

A contrastive analysis of deletion, insertion and voicing as variants in Gudi and Yaya dialects of the Ngamo language

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Abstract

This paper discusses deletion, insertion and voicing as variants in Gudi and Yaya dialects of Ngamo language spoken in some areas of Bauchi, Gombe and Yobe States. The theoretical framework is based on generative dialectology which involves the application of concepts and findings from generative phonology to the description and comparison of different dialects. The paper aims at exploring some variations that are phonologically motivated in Ngamo dialects. Structured interview and personal observations are used as methods of data collection for the research. Two (2) respondents were interviewed in five (5) villages each of Gudi and Dozi districts to represent Gudi and Yaya dialects respectively, using quota sampling technique. The result of the analysis reveals that aphaeresis, syncope and apocope served as variants depending on the position of deletion occurrence in a word. Insertion of glottal plosive /ʔ/ in between the vowels and word final syllable in Yaya dialect served as another variant. Lastly, voicing of voiceless sounds /s, p, k/ become voiced sounds /z, b, g/ served as variants in Gudi and Yaya dialects of Ngamo language respectively. Issues on underline structures and phonological rules of the processes were also discussed as evidences of the variations between the two dialects. In conclusion, this study compares and analyses the Gudi and Yaya dialects of Ngamo with the aim of identifying their phonological variations.

Keywords: Phonology, deletion, insertion, voice, variant, dialect, Ngamo.

Introduction

Ngamo is a member of Bole-Tangale group of the West Chadic ‘A’ sub-branch of Chadic Languages along with Bole, Karekare and Maga (Newman 1977). There are also number of languages of the same group spoken to the south of Yobe state, most notably, Tangale and Kanakuru, which have been fairly well described (Kidida 1985, Jungraithmayr 1991, Newman 1974). The language is spoken in the area to the south and west of Potiskum, the largest city in Yobe State (Schuh, 2005b).

There are two major dialects of Ngamo namely Gudi and Yaya. The dialects are different enough from each other in phonology and lexicon that they border on being separate languages, but there is fair mutual intelligibility which justifies grouping them as dialects of one language (Gashinge, Janga-Dole & Goge, 2004: iii). Apart from the above, there are also two dialects namely Janga and Dotto which are nearly related to the Gudi dialects. The Gudi Ngamo is relatively uniform group which consists of several clans namely, Shula, Lele, Kushi, Mele, Debo, Ziu, Ngede, Gudo, and many others. Initially, an Ngamo ancient settlement was on the Gudi hill and other hills of Gana, Lewe, Gamari, Dozi, and Bara etc. Later they moved down to the places where they live today under Fika, Fune and Gulani Local Government Areas of Yobe state. Some are under Dukku and Nafada of Gombe State. Few of them are under Darazo Local Government Area of Bauchi state.

Although information on Chadic languages of Yobe State has increased in the last few years, our linguistic knowledge on Ngamo today comes almost entirely from works of (Schuh 1978, 1982, 1984, 2001, 2003a, 2003b, 2004, 2005a, 2005b, 2005c, etc.). Apart from these works yet there is no other linguistic researches published on the language except some few copies of comparative studies (Gashinge 1993) (Samuel 2007) (Zulyadaini 2008) (Gadaka 2009, 2015). Therefore, the principal aim of this research is to investigate and examine deletion, insertion and voicing as variants in Gudi and Yaya dialects of Ngamo language.

Literature review

Gashinge et al. (2004) compile *Ngamo – English – Hausa Dictionary* based on the two major varieties of Ngamo: Gudi Ngamo and Yaya Ngamo, does not concern about Dotto Ngamo and Janga Ngamo being that the former two varieties are different enough from each other in phonology, morphology and lexical structure that they deserve being separate

languages, but there is fair mutual intelligibility, which justifies grouping them as dialects of one language. Every entry was marked with [G] for a Gudi form and [Y] for a Yaya form whereas forms for both dialects appear in a lead entry. The spelling system used the same as Hausa for the most part. Only that one slight difference was that the Standard Hausa writing system does not use the letter ‘p’ but Ngamo writing system contains [p] as in *kèpdi* / *kèpdi* ‘hoe handle’ in Gudi and Yaya dialects respectively. The present research observes the phonological variations between Gudi and Yaya dialects of Ngamo language not the lexical comparison between Ngamo dialects.

Schuh (2005a) makes an internal reconstruction of the totality extension **t* in Gudi dialect of Ngamo. It was a sample paper made for a linguistic course 110 in the Department of Linguistics, University of California, United States of America. The paper introduced lengthy about Ngamo language. Also discussed Ngamo phonology that the consonant system of Ngamo is straight forward and requires little comment other than to note that NC at the beginning of a word, for example, *ngàrkô* ‘he tied’ is a unit phoneme. Ngamo has distinctive vowel length. Long vowels were written in the paper as double vowels, e.g., *ɔ̀urà* ‘getting down’ with a short ‘u’ Vs. *ɔ̀uurà* ‘dust’ with a long ‘uu’.

The paper provides a direct evidence for reconstruction **-u* as the final vowel for A2 and B verb classes in Yaya dialect form which ends in -V?V rather than -(V)ko. Suggests that the completive marker may have contracted with the final vowel as in:

A2:	<i>*biskú-kò</i>	>	Yaya: <i>biskó?ò</i> ,	Gudi: <i>biskâ</i>
B:	<i>*bàsáa-kò</i>	>	Yaya: <i>bàsáa?à</i> ,	Gudi: <i>bàsâ</i>

That is, the ‘**k*’ of the completive marker weakened to ‘?’ Between vowels, the vowels assimilated and the V?V further contracted to a single vowel in Gudi. The paper explains the tonal difference in *ngàrkô* Vs *ngárkò*. It proposes a reconstruction **ngàr-t-kò* for a class A1 verb with the Totality Extension **t* like other verbs. It noted that there is part of the completive pattern for all verbs and that show up as the first part of a falling tone on the last syllable of unextended forms such as *ngàrkô* and *bàsâ*. In form with the totality extension like *bàsátkò*, there is an additional syllable with which the H tone can associate alone, and the final syllable bears L rather than falling. In an A1 form with the totality extension, such as the reconstructed **ngàr-’t-kò*, the presence of the totality extension has prevented the tone H from associating with the suffix, thus forcing it to associate with the verb root to give L+H = Raising on the root. In a number of Chadic languages, apparently including

Ngamo, raising tones are not tolerated and are replaced by H. The ‘*t’ of the Totality Extension is deleted to avoid a CCC cluster.

Another work on Ngamo phonology is by Schuh (2005c) focusing on Gudi dialect alone. The paper lays out a description of degemination, compensatory lengthening and gemination in Gudi dialect of Ngamo language. He argues that Ngamo Language has a number of morphophonological configurations that bring constants together across morpheme boundaries. In some cases, these consonantal abutments would result in geminates, but Ngamo strongly disprefers germinate. Degemination has different effects depending on whether the first consonant of the geminate sequence belongs to suffix or to a root. In the former case, degemination is accompanied by compensatory lengthening but in the later germinate becomes a singleton with no change. Hence Ngamo does not allow phonetic germinates when a consonant fully assimilates to a dissimilar consonant. The present study is concerned with the phonological processes of both Gudi and Yaya dialects not phonological processes of Gudi dialects alone. Therefore, Schuh (2005c) cannot be treated here as phonological variation between Gudi and Yaya dialects of Ngamo language.

Research methodology

The sources of data such as personal observations and listening to a radio programme titled: *Rabin Sa'ar Ngamo* on Yobe Broadcasting Corporation Damaturu were used for the study. The materials used in this research came largely from Gashinge et al. (2004). The researchers collected nine hundred (900) wordlist. The research respondents were asked to verify the correctness and appropriateness of the data gathered from the mentioned published material on Ngamo language. The researchers also used textbooks journals, dissertations, internet facilities and thesis on Ngamo language and other language studies on phonology and dialectology to obtain secondary data. Also tape recorder and handset facilities were used to record interviews and discussions as material source of data for the study. The researchers used unstructured interview as a method of data collection for the research. Questions were presented to the respondents in an informal and relaxed atmosphere, where some valid and significant data about variety of Gudi and Yaya Ngamo were gathered. Such questions were presented to the respondents in a face-to-face encounter.

The population of this study comprises of all Ngamo native speakers of northern Bauchi state, southern Yobe state and northern Gombe state of north-eastern Nigeria. Being that it will not be possible to have the responses of the entire population, it has become necessary

to select a sample population from the general population for their representation. Therefore, the research uses twenty (20) native speakers of Ngamo Language in Yobe state as research respondents. See the tables below:

Table 1: Research domain and respondents

Village	Dialect	Respondent	District	Emirate	L.G.	State
Bawayo	Yaya	2	Dozi	Gudi	Fika	Yobe
Gamari	Yaya	2	Dozi	Gudi	Fika	Yobe
Gana	Yaya	2	Dozi	Gudi	Fika	Yobe
Gashinge	Yaya	2	Dozi	Gudi	Fika	Yobe
Kadi	Yaya	2	Dozi	Gudi	Fika	Yobe
Dadfe	Gudi	2	Gudi	Gudi	Fika	Yobe
Falau	Gudi	2	Gudi	Gudi	Fika	Yobe
Garkuwa	Gudi	2	Gudi	Gudi	Fika	Yobe
Gudi	Gudi	2	Gudi	Gudi	Fika	Yobe
Shengile	Gudi	2	Gudi	Gudi	Fika	Yobe
10	2	20	2	1	1	1

The trip to above places has given the researchers the opportunity to make observation and to conduct an interview with Ngamo native speakers on the relevant data with regards to Ngamo dialectal area and Ngamo varieties in their respective destinations. The major aim was data gathering required for the study.

Theoretical framework

The analysis for this paper was based on generative dialectology as a method in synchronic approach which involves the application of concepts and findings from generative phonology to the description and comparison of different dialects. It is based on the two-level approach to phonology which posited (a) underlying form and (b) phonological rule. This technique has the advantage of making it easier to handle two varieties at a time. One problem of generative phonology is how exactly underlying form should look like and how it should be arrived at. An early assumption was that it would be possible to take a base form from one dialect as basic and derive another dialect from it (Chambers and Trudgill, 1998:39-42). This method was adopted by Abubakar (1983) and Bulakarima (1991). Therefore, the researchers feels that it is more suitable to adopt this method as an approach to this research paper.

Data presentation and analysis

The major consonant variations of Gudi and Yaya dialects of Ngamo language discussed here are deletion – aphaeresis, syncope and apocope, insertion I, insertion II, consonant voicing I, consonant voicing II, consonant voicing III. These consonant variations are observed between Gudi and Yaya dialects of Ngamo language in the present research as follows:

Deletion

There are three types of deletion observed in this research paper, depend on the position of its occurrence in a word. The first one occur in a word initial position which technically known as aphaeresis. The second one occur in a word medial position which is known as syncope. The third one occur in a word final position which is known as apocope.

Aphaeresis

One of the processes found to operate in Ngamo dialect variation is aphaeresis. It refers to the loss of a segment from initial position of a word as in example (1) below:

Example 1¹:

	Base Form	Gudi	Yaya	Gloss
a.	/bàabàdĩ/	[bàabàdĩ]	[badĩ]	Morning
b.	/gàabàni/	[gàabàni]	[bàna]	Town
c.	/dʒèedʒèlè/	[dʒèedʒèlè]	[dʒelè]	Potsherd
d.	/k ^w ùk ^w updĩ/	[k ^w ùk ^w updĩ]	[k ^w ûbdĩ]	Small red ants
e.	/làlambà/	[làlambà]	[làmba]	Child
f.	/tàatàrà/	[tàatàrà]	[tarà]	Termite

This phonological process is captured in the following rule:

$$\sigma \longrightarrow \emptyset \quad / \quad \# \text{ —————}$$

¹ Citations are in based on tone marking and vowel length: low tone (è); high tone left unmarked (e); falling tone (è); rising tone (ě); long vowel marked with double of it (ee); while short vowel marked with single of it.

The above rule states that a syllable in Gudi dialect becomes deleted in Yaya dialect of Ngamo language in the environment of word initial position.

Syncope

This is defined as the loss of medial segment in a word. The process operates as a means of variation between Gudi and Yaya dialects of Ngamo language as can be seen in example (2) below:

Example 2:

	Base Form	Gudi	Yaya	Gloss
a.	/gàŋg ^w ò/	[gàŋg ^w ò]	[gàndig ^w ò]	Giant rat
b.	/g ^w òm ^r ò/	[g ^w òm ^r ò]	[g ^w òmbìrò]	Okra
c.	/tòŋlì/	[tòŋlì]	[tong ^w òlì]	Grey hornbill
d.	/fɛŋlɛ/	[fɛŋlɛ]	[fɛŋg ^j ilɛ]	Village name

This phonological process is captured in the following rule:

$$\emptyset \longrightarrow \sigma \left/ \begin{array}{c} +\text{son} \\ +\text{voice} \\ +\text{nasal} \end{array} \right.$$

The above rule asserts that word mid syllable in Gudi dialect becomes deleted whereas the syllable is found present in Yaya dialect of Ngamo language in the environment after a nasal sound /ŋ/, /n/ and /m/ respectively.

Apocope I

This process refers to a situation whereby a final segment is lost in a word. This is found to operate in Gudi Ngamo dialect when compared to Yaya Ngamo dialect. It can be illustrated in example (3) below:

Example 3:

	Base Form	Gudi	Yaya	Gloss
a.	/bàjâm/	[bàjâm]	[bàja]	Tiger nuts

b.	/bònùm/	[bònùm]	[bònù]	Nine
c.	/dàadùm/	[dàadùm]	[dàadù]	Spiny
d.	/ʃàaʃùm/	[ʃàaʃùm]	[ʃaaʃù]	Sugar cane

This phonological process is captured in the following rule:

$$\left(\begin{array}{c} +\text{cons} \\ +\text{son} \\ +\text{nasal} \\ +\text{lab} \end{array} \right) \longrightarrow \emptyset \quad / \quad \text{---} \quad \#$$

The above rule states that bilabial nasal consonant /m/ in Gudi dialect becomes deleted in Yaya dialect of Ngamo language in the environment word final position.

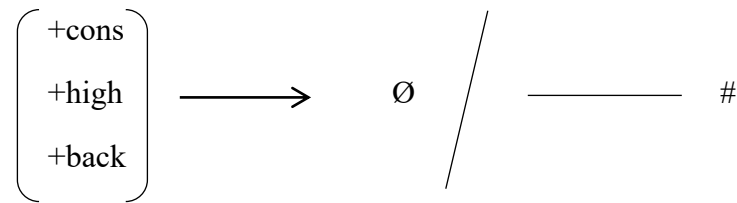
Apocope II

In another form of apocopation process found to operate in Gudi Ngamo dialect when compared to Yaya Ngamo dialect shows that velar plosive sound /k/ in Gudi dialect becomes deleted in Yaya dialect. This can be seen in example (4) below:

Example 4:

	Base Form	Gudi	Yaya	Gloss
a.	/bàʃàk/	[bàʃàk]	[bàbàʃo]	Brittle
b.	/kʷòokʲijòk/	[kʷòokʲijòk]	[kʷòokʲijòo]	Crest
c.	/tiitòk/	[tiitòk]	[tiità]	Worm
d.	/tèpʃidèk/	[tèpʃidèk]	[tèèʃidè]	Big wide head

This phonological process is captured in the following rule:



The above rule states that velar plosive sound /k/ in Gudi dialect becomes deleted in Yaya dialect of Ngamo language in the environment of word final position. Apart from the above deletion, one of the word initial syllable insertion is observed in example 4a [bàfāk] → [bàbàfo] ‘brittle’ as well as word final vowel change. Also vowel compensatory lengthening in Yaya dialect is observed in the word final syllable of example 4b [k^wòok’ijòk] → [k^wòok’ijòo] ‘crest’ and in the word initial and final syllable of example 4d [tèpfidèk] → [tèefidè] ‘big wide head’.

Insertion I

This is a process whereby a glottal plosive /ʔ/ in Yaya dialect is introduced which did not exist originally in Gudi dialect in a particular environment as in the following example (5) below:

Example 5:

	Base Form	Gudi	Yaya	Gloss
a.	/ŋgâ/	[ŋgâ]	[ŋgaʔà]	Hinder
b.	/rèe/	[rèe]	[rèʔè]	Fire place
c.	/tê/	[tê]	[teʔè]	She, her
d.	/sâ/	[sâ]	[saʔà]	Drink, smoke

This phonological process is captured in the following rule:

$$\emptyset \longrightarrow \left[\begin{array}{c} +\text{cons} \\ +\text{low} \\ -\text{syll} \\ -\text{cont} \end{array} \right] / \text{V} \text{ — } \text{V}$$

The above rule states that the glottal plosive /ʔ/ not found in Gudi dialect becomes inserted in Yaya dialect of Ngamo language in the environment between vowels.

Insertion II

This is a process whereby a syllable in Yaya dialect is introduced which did not exist originally in Gudi dialect in a particular environment as in the following example (6) below:

Example 6:

	Base Form	Gudi	Yaya	Gloss
a.	/ndaa/	[ndaa]	[ndâlô]	Like/love
b.	/ròo/	[ròo]	[ròji]	Tree
c.	/k'èn/	[k'èn]	[k'èntî]	Maternal uncle

The final syllables of words in Yaya dialect in the above example /-lo/, /-ji/ and /-ti/ are introduced. This phonological process is captured in the following rule:

$$\emptyset \longrightarrow \sigma / \text{ — } \#$$

The above rule asserts that a syllable is missing in Gudi dialect while is present in Yaya dialect of Ngamo language in the environment of word final position.

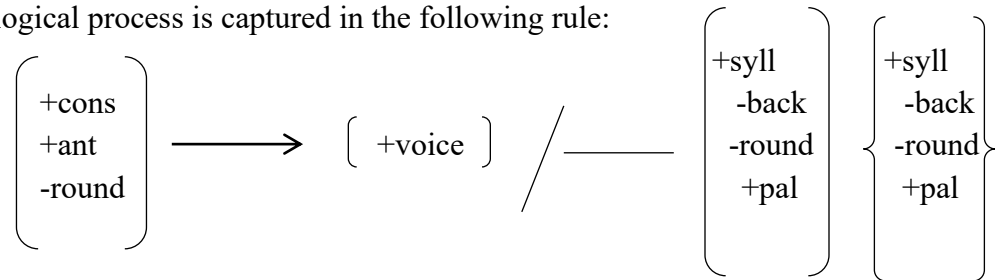
Consonant Voicing I

The voicing of certain consonants like /s/ → /z/ is very common in Ngamo dialects. Therefore, the voicing of /s/ to /z/ operates in Gudi and Yaya dialects as illustrated in example (7) below:

Example 7:

	Base Form	Gudi	Yaya	Gloss
a.	/gasijò/	[gasijò]	[gazijo]	Trolling
b.	/gàsk ^w ô/	[gàsk ^w ô]	[g ^j èzg ^w ô]	Waiting
c.	/màsk ^w ô/	[màsk ^w ô]	[mbizk ^w ò]	Count
d.	/sèmbilèm/	[sèmbilèm]	[zèmbilèm]	Huge

This phonological process is captured in the following rule:



The above rule states that the voiceless alveolar fricative /s/ in Gudi dialect becomes voiced alveolar fricative /z/ in Yaya dialect of Ngamo language in the environment before or after front vowel. The consonant voicing of voiceless alveolar fricative /s/ in Gudi dialect become voiced alveolar fricative /z/ in Yaya dialect led to the voicing assimilation of the preceding voiceless velar plosive sound /k/ in Gudi dialect to become voiced velar plosive sound /g/ in Yaya dialect in example (7b) [gàsk^wô] → [g^jèzg^wô] ‘waiting’. The later voicing situation above does not affect the next example (7c) [màsk^wô] → [mbizk^wò] ‘count’. But the process of prenasalization /mb/ is observed to occur in Yaya dialect from its primary source of nasal sound /m/ in Gudi dialect.

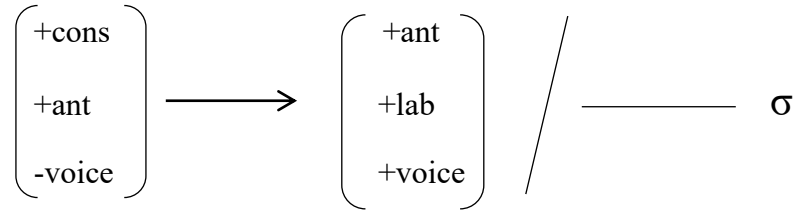
Consonant Voicing II

The voiceless bilabial plosive /p/ in Gudi dialect becomes voiced bilabial plosive /b/ in Yaya dialect of Ngamo language as can be seen in example (8) below:

Example 8:

	Base Form	Gudi	Yaya	Gloss
a.	/dàpk ^w ô/	[dàpk ^w ô]	[dabk ^w ò]	Break in two
b.	/sàprà/	[sàprà]	[sàbrà]	Hawk
c.	/supdù/	[supdù]	[subdù]	Saturday
d.	/tèplè/	[tèplè]	[tèble]	Scoop for <i>tuwo</i>
e.	/zàpk ^w ô/	[zàpk ^w ô]	[zabk ^w ò]	Put in

This phonological process is captured in the following rule:



The above rule states that voiceless bilabial plosive /p/ in Gudi dialect becomes voiced bilabial plosive /b/ in Yaya dialect of Ngamo language in the environment of syllable final position.

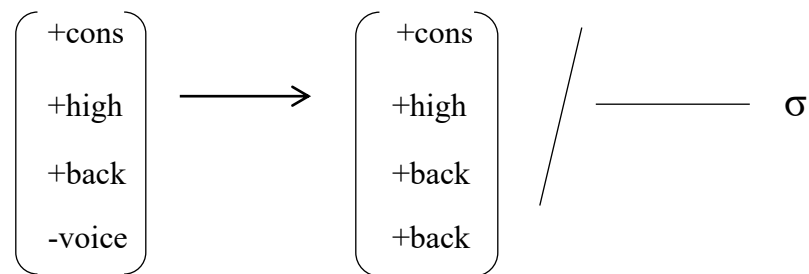
Consonant Voicing III

The voiceless velar plosive /k/ in Gudi dialect becomes voiced velar plosive /g/ in Yaya dialect of Ngamo language. This can be exemplified in example (9) below:

Example 9:

	Base Form	Gudi	Yaya	Gloss
a.	/bùklâ/	[bùklâ]	[biglô]	Rolling
b.	/màkmâ/	[màkmâ]	[mbògmo]	Become a blind
c.	/nzùklâlù/	[nzùklâlù]	[ndʒùglàlu]	Slimy
d.	/dòklô/	[dòklô]	[dòglô]	Stir a liquid substance
e.	/làkri/	[làkri]	[làgri]	A type of food made with Bambara nuts
f.	/dikli/	[dikli]	[digli]	A bed plat made of corn stalks

This phonological process is captured in the following rule:



The above rule states that voiceless velar plosive /k/ in Gudi dialect becomes voiced velar plosive /g/ in Yaya dialect of Ngamo language in the environment of syllable final position. Apart from the voicing process, it is important to note the following phonological processes: Vowel change of low vowel /a/ in Gudi dialect is changed to mid back vowel /o/ in Yaya dialect in example (9b). Also bilabial nasal sound /m/ in Gudi dialect becomes bilabial prenasal /mb/ in Yaya dialect in example (9b). However, another instance in example (9c) is that alveolar prenasal /nz/ in Gudi dialect becomes post alveolar prenasal /ndʒ/ in Yaya dialect.

Discussion

From the above presentations, it is clear that deletion and its three types are found to operate as variants of Gudi and Yaya dialects of Ngamo language. A syllable in Gudi dialect is deleted in Yaya dialect in the environment of word initial position as in [taatarə] → [tarə] ‘termite’. Another type of deletion found to create variation in Gudi and Yaya dialects is syncope. It is a process whereby a word medial segment is lost as in [gàndig^wò] → [gàng^wò] ‘giant rat’. The Apocope is another process of deletion to create variations whereby a word final segment is lost in Yaya dialect as in [bàjâm] → [bàja] ‘tiger nuts’ as well as [k^wòokijòk] → [k^wòok^jijò] ‘crest’. Insertion is another process whereby a glottal plosive or a syllable segment which did not exist in Gudi dialect is introduced in Yaya dialect in a particular environment as in [rèe] → [rèʔè] ‘fire place’ and [ròo] → [ròji] ‘tree’. The voicing of certain voiceless consonants to become voiced is very common in Ngamo dialects. This process is of three different types in Ngamo such as: (i) A voiceless alveolar fricative sound /s/ in Gudi dialect becomes voiced alveolar fricative sound /z/ in Yaya dialect as in [gasijò] → [gaziʒo] ‘travelling’, (ii) A voiceless bilabial plosive sound /p/ in Gudi dialect becomes voiced bilabial plosive sound /b/ in Yaya dialect as in [sàprà] → [sàbrà] ‘hawk’, (iii) A voiceless velar plosive sound /k/ in Gudi dialect becomes voiced velar plosive sound /g/ in Yaya dialect as in [dòklô] → [dòglô] ‘stir a liquid substance’.

Conclusion

In conclusion, the major consonant variations of Gudi and Yaya dialects of Ngamo language discussed here are deletion – aphaeresis, syncope and apocope, insertion I, insertion II, consonant voicing I, consonant voicing II, consonant voicing III. This should not be seen as laziness on the part of speakers to express themselves but rather an economy of the word usage in the desire to be less verbose in the side of both Gudi and Yaya dialect as well. In conclusion, this study compares and analyses the Gudi and Yaya dialects of

Ngamo language with the aim of identifying their phonological variations. Hence, it is hoped that this work will stimulate researchers on the various linguistic fields of Ngamo language by scholars of Chadic languages in future.

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