, thus making the research easier, comprehensive and authentic source of evidence. The lexical items considered was based on six categories which includes; family/matrimonial, Naming and rearing animals’ Health/ sickness, environment /geographical areas, trading, sewing/clothing. Regardless of the variation noticed in the three Hausa dialects, they remained mutually intelligible and recognized as different dialect of Hausa language. Studies on Hausa language started, by Koelle as far back as 1854 to present day. However, Hausa language is the oldest written language known in west Africa. Lexicostatistics is dynamic in Hausa language studies which enhances rigorous and modern procedures of investigation on varieties of Hausa dialects as such their data were stored inform of corpus to meet up with modern digital trend. These enabled Ahmad and Mohammed (2022) to adopt a modern, advanced and simplified technique which enhances their analysis. The lexical items employed in their research is based on six binary categorizations of noun. Both researches adopted descriptive method and lexicostatistics in their analysis, but this research investigates an indigenous dialect of Kuteb language while Ahmad examines the dialects of standard Hausa language. our data were collected through primary source and four hundred Swadesh word list while their data was readily stored in form of digitalized corpus, similarly investigation on Kuteb language was also conducted by Koelle almost the same period but not as detailed as that of Hausa language.

Onouha, and Ezeudo. (2022) conducted a lexicostatistics analysis of standard Igbo language and Achia dialect by using one hundred words checklist culled from Swadesh (1955). Simple elicitation method was used for data collection, oral interview and telephone calls to determine Achi equivalent from Achi native speakers. The percentage cognate of lexical items in both varieties identified both differences and similarities but the later exhibit 87% which depict high

level of mutual intelligibility between standard Igbo and Achi dialect which therefore established the finding that; Achi dialect was a variety of Igbo language. Onouha and Ezeudo (2022) analyses only one hundred lexicons from Swadesh wordlist. In this research also one hundred Swadesh words were considered and analysed. Unlike Onouha and Ezeudo there was no telephone contact with respondents. It was easier to have a physical session/contact with the respondents because, most of them are peasant, so they are readily available moreover, some of the research areas are susceptible to poor tele- communication network, which could retard telephone calls. However, both researches equally adopt lexicostatistics for their analysis of data and the percentage of similarities in Kuteb dialects is 97% which is higher than standard Igbo and Achia dialect as investigated by Onouha and Ezeudo.

Onwukwe, and Ndimele, (2016) Lexicostatistics analysis was focused on Ibeme. Ibeme is a clan, assumed to be a patois of Ngwa dialect in Obi-Ngwa local government area of Abia State Nigeria. One hundred lexical items from Swadesh wordlist were adopted for the research. Introspection was utilized in collection of data from native speakers. Result of the investigation verified ethnographic description, phonemic and morphological variations. The research finding has proofs Ibeme as a separate dialect which annulled earlier assumption by Oluikpe (1979). Therefore, Ibeme was not a patois of Ngwa, both the lexicostatistics and Ethnographic results identified Ibeme as a separate dialect area. Oluikpe's research in 1979 was able to bring into cognizance that; linguistic feature of Ibeme have developed to patois of Ngwa dialect but, Onwukwe and Ndimela (2016) debunked such earlier findings, this research did not delve into such findings rather it focused principally to investigate the dialects of Kuteb as different styles of the same language or otherwise. Both researches utilize only one hundred Swadesh wordlist and lexico- statistics for their analysis. Ogbeifun, & Taiwo, (2019) conducted research on Usen language and adopted lexicostatistics in the analysis of data. Usen language speakers were small community that inhabit Ovia south-west local government area of Edo State in Nigeria. It has been observed that the Usen language is mutually intelligible to Yoruba language rather than the Edoid language of the community in which it occupy, as well as the other neighbouring language, these triggered the need for the research in order to validate the contention if Usen language was a dialect of either Yoruba or Edo language or it has evolved to form a new language of its own, conversely the research was tailored toward finding the linguistics relatedness of the languages investigated in order to determine the linguistic status of Usen language, The finding situates Usen as a dialect of Yoruba Language. Ogbeifun, & Taiwo, (2019) investigation was able to add up to linguistic knowledge that geographical boundaries does not constrain mutual intelligibility. Usen dialect is mutually intelligible to Yoruba language rather than Edo language that it was earlier on classified as. The findings designated Usen as a dialect of Yoruba language which has perhaps migrated and occupied Edoid linguistic area and resist changes by conforming to the linguistic feature of its proto language, which is Yoruba language. More contained in this review is both results indicate high degree of homogeneity which indicates they are mutually intelligible, in the same vein each research adopts descriptive methods and Lexicostatistics, and this research does not investigate different language rather, it investigated different dialects of the same language

Aja, Ngozi, Nwabia & Onu (2018) steered a lexicostatistics survey of speech varieties of four Afikpo- Igbo dialects, to divulge the multilingual condition in Nigeria and diaspora. Data were collected from twenty respondents from the four varieties. Result of the study illustrated variation was prominent on accent and it exhibited a high degree of endangerment from Afikpo in diaspora and therefore recommended revitalization. Although Kuteb language tend to have some of its' speaker across other international geographical boundaries, but the point of departure is that; this research is domesticated while the research of Aja *et al* (2018) investigated Afikpo- Igbo dialect speakers in diaspora, equally this research also espoused one hundred Swadesh lexical items, both researches adopted lexicostatistics for their analysis and,

demonstrated homogenous relatedness which identified them as different style of the same proto language meaning different dialects of the same language, in contrast, the analysis of this research was in two phases, all the one hundred Swadesh lexical items were aligned, analysed and categorized based on seven phonological process before, the application of Lexico-statistic for the final analysis, so far no research have been conducted on the Kuteb language with the aim of investigating their lexical homogeneity and contrastive feature by using Lexicostatistic.

2.3 Theoretical framework

Turning to the relevant theory this research adopts Lexicostatistics and Labov variationist theory. Lexicostatistics theory was propounded by Morris Swadesh in 1950s as part of his contribution to historic linguistics and comparative philology. It is the underpinning theory of this research, and one of the major theories used in comparative linguistics and dialect studies, to determine the degree of relationships among language through comparison. It is a scientific and quantitative method of measuring linguistic relationship among speech communities. In order to augment to comparative philologist that languages that shares common ancestry tend to possess similar lexical items known as Cognate. Within this background he developed a list of basic vocabulary famously called the 'Swadesh Wordlist'

The theory henge on some important assumptions that basic vocabulary such as slangs and technical vocabularies changes slowly and gradually over time, while core lexical items remain stable within speech communities because of frequent usage. And the dialects or language sharing high percentage of similarities are likely to might have evolved from a common linguistic source. He further assumes that lexical comparison could be used to determine linguistics distance and patterns of language divergence over time through statistical calculation of shared vocabulary percentage, thus the theory develops a systematic and measurable methods of comparing dialect and language. The weakness of the theory lies in it inability to incorporate sociocultural and historic factors influencing language change by focusing mainly on vocabularies, ignoring borrowing from other neigh boring languages as well as syntax and grammar of a language. Despite the criticism lexicostatistic theory provide the most appropriate theoretical and methodological frame work for the present study hence it employs comparative lexical analysis to calculate the percentage of similarities and differences of the lexical items and explore the degree of mutual intelligibility.

Sociolinguistic variationist theory was developed by William Labov in 1972 He neither view language as accidental nor random, rather to him language is inherent variable socially structured and meaningful. He demonstrated that differences in pronunciation, vocabulary and language usage is closely related to factors such as age, social class, occupation, prestige, class, ethnicity, gender and geographical location, as such language variation reflects social identity and relationship. He further emphasised on the role identity, cultural affiliation in dialect variation. One Of the criticisms of the theory is that it cannot accommodate all social variables because they are too complex to measure accurately, this makes it difficult to determine the precise extent to which social variables contribute to linguistic variables. The theory cannot account adequately for historic origin and genetics relationship and fucus heavily on spoken language and urban communities paying less attention to rural and endangered dialects and languages. Never the less the study accommodates the theory because lexical variation among Kuteb dialects is influenced by social interaction and geographical distribution of its' speakers. It also reflects identity and cultural affiliation among Kuteb speakers.

3. Methodology

The research employs Quasi and purposive research design, because the research comprises of both qualitative and quantitative data while the qualitative data appeals to descriptive analysis, quantitative data assumes statistics analysis. The population size of this research is three

hundred (300). One hundred (100) respondent from each dialect. Ten percent (10%) of each population size was considered, giving a total of thirty (30) person(s). Ten (10) individuals as interviewees representing each dialect.

4. Results and Discussion

Below are the 100 Swadesh wordlists and their transcription in the three dialects of Kuteb language.

S/N	GLOSS	ARUFU	ASKEAN	ARUBUR
1.	All	[pĒtag]	[pĒta:]	[pĒta:k]
2.	And	[tæ]	[tæ]	[ti:]
3.	Animal	[ɪmbjɪa]	[tʃɪn]	[ɪjāk]
4.	Ashes	[ɪtoŋ]	[Ntoŋ]	[kitoŋ]
5.	At	[tā]	[ti:]	[Nē]
6.	Back	[ɪsɪm]	[sɪm]	[kā:sɪm]
7.	Bad	[bēb]	[ti:b:]	[jānbē]
8.	Bark	[ɪtʃjūk]	[tʃa:tʃā]	[uru:tʃa:]
9.	Because	[ɪkɪa]	[kɪarā]	[rākɪa]
10.	Belly	[rɪfuā]	[tʃu:]	[ʃu:]
11.	Big	[kuk:]	[Njá:]	[kōu]
12.	Bird	[ku:n]	[tūn]	[Nnū:n]
13.	Bite	[kūb]	[jēr]	[kūb]
14.	Black	[tɪbjɪr]	[d3ūr]	[tɪd3ūr]
15.	Blood	[ɪnjē]	[nji]	[nji]
16.	Blow	[ūfūm]	[fu:]	[ku:m]
17.	Bone	[ku:kub]	[ku:b]	[ku:b]
18.	Breathe	[ija]	[njæn]	[njæn]
19.	Burn	[twitæn]	[twɪn]	[twɪn]
20.	Child	[mbaɪ]	[mbá:]	[mbá:]
21.	Cloud	[ɪmbjæ]	[ɪ3wɪ]	[ɪ:ta:d3]ɔ
22.	Cold	[d3ɪm]	[kū:sɪr]	[d3ɪmsɪr]
	GLOSS	ARUFU	ASKEAN	ARUBUR
23.	Count	[puān]	[pwɪn]	[pwɪn]
24.	Cut	[jiār]	[jɪar]	[jɪar]
25.	Day	[ūsɪr]	[tjūr]	[tjɪr]
26.	Die	[twu:]	[tsuí]	[tju:]
27.	Dig	[bu:m]	[mu:m]	[mu:m]
28.	Dirty	[kūata:]	[kāutā]	[d3ɪ:b]
29.	Dog	[mbærɪp]	[mbērɪpuā]	[mbēpu]
30.	Drink	[Juá]	[Juá]	[Juá]
31.	Dry	[wɔm]	[wɔm]	[wɔm]
32.	Dull	[ka:mkɪ]	[d3jisu:]	[tʃu: ɲsū]
33.	Dust	[ibuŋ]	[ūbu:m]	[ūbu:m]
34.	Ear	[kūto n]	[toŋ]	[toŋ]
35.	Earth	[kɪbán]	[tɪŋsē]	[bim]
36.	Eat	[tʃ:]	[tʃi:]	[tʃi:]
37.	Egg	[kí:]	[kí:]	[kí:]
	GLOSS	ARUFU	ASKEAN	ARUBUR
38.	Eyes	[kūd3ɪb]	[jɪb]	[d3ɪ:b]
39.	Fail	[d3wūnsɪ]	[kænsɪ]	[d3wéns:]
40.	Far	[rūrúán]	[rwɪn]	[rwɪn]

41.	Fat	[kīm]	[kīm]	[nJa:n]
42.	Father	[i:lǝ]	[tʌdʒo]	[i:tē]
43.	Fear	[kǝfù:]	[tsīn]	[Jis]
44.	Feather	[kú:sin]	[sīn]	[tīn]
45.	Few	[pa:n]	[pætā:n]	[bɔn]
46.	Fight	[pjēn]	[kù:]	[kù:]
47.	Fire	[ūrúa]	[ūrúa]	[rūa]
48.	Fish	[úwɔk]	[úwɔk]	[wɔk]
49.	Five	[i:tʃɔŋ]	[tʃɔŋ]	[tʃɔŋ]
50.	Float	[ná:tsúa]	[pɔŋ]	[pɔŋ]
51.	Flow	[pɔŋtʃúa]	[pú:pɔŋ]	[pú:pɔŋ]
52.	Flower	[ɪdʒú:g]	[dʒwɔk]	[mbóumdʒúb]
53.	Fly	[mwù:n]	[pein]	[jǝ ŋ]
	GLOSS	ARUFU	ASKEAN	ARUBUR
54.	Fog	[kù:būm]	[mbūŋ]	[ita:zū:]
55.	Foot	[úwækūfkin]	[wæfīn]	[skēpfīn]
56.	Four	[ɪndʒē]	[ndʒē]	[ndʒē]
57.	Fruit	[úwæn]	[unwætaku:]	[nJa:taku:]
58.	Give	[nda]	[sa:n am]	[nda]
59.	Good	[nja:ŋ]	[nja: ŋ]	[nja:m]
60.	Grass	[i:ru:m]	[rwūm]	[rwūm]
61.	Green	[i:rū:mti:s'u:]	[rwu:mti:s'u:]	[rwu: mtis'u:b]
62.	Guts	[kǝf' iže]	[sa:m]	[ifua]
63.	Hair	[ri:ki'n]	[r' i:ki'n]	[ndʒu:kr'n]
64.	Hand	[kúrdʒɔ]	[dʒɔ]	[dʒɔ]
65.	He	[úw'u:]	[wū:]	[wū:]
66.	Head	[rs'u]	[sū:]	[sū:]
67.	Hear	[pkīn]	[fkīn]	[fi'n]
68.	Heart	[ù:tɔb]	[tɔb]	[tɔb]
69.	Heavy	[rɔb]	[ruwɔb]	[ruwɔb]
	GLOSS	ARUFU	ASKEAN	ARUBUR
70.	Here	[l:ki']	[kēi]	[kēi]
71.	Hit	[kɔr]	[ku'm]	[dʒɪw]
72.	Hold	[je'su:]	[j'eka:n]	[jèfi:]
73.	How	[ndem'un]	[nmun]	[nmun]
74.	Hunt	[kja:ŋfua]	[kja:ŋtu'r]	[kja:nfúatúr]
75.	Husband	[ubæn']	[bæe m]	[ndefias k]
76.	I	[à:m'ɪ]	[m'ɪ]	[a:m'ɪ]
77.	Ice	[ú:kon]	[ú:kon]	[ù:kon]
78.	If	[i:kībà]	[fūa]	[nna:]
79.	In	[u'wæ]	[uw'æ]	[w̄æ]
80.	Kill	[wīn]	[wīn]	[wīn]
81.	Know	[nuŋ]	[nūn]	[nūn]
82.	Lake	[l:nj:ŋ]	[l:nj:ŋ]	[būŋku'a]
83.	Laugh	[skæn]	[skein]	[kja'in]
84.	Leaf	[kūskīŋskiŋ]	[tsin]	[tsin]

85.	Leftside	[kūnd ³ fe ⁻]	[d ³ fe ⁻]	[d ³ ju ⁻ : fe ⁻]
86.	Leg	[hu ⁻ : pj: n]	[ku ⁻ : fskīn]	[fj: .n]
87.	Lie	[i ⁻ : rikoŋ]	[ti ⁻ : koŋ]	[r: fj: n]
88.	Live	[som]	[som]	[som]
89.	Liver	[dūbw'æ]	[kūd ⁻ wæ']	[ndu' ab]
90.	Long	[rwīn]	[wæ ⁻]	[wæ ⁻]
91.	Louse	[īsu ⁻ : m]	[ūsu ⁻ : m]	[ūsu ⁻ : m]
92.	Man	[u'ndē]	[a ⁻ : dē]	[ndē]
93.	Meat	[mbj ⁻ æ]	[d ³ w ⁻ æ]	[d ³ w ⁻ æ]
94.	Many	[kokwo]	[kūko]	[d ³ j: n]
95.	Mother	[i ⁻ : ja ⁻ :]	[i ⁻ : ja ⁻ :]	[ja ⁻ : m]
96.	Mountain	[rīkwān]	[kwīn]	[kwīn]
97.	Mouth	[ntsū]	[n ³ ū]	[nd ³ ū]
98.	Name	[rīnji ⁻]	[nji ⁻]	[nji ⁻]
99.	Narrow	[īti ⁻ : m]	[nji ⁻ nj: n]	[fjáfjā]
100.	Narrow	[iti: m]	[njini: n]	[fjáfjā]

The data is to be analysed in two (2) phases in the first stage descriptive data were analysed based on seven (7) phonological processes which include; Aphesis is a phonological process in which a segment is lost in the initial position Carlton (2017) Syncope identifies loss of sound at the medial segment Ladan and Abubakar (2020) Apocope Ladan and Abubakar (2020) postulates it as elision of one or more sounds at the final position of a word. Buckley, (2011) defines Metathesis as transposition of sounds or syllable within a word. Total cognate; lexical items remain the same in all dialect because they are cognate meaning words of the same origin and ancestry. Sound Correspondence; are set of cognates that corresponds in related dialects. Non cognate the lexical items are completely different.

4.1 Apherensis

Aphesis is a phonological process in which a segment is lost from initial position.

Gloss	Arufu	Askean	Arubur
Ashes	[itəŋ]	[ntəŋ]	[kitəŋ]
Back	[isim]	[sim]	[kə: sim]
Bad	[beb]	[ti: bi]	[jaŋbe]
Because	[ikia]	[kia: rə]	[rəkia]
Belly	[risuə]	[tʃu]	[su:]
Big	[kukə:]	[njə]	[kou]
Bird	[ku: nʌŋ]	[tʃun]	[nnū: n]
Black	[tibjir]	[dzur]	[tidzur]
Bone	[kú: kub]	[kū: b]	[kū: b]
Breath	[ijəŋ]	[njæŋ]	[njæŋ]
Cold	[dzim]	[kú: sir]	[dzimsir]
Come	[zú: bʌ]	[bə:]	[rú: bʌ]
Cloud	[imbjæ]	[mba:]	[mba:]
Day	[usir]	[tjur]	[tjir]
Dust	[ibuŋ]	[ubu: m]	[ubu: m]
Ear	[kútəŋ]	[təŋ]	[təŋ]
Eyes	[kúdzib]	[jib]	[dzi:]
Far	[ruruən]	[rwin]	[rwin]
Feather	[kú: sʌŋ]	[sin]	[tʃin]
Fire	[uruə]	[uruə]	[ruə]
Fish	[uwʌk]	[uwək]	[wək]

Five	[i:tʃɔŋ]	[tʃɔŋ]	[tʃɔŋ]
Four	[indʒā]	[ndʒə]	[ndʒə]
Give	[ndʌ]	[sā:nʌm]	[ndʌ]
Grass	[i:rū:m]	[rwū:m]	[rwū:m]
Green	[i:rū:mti:sū]	[rwū:mti:sū:b]	[rwū:mti:sū:b]
Hair	[i:kin]	[ri:kin]	[ndʒu:kin]
Hand	[kurdʒə]	[dʒə]	[dʒə]
He	[ú:wū:]	[wū]	[wū]
Head	[risu]	[sū]	[sū]
Hearth	[ú:təb]	[təb]	[təb]
How	[ndemuŋ]	[nmuŋ]	[nmuŋ]
I	[a:mi]	[mi:]	[ami:]
In	[uwæ]	[uwæ]	[wæ]
Leaf	[kúskingskin]	[tsin]	[tʃin]
Leftside	[kundʒəfe]	[dʒəfe]	[dʒdu:fe]
Leg	[kú:pjin]	[kú:fskin]	[fji:n]
Lie	[i:rikəŋ]	[ti:kəŋ]	[rifjin]
Liver	[dubwe]	[kudwæ]	[nduab]
Louse	[usu:m]	[usu:m]	[su:m]
Man	[undə]	[a:ndə]	[ndə]
Meat	[mbjæ]	[dʒwæ]	[dʒwæ]
Mother	[ijä:]	[ijä:]	[ja:m]
Mountain	[rikwən]	[kwin]	[kwin]
Name	[rinji]	[nji]	[nji]

Syncope

Gloss	Arufu	Askean	Arubur
How	[ndemuŋ]	[nmuŋ]	[nmuŋ]
Hunt	[kja:ŋfua]	[kja:ŋtur]	[kja:ŋfúətur]
Cloud	[imbjæ]	[izwi]	[itadʒwi]
Few	[pain]	[pæta:ŋ]	[bən]
Flow	[pəŋtʃua]	[pupəŋ]	[pupəŋ]
Many	[kəkwo]	[kukə]	[dʒwi:n]

Apocopation

Gloss	Arufu	Askean	Arubur
Fruit	[üwēn]	[nwētəkū]	[njə:təkū]
Fly	[mwu:m]	[pein]	[jiji:ŋ]
Few	[pā:ŋ]	[pæta:ŋ]	[bən]
Fog	[kú:bum]	[mbuk]	[i:tá:zú:]
Cold	[dʒim]	[kú:sir]	[dʒimsir]
Cloud	[imbjæ]	[mba:]	[mba:]
Liver	[dubwe]	[kudwæ]	[nduab]
Mother	[i:já:]	[i:já:]	[já:m]
Many	[k kw]	[kuk]	[dʒim]

Total Cognant

Gloss	Arufu	Askean	Arubur
Cut	[jia]	[jia]	[jia]
Drink	[jua]	[jua]	[jua]
Dry	[wəm]	[wəm]	[wəm]
Eat	[tʃi:]	[tʃi:]	[tʃi:]
Egg	[ki:]	[ki:]	[ki:]

Ice	[u:kəŋ]	[u:kəŋ]	[u:kəŋ]
Kill	[win]	[win]	[win]
Live	[səm]	[səm]	[səm]
Know	[nuŋ]	[nuŋ]	[nuŋ]
Fat	[kim]	[kim]	[kim]

Non Cognant

Gloss	Arufu	Askean	Arubur
Fly	[mwu:m]	[pein]	[jiji:ŋ]
Gut	[kiʃize]	[sa:m]	[ifua]
If	[i:kiba]	[fua]	[nna]

Metathesis

Gloss	Arufu	Askean	Arubur
Because	[ikia]	[kiara]	[rakia]

Sound Correspondence

Gloss	Arufu	Askean	Arubur	S/Corr.
Fruit	[üWēn]	[nWētəkū]	[njə:təkū]	/æ/, /ə:/
Laugh	[skæn]	[skə:n]	[kja:n]	/æ/, /ə:/
And	[tæ]	[tae]	[ti:]	/æ/, /i:/
Come	[ʒú:bΛ]	[bə:]	[rú:bΛ]	/Λ/, /ə:/
Dry	[wΛm]	[wəm]	[wəm]	/Λ/, /ə:/
Fish	[uwΛk]	[uwək]	wək]	/Λ/, /ə:/
Left side	[kundʒəfe]	[dʒəfe]	[dʒə:fe]	/ə/, /ə:/
Bird	[kú:nΛŋ]	[tʃun]	[nnú:n]	/n/, /ŋ/
Dust	[lbun]	[ubú:m]	[ubú:m]	/ŋ/m,/
Good	[njə:ŋ]	[njə:ŋ]	[njə:m]	/ŋ/, /m/
Fly	[pjəmpər]	[pjəpi:r]	[ΛjΛŋ]	/p/, /r/
Near	[pΛin]	[fkin]	[fin]	/p/, /f/
Eyes	[kūdʒib]	[jib]	[dʒi:b]	/j/, /dʒ/
Black	[ti:bjir]	[dʒur]	[tidʒur]	/dʒ/, /bʒ/
Burn	[twitæn]	[twin]	[twin]	/æ/, /i:/
Dog	[mbærɪpΛ]	[mberipua]	[mbepü]	/æ/, /e/
Hit	[kər]	[kum]	[dʒiw]	/ə/, /u/
Dull	[kə:mki]	[dʒi:sú:]	[tsu:ŋsu]	/u:/, /u/
Hold	[jəsú:]	[jəkə:n]	[jəʃi:]	/u:/, /i:/
Head	[risu]	[sú:]	[sú:]	/u/, /u:/
Fall	[dʒumsi]	kænsi]	[dʒwənsi]	/u/, /ə/
Count	[puən]	[Pwin]	[Pwin]	/uə /, /i/
Ashes	[itəŋ]	[ntəŋ]	[kitəŋ]	/i/, /n/
Four	[indʒe]	[ndʒe]	[ndʒe]	/i/, /n/
Day	[usir]	[tʃur]	[tʃir]	/i/, /u/
Here	[i:ki]	[kei]	[kei]	/i/, /ei/
At	[ta]	[ti:]	[ne:]	/a/, /i:/
Bark	[itʃjuk]	[tʃa:tʃa]	[urutʃa]	/tʃ/, /u:/
Die	[twu:]	[tʃu]	[tju:]	/u/, /u:/
Dig	[bu:m]	[mu:m]	[mu:m]	/b/, /m/
Dirty	[kuata]	[kauta]	[dʒi:p]	/ua/, /au/
Fall	[dʒunsi:]	[kænsi]	[dʒwensi:]	/k/, /dʒ/
Hear	[pkin]	[fken]	[fin]	/p/, /f/
Liver	[dubwe]	[kudwæ]	[nduab]	/d/, /k/

4.2 Statistics Analysis of Data

Analysis of various degrees of similarity and difference were conducted with a view of observing the degree of homogeneities within the dialects and to determine the time depth of their separation.

The number of similarities in the three dialects involved in this study is 93.

The number of non-cognate is 03.

Thus, ratio of similarity is:

$$R = (97/100) = 97:100 = 0.97$$

$$\% \text{ of similarities} = R^{n-1} \times 100$$

$$= (97/100)^{3-1} \times 100 = (0.97)^2 \times 100$$

$$= (0.97)^2 \times 100$$

$$= 0.97 \times 100$$

$$= 97\%.$$

4.3 Discussion of Findings

From the percentage of similarities which is 97%, we deduce that there is an impressive degree of homogeneity within the three dialects of Kuteb language. For the sake of our analysis, it is interesting to determine the degree of similarities between the dialects. The result of the analysis proved the three dialects of Kuteb investigated are not different languages, because they are mutually intelligible. It appeared more clearly that, uniformity is evident based on;

1 Ratio of similarities.

2 Percentage of similarities.

The ratio of similarities between the three dialects is 0.99, and the percentage of similarities is 97%. However, based on the analysis largely received, the three dialects of Kuteb language investigated so far, are at a particular point in time a uniform language, and they are also mutually intelligible. We therefore concluded that, they are not different languages at all, rather they are different dialects of the same language. All these laudable results were achieved through the application of Swadesh (1955) theory of lexicostatistics because it provides a systematic method through which scholars could compare basic vocabulary items and estimate historic relationship, divergence and development of a language over time. Swadesh, proposed the examining of basic vocabulary items famously known as the 'Swadesh wordlist' which explains dialects and languages that have high percentage of similarities as likely to evolve from a common linguistic source, through statistics calculation and shared vocabulary percentage, it was the same Swadesh wordlist that was utilised in this study, by translating it into Kuteb language and the utterances of the interviewers were transcribed using phonetic transcription of William (1984) and microsoft supplement to account for the lexical similarities and differences. Lexicostatistics was adopted as the underpinning theory of this research because it directly addresses the core objectives of this study. It enables this research to calculate the percentage of mutual intelligibility as well as the closeness and remoteness among the dialect of kuteb language, which eventually could develop the mapping out of the Isogloss of Kuteb language. After the classification of the one hundred (100) Swadesh word list into seven phonological processes, Lexicostatistic was adopted, and it provided a systematic measurable method of comparing the percentage similarities. Likewise lexicostatistic measurement enables this research to postulate partial cognate by which the percentage of lexical differences was obtained. In addition, Lexicostatistics provided scientific framework, empirical evidence and practical method of recording vocabulary items and speech pattern from native speakers to identify dialectal convergence and divergence of Kuteb language. The theory also assists in determining the historic and genetics relationship of dialects of Kuteb language as different style of the same proto language and mutually intelligible. The theory

also added to the significance of the study as it fills the yawning academic gap due to lack of research in this area of Kuteb language, because the outcome will integrate research and contribute to the documentation process of Kuteb language. The transcription of lexical items will assist lexicographers in compilation of bilingual dictionaries, orthographies, and literacy manuals of Kuteb language.

Main while, the sociolinguistics variation theory by Labov (1972) it is one of the most influential theories of dialect study, and highly relevant to the present study, because Labov hold the view that geographical location contributes significantly to dialect formation and linguistic variation, this was consequently identified in this study based on differences in percentage similarities, between Arufu and Asquean is higher than Arufu and Arubur based on location and proximity, Asquan is closer to Arufu than Arubur. The findings of the study resonate with sociolinguistic theory, that lexical variation among Kuteb dialect is influenced by social interaction and geographical distribution of the speakers. The theory complements the lexicostatistic theory by identifying sociocultural and geographical factors are some of the variables responsible for the hypothesis of relocation and other observable lexical differences in Kuteb dialects. The role of age, gender and status also influence the choice of the focal group of the study. The sociolinguistic theory further inclined to language as not merely a tool of communication but also a symbol of cultural identity and group affiliation, whereby the study examines how Kuteb speech communities differ linguistically, similarly the sociolinguistic findings identified the dialects as different style of Kuteb language. They have not evolved into a separate language, because they remained mutually intelligible.

5. Conclusion

All the gross and transcribed lexical items of the three Kuteb dialects investigated were presented. Attempt was made to compare, analyse and also advocate on determining the degree of lexical relationship and differences. The analysis pursued a simple theoretical calculation of Lexicostatistics which shows, a strong claim based on the Lexico-statistics calculation that simultaneously identified, high degree of similarities among the three dialects submitted to the fact that; Dialects of Kuteb language are mutually intelligible and originally a uniform language (meaning the same language). because the element of similarities and differences occurs as a result of loss of segment either in the initial, medial, final position or when a sound is transposed, and in some instances, it is noticeable in form of sound correspondence, a phonological process whereby sounds are substituted. Similarly, there are some lexical items that remained the same in all the varieties investigated and, they are referred to as total cognate therefore, the findings of this research identify the dialects of Kuteb language as different style of the same language and concludes that; they are mutually intelligible and have not evolve into a separate language.

5.1 Contribution to Knowledge

The study contributes significantly to language teaching and educational development because it provides clearer understanding of vocabulary usage across Dialects of Kuteb language. Likewise, knowledge of lexical similarities and differences is useful for developing language instructional materials, bilingual dictionaries, orthographies, literacy manual, and curriculum content for Kuteb language education.

The statistical calculation of vocabulary percentage of the study deduced the estimate of the shared closeness and remoteness of the dialectal relationship of Kuteb language. It further illustrates the phonological, sociolinguistic, and historic factors that impelled lexical variation in Kuteb language.

The study further contributes to the phonological and linguistic distances and pattern of dialect divergence over time in Kuteb language. It also contributes to the academic documentation and

historic preservation of the Kuteb language by providing empirical linguistic data that may support future language planning and educational initiatives

Recommendations.

- i. Stake holders should implement sponsorship on researches within the Benue Congo family to assist educational sectors and government towards the standardisation of indigenous languages in Taraba state and minority languages in Nigeria.
- ii. This research will add up to existing knowledge of Kuteb language when adequately considered it will enhance the research on Kuteb Isogloss which could easily determine the classification of dialects of Kuteb language as it equally fill in an existing gap in a wide area of linguistics study.
- iii. Student/scholars of linguistics should be
- iv. encouraging to be critically engage in the analysis of languages within their immediate environment to linguistics limelight.

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