A STUDY OF PHONOLOGICAL FEATURES OF HAUSAWORDS AS SPOKEN BY THE BABUR/BURA IN KANO

BY

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A DISSERTATION SUBMITTED TO THE DEPARTMENT OF LINGUISTICS AND FOREIGN LANGUAGES, FACULTY OF ARTS AND ISLAMIC STUDIES, BAYERO UNIVERSITY KANO, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS DEGREE OF ARTS IN LINGUISTICS.

APRIL, 2019

Declaration

I hereby declare that this dissertation entitled "A Study of Phonological features of Hausa words as spoken by the Babur/Bura in Kano" is the product of my research efforts undertaken under the supervision of Professor Lawan Danladi Yalwa. To the best of our knowledge, this research is not conducted elsewhere for the award of same degree and all sources consulted are dully acknowledged.

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Certification

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DEDICATION

I whole-heartedly dedicate this dissertation to my beloved Father, Alhaji Musa Abba Shariff and Mother, Hajiya Zainab (Jummai) Adamu Shariff to whom I am indebted. May Allah (SWA) protect and bless them in good health and wealth and grant them all their hearts desires in this world and in the hereafter.

ACKNOWLEDGEMENT

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ABSTRACT

This study titled A study of phonological features of Hausa words as spoken by Babur/Bura in Kano analyses how the Babur/Bura produces Hausa words or lexical items. The aim of the research is to study the phonological features of Hausa words as spoken by Babur/Bura speakers in order to identify how some Hausa words are pronounced by Babur/Bura L2 speakers, to highlight and explain the phonological realization of the words and to provide phonological rules of the word variants.Interview and observation methods were adopted primarily to collect data from respondents for the purpose of the research.The study limits itself from studying how the Babur/Bura adopts or adapts the Hausa lexical items or words into the Babur/Bura language but rather is interested in discovering how the Babur/Bura transfer phonological features of the Babur/Bura language to Hausa lexical items during speech. Therefore the study identified and described the phonological changes that Hausa lexical items go through in order to fit into the Babur/Bura sound system as it operates and establish phonological rules that account for changes. The study adopts the theory of generative phonology which was advocated by Chomsky and Halle (1968) as the theoretical framework. The research reveals that Babur/Bura tends to change sound structure of some Hausa words during speech rarely because of the absence of a particular sound in the Babur/Bura inventory infact few changes occurred in this light as will be seen ahead. However, the subject of the sound sometimes appears to be systematic, where the affected segment is changed with a closer segment,in terms of their natural class. The substitution may also occur among Babur/Bura L2 speakers not because the phonemes are totally absent in their sound system, but because of simplicity as is the case with Fulfulde speakers when producing Hausa words such as tàabarmaa mat→ taberma thus /a/ →/e/ in any environment..There were a number of changes that occurred like glottalization, deglottalization, sound substitution, vowel substitution, insertion etc.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 INTRODUCTION

This chapter is a general overview of the background, aims, significance and limitations of the research. We briefly trace the history of the Babur/Bura language and the Hausa language. It also contains statement of the problem and sound charts of Hausa and Babur/Bura Languages.

Meisel (2011:4) assumes that individuals tend to transfer forms and meanings of their native Language and culture. Weinreich (1953) and Lado (1957) cited in Meisel (2011:4) both argue that those elements that are similar to the learner's native language will be simple for him and those elements that are different will be difficult. All these scholars seem to agree on one thing that is the notion that when two or more languages come into contact, one or both of them may change. In other words one language is influenced by another or both are influenced at the same time as the case may be. A language can adopt new sounds or change already existing sounds under the influence of another language it is in contact with. It could also change word forms under the influence of another language.

The two languages under study belong to the same language family. As classified in Greenberg (1963), Hausa belongs to the West Chadic family of the Afro-Asiatic phylum of the African languages, while according to Greenberg (1963) cited in Badejo (1987),classifies the Babur/Bura language as a member of the Chadic family under the Bata–Marghi group. There has been contact between the two languages over the years as a result of social, economic, political and religious attractions.

1.1 BRIEF HISTORY OF THE BABUR/BURA LANGUAGE

The Babur/Bura language is a member of the central Chadic languages which falls under the Chadic branch of Afro-Asiatic phylum of African languages classification (Greenberg,1963). The word "Bura" is used to refer to the language, the land and the people who inhabit Biu, Kwayakusar, Shani, Damboa and Askira-Uba Local Government Areas in Borno State and Gombi and Gujba Local Government Areas, in Adamawa and Yobe States respectively.Oral tradition claims that the Bura people came from Yemen in the Middle East (Davies, 1954/56).

There are two dialects of Bura language. These are the East (Bura) and Western 'PabƏr' otherwise known as Babur (Badejo, 1987). Similarly, Davies (1954/56) asserts that "the Babur and Bura are for all practical purposes identical." "The Eastern dialect is largely spoken in the central and Eastern parts of the land while the Western dialect on the other hand is spoken in only the south-western parts of the land" (Davies,1954/56:120-121). The two dialects are mutually intelligible to the extent that, most often, only phonetic differences separate them.

"The 1991/92 census puts the population of the Babur/Bura at about 250,000 imcludingthe pabər and the 32,000Speakers of the language are said to be located at Garkida in Adamawa state. There has been a tremendous growth in population since then, thus one could estimate the overall population of the Babur/Bura at about 300,000 both at home and in the diaspora" (Muazu and Balami2010:7).

AFRICAN LANGUAGES CLASSIFICATION

Afro-asiatic   Nilo-Saharan   Niger –kordofanian   Khoisan

Afro- Asiatic phylum

Chadic   berber   Cushitic   Semitic   Ancient- Egyptian
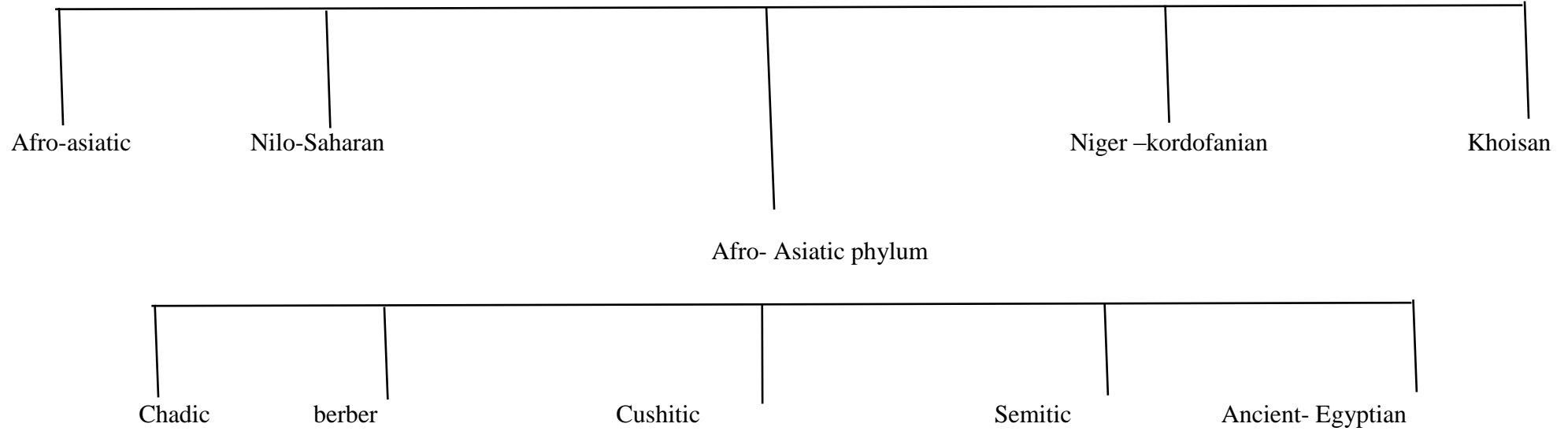
CHADIC LANGUAGE CLASSIFICATION

WestChadic   Central Chadic   East Chadic   Masa

A   B   A   **B**
                                                                              Donglazeme
                Ngizim   Blu   Mandara   Kera
Hausa   Mokolo
Bole   Babur/bura   Kotoko   Sumrai
Angas   Warji   Sokoro
                              Marghi   Gida   Lele
                Bade
                              Kilba   Musgo

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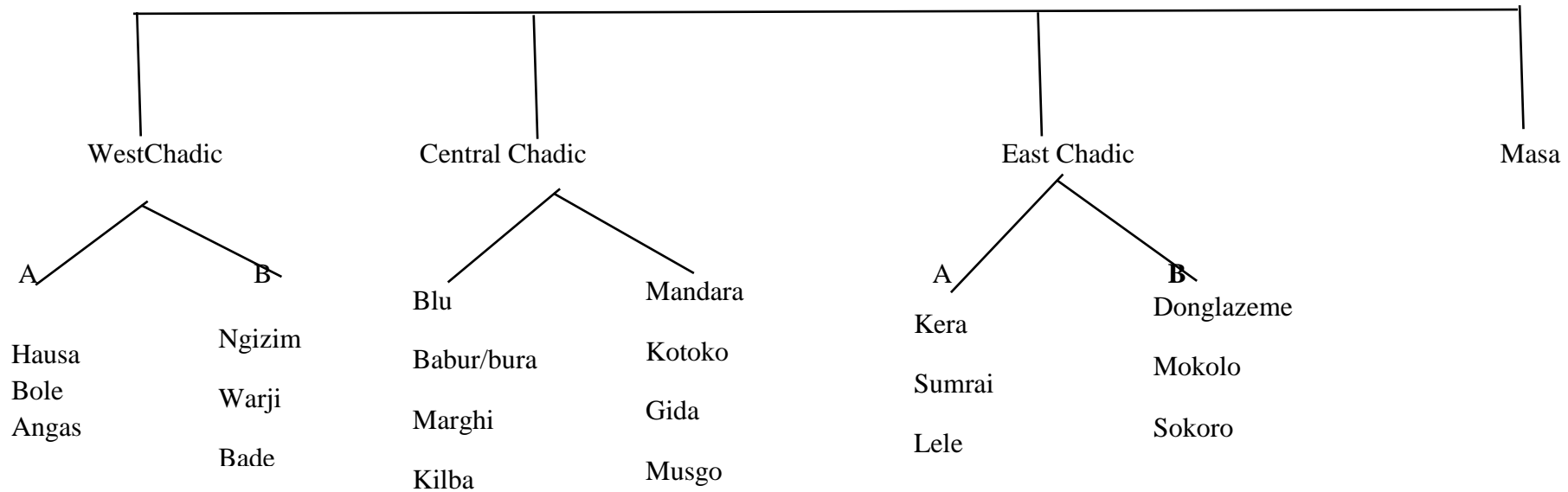
1.2 Babur/Bura Sounds System

Babur/Bura sound system can be seen as enumerated by the committee on Bura language orthography. Badejo and committee on Bura language orthography (1987) provide the Babur/Bura sounds system as shown below:

Table 1: Babur/Bura Sounds System (Badejo, 1987)

	Bilabial	Labio-dental	Dental	Alveolar	Palato-Alveolar	Palatal	Velar	labio-velar	Glottal
Stop	p b			t d				k g	
Glotallized stop	ɓ			ɗ					
Fricative		f v		s z	ʃ ʒ				h
Lateral Fricative				ɭ ʤ					
Affricate				ts dz	tʃ ʤ				
Nasal	m			n			ŋ		
Lateral				l					
Flap				r					
Approximant/						j		w	

According to Blench (2010), Babur/Bura has very wide range consonant. He states that the Babur/Bura orphography is best described as 'in transition'. The chart for the sound system is as follows:

Table 2: Babur/Bura Sounds System (Blench, 2010)

	Bilabial	Labial alveolar	Labio-alveopalatal	Labial-palatal	Alveolar	Alveo-Palatal	Palatal	Velar	Glottal
Stop	p b	pt bd	Pc		t d	cj		k g	ʔ
Glotallized	ɓ	b ɗ			ɗ				
Ejective								ƙ	
Prenasalised	mp mb		mc mj		nt nd	nc nj		ŋg ŋk	
Nasal	m	mn		m ɲ	n		ɲ	ŋ	
Affricate		pts			ts dz	tʃdʒ			
Prenasalised					nt sn dz				
Fricative	f v	ps bz	pʃ		s z	ʃ ʒ		x ɣ	h
Prenasalised	nfnv		nʃnʒ	nx nɣ	ns nz			ŋx ŋɣ	
Lateral Fricative		pl blʒ			l lʒ			xl ɣlʒ	
PrenasalisedLateral	mpl			nlnlʒ				ŋɣlʒ	
Fricative		mblʒ							
Approximant							j	w	
Lateral					l				
Roll					r				

1.3 BRIEF HISTORY OF HAUSA LANGUAGE

Greenberg (1963) classifies Hausa language as West Chadic. In this language family, Hausa's closest ties are with Angas, Bole, Ngizim, Bade and Warji.Most Hausa dialectologists seem to agree that, although several Hausa dialects exist, these dialects are classifiable into two major dialect groups on the basis of their morphology, phonology and other features(cf. Bargery1934, Zima 1968) as cited in Abubakar (1994:xiv). The dialects of Katsina and Sakkwato forming one group called Western dialects, while the dialects of Daura, Kano, Zaria and Bauchi constituting another known as Eastern dialects. All the dialects are mutually intelligible irrespective of the dichotomy.

Hausa is the most widely spoken African language apart from Swahili. It is one of the three major languages of Nigeria – others include Igbo and Yoruba. Nigeria is the

home of the Hausa language although there are pockets of Hausa communities in Cameroun, Ghana, Sudan, Tripoli and Alexandria with a sizeable population in Niger

Abubakar (1994:xii).

The Hausa language, as far as tropical Africa is concerned, is undoubtedly the language of the future, spoken as it already is by one percent of the population of the globe and with every prospect of obtaining a still wider currency in the near future……Robinson (1899) as cited in Abubakar (1994:xiii).

Palmer (1928) in Bello (1991: 4) says,"The Hausas are not a tribal group. They are a community of people of various ethnic origins. In A.D 1000 the Hausa states were occupied by Berber races coming from the north and established themselves and intermarried with the indigenous tribe." According to Bello (1991:4)"Hausa are mixture of Aboriginal Negro and Berber immigrants who came from more Northerly regions."

He further revealed that "some scholars have infact based their hypotheses on the legend of Bayajiddah who is said to have founded the Hausa bakwai or the seven Hausa States namely Kano, Zazzau (Zaria), Gobir, Daura, Katsina, Rano and Biram"(ibid)

1.4 HAUSA PHONETICS DESCRIPTION

Here, we are going take a look at the phonetic representation of the Hausa language.

1.4.1 Hausa Vowel Sounds and Consonants

There are forty-eight (47) segments of sounds in standard Hausa, comprising of thirteen (13) vowel sounds and thirty - four (34) consonants sounds.

Sani, (1989) describes Hausa vowel sound as "a speech sound whose articulation does not involve obstruction of airflow but essentially vibration of vocal cords".

Hausa vowels are categorized basically into two segments: The "monophthong" and the "diphthong"

1.4.2 Hausa Monophthongal Vowels

Hausa monophthongal vowels are vowels of steady quality i.ehaving one element of sound in its production. These vowels can be short or long in quality, in the course of their articulation. There are five (5) short and five (5) long vowels. This can be seen in the following cardinal vowel chart. The most important thing in the study of vowel production is the tongue movement indicated as follows:
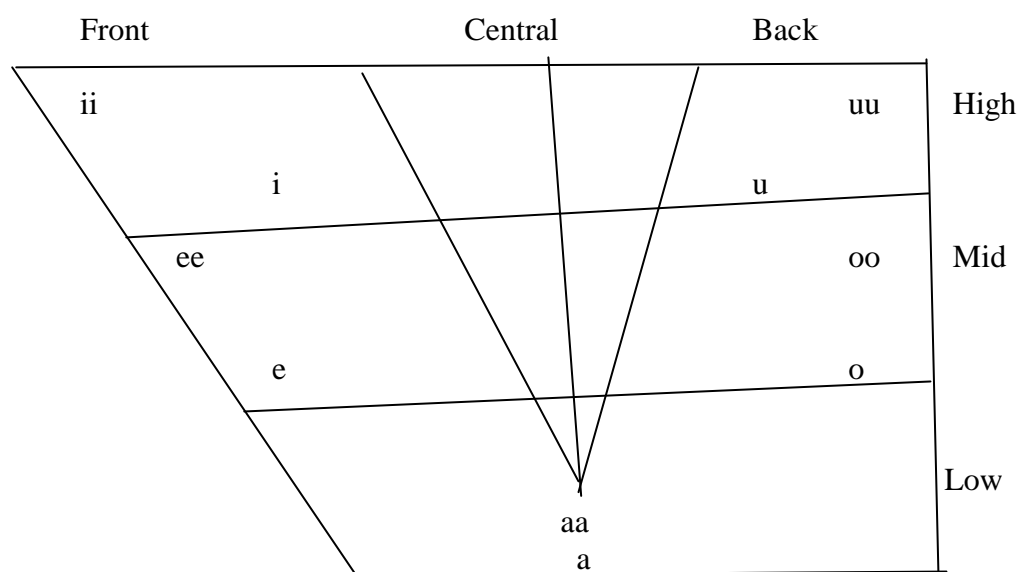
Sani (2005: 22)

i. Short vowels:

[a]short low central

[e] short mid front

[u]short high mid back

[i] short high front

[o]short mid back

ii. Long vowels:

[aa]long low central

[ee] long mid front

[uu]long High back

[ii] long high front

[oo] long mid back

These are vowels of continuous changing quality where a certain articulation of a vowel starts with one quality of sound and ends in another quality. The movement of tongue can be seen as follows in the vowel trapezium displayed in the next page.
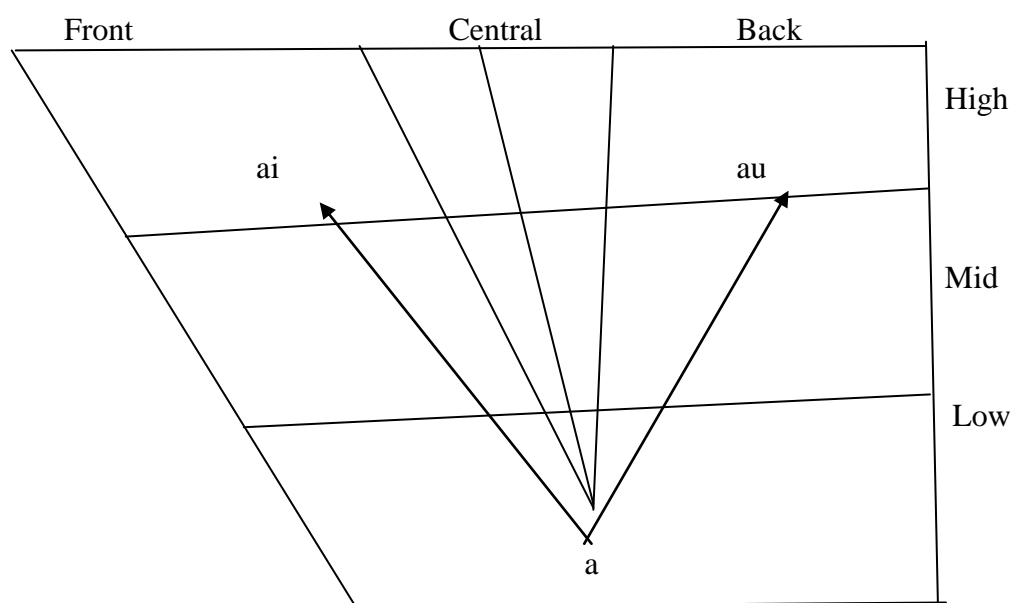
Sani (2005:23)

[ai] - vertical movement form low central to high front

[au] - vertical movement form low central to high back

Sani (2005:20) gives the following examples of Hausa vowels as used in some

words:

short vowels   long vowels

[i] - ci - eat   [ii] - biiròo - pen

[e] - màage - cat   [ee] - ɓeeraa - rat

[a] - ràkee - sugarcane   [aa] - faatàa - leather

[o] - tankò - a name   [oo] - goomà - ten

 [u] - duhùu - dark   [uu] - hùula - cap

                                                Sani (2005:20)

Sani (2005:22) further asserts that "apart from monopthhongs, Hausa has yet

another type of vowel, the diphthong, which means a union of two different

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vowels. In other words it is two different vowels articulated differently".

According to him, three different diphthongs are found to operate in standard Hausa. They are as follows:

[ai] as in bâiwaa(female slave) and kai (you)

[au] as in taurii (hard) and taushii (soft)

[ui] as in guiwàa(knee) and tukuicii (small gift)

1.4.3 Hausa Consonant Sounds

Hoffman and Schachter, (1969) describe consonant as a speech sound, which is produced with the obstruction of airstreams. The obstruction could be partial or total. In the articulation of consonant sound three (3) things are always put into consideration: place of articulation, manner of articulation and the state of the glottis. The following are the (34) Hausa consonantal sounds based on three-term label:

HAUSA CONSONANTAL CHART

	Bilabi-al	Palatal-ized Bilabial	Alveo-lar	Retroflex	Post-alveolar	Palat-al	vela-r	Labio-velar	Labiali-zed velar	Palatali-zed velar	Glott-al	Palatali-zed glottal
stop/ plosive	b		t d				k g		kw gw	kj gj	ʔ	ʔj
Implosive	ɓ		ɗ									
Ejective			s'				ƙ		ƙw	ƙj		
Nasal	m		n			ɲ	ŋ					
Fricative	Φ	Φj	s z		ʃ						h	
Affricate					ʧ ʤ							
Lateral			l									
Trill/Roll			r									
Flap				r								
Approximant/ Semi vowels						J		w				

Haruna (2008:28)

/b/   voiced bilabial stop/plosive   [b]

/ɓ/   voiced bilabial implosive   [ɓ]

/m/   voiced bilabial nasal   [m]

/f/   voiceless bilabial fricative   [Φ]

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/t/	voiceless alveolar stop/plosive	[t]
/d/	voiced alveolar stop/plosive	[d]
/l/	voiced alveolar lateral	[l]
/r/	voiced alveolar trill	[r]
/n/	voiced alveolar nasal	[n]
/s/	voiceless alveolar fricative	[s]
/z/	voiced alveolar fricative	[z]
/ts/	voiceless alveolar ejective	[s']
/r/	voiced retroflex flap	[r]
/ɗ/	voiced retroflex implosive	[ɗ]
/c/	voiceless post alveolar affricate	[ʧ]
/sh/	voiceless post alveolar fricative	[ʃ]
/j/	voiced post-alveolar affricate	[ʤ]
/y/	voiced palatal approximant	[j]
/k/	voiceless velar stop/plosive	[k]
/ƙ/	voiceless velar ejective	[ƙ]
/g/	voiced velar stop/plosive	[g]

| /h/ | voiceless glottal fricative | [h] |

| /'/ | glottal stop/plosive | [ʔ] |

| /w/ | voiced labio— velar approximant | [w] |

1.4.4 Hausa Consonants with Secondary Articulation

| /fy/ | voiceless palatalized bilabial fricative | [Φj] |

| /kw/ | voiceless labialized velar stop/plosive | [kw] |

| /ƙw/ | voiceless labialized velar ejective | [ƙw] |

| /ƙy/ | voiceless palatalized velar ejective | [ƙj] |

| /ƙy/ | voiceless palatalized velar stop/plosive | [ƙj] |

| /gw/ | voiced labialized velar stop/plosive | [gw] |

| /gy/ | voiced palatalized velar stop/plosive | [gj] |

| /'y/ | voiceless palatalized glottal stop/plosive | [ʔj] |

1.5 CONTACT BETWEEN THE BABUR/BURA AND HAUSA

According to Davies(1954/56), the first language to exert its influence on the languages of the Biu communities, including Babur/Bura was Kanuri Language. Its incursion was so successful that in 1914, nearly all Babur spoke Kanuri. Similarly, Usman (2014:56) states that :

> *The influence of Kanuri started to fade away with the coming of Hausa. Today not many people understand Kanuri Language, although it is widely spoken in the northern part of Biu Territory. The influence of Hausa today is unrivalled in commerce, administration and education in the Emirate. Hausa ranks number one followed by Kanuri. As an inter-ethnic language, Hausa is the Lingua Franca among the ethno-linguistic groups in Biu Area, and equally the most widely used Language in the greater area of northern Nigeria.*

Hausa language seems to have greater impact on the Babur/Bura speakers existing outside the Biu Territory. For those living in Kano, for example, the dependence on Hausa Language cannot be over emphasized, for it is the Lingua franca there. Usman confirms this assertion by saying:

> *There is a growing evidence of unmitigated decline in intergenerational transmission of Babur/Bura Language. Many young people, particularly those schooling or working outside Babur /Bura speaking areas, are shifting to English and/or Hausa as their Language of daily conversation in both private and public domains. Indeed, many Babur /Bura youths can no longer speak Babur/Bura Language and when they visit their home towns, do not understand what is being said when their parents are speaking the Language. How can such youths transmit the Language to their children?*

> Usman(2014:58)

1.6 STATEMENT OF THE PROBLEM

A good number of research works have been conducted on Babur/Bura language (Davies, 1954/56; Badejo, 1987; Mohammed, 2012; Mohammed, Shettima and Mu'azu, 2002; Bwala, 2005). A lot of research has also been done on Hausa language like (Abubakar, 1983; Salim, 1981; Bello, 1985; Yalwa, 2002; and Munkaila& Baba, 2014). There is no doubt that, Hausa and

Babur/Bura languages have been in contact for a very long time and this suggests the existence of linguistic influence between the two languages. Attempts have been made by previous scholars to analyse possible linguistic influence between Hausa and Babur/Bura in the past, with Bukar (2004) being a major point of reference. It is on this background that, this present study intends to analyse the phonological features of Hausa language, spoken as L2 by Babur/Bura speakers within the framework of Generative Phonology.

1.7 AIM AND OBJECTIVES

The aim of this research is to study the phonological features of Hausa words as spoken by Babur/Bura speakers with the following objectives:

i.   To identify how some Hausa words are pronounced by Babur/Bura native speakers.

ii.   To highlight and explain the phonological features of the words.

iii. To provide phonological rules of the word variants.

1.8 RESEARCH QUESTIONS

In order to carry out the phonological analysis, this study attempts to address the following research questions:

i.   How are some Hausa words pronounced by Babur/Bura speakers?

ii.   What are the phonological features of such words?

iii. What are the phonological rules of the word variants?

1.9 SIGNIFICANCE OF THE STUDY

This research will serve as a reference material to researchers in the field of linguistics in general and that of Hausa and Babur/Bura Languages in particular.

It will also be used as a pedagogical aid for language teachers, particularly in the two languages.

And finally, this work will serve as an important document for safeguarding the Babur/Bura language on one hand and creating the needed awareness about the menace of language endangerment on the other side.

1.10 SCOPE AND LIMITATION

This research analyses the phonological features of the Hausa language as spoken by Babur/Bura natives in Kano specifically, Nassarawa, Kumbotso and Ungogo Local Government Areas. Therefore, the areas covered by the research are Kawo, Tundun Murtala, Rimin Kebe and Farawa..The work will be limited to the standard dialect of the Hausa language.

CHAPTER TWO

LITERATURE   REVIEW

2.0 INRODUCTION

In this part, an attempt is made to review the related and relevant works for the research. The chapter reviews Bilkisu (1973), Munokan(1973),Salim (1981), Baba (1993). Similarly, the chapter also reviewed related works like Waya (2001), Dikwa et al (2002) etc.

2.1 REVIEW OF RELATED LITERATURE

Bilkisu (1973) identified some aspects of Hausa as spoken by Kanuri. She observed certain characteristics with regard to phonological, morphological and syntactical rules of Hausa spoken by Kanuri. She said, Hausa has certain consonants which are absent in Kanuri language, such consonants are: /ɓ/ /ɗ/ /ƙ/ /ý/ and /ts/ which are minimal pairs with /b/, /d/, /k/, /y/, and /s/ respectively. She also observed that Kanuri language lacks geminate consonants such as /ky/, /kw/, /gw/ and /gy/. Consider the following examples in (1) below:

Hausa	**Kanuri**	**Gloss**
1) a.ɓatàa	bataa	lost
b. kàɗàn	kadan	little
c. ƙàrshee	ƙarshee	end
d. 'yaa 'yaa	yaayaa	sons/daughters

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e. tsàkaanii	sakaanii	between
f. ƙyàamaa	kyaamaa	dislike
g. ƙwarai	kwarai	very well/indeed

Again, she identified the shortening of Hausa words, which mostly occurs in loan words, especially those loans from Arabic language. Take the following examples in (2) below:

Hausa	**Kanuri**	**Gloss**
2) a. duuniyàa	dunya	world
b. bayàanii	bayan	explanation
c. munàafikii	munaafik	hypocrite
d. misalìi	missal	example
e. kàràatuu	karaa	reading

Similarly, Bilkisu (1973) observed other things like /a/ replacement by /o/ as in /ràsu/ vs /rosu/; /ƙòƙarii/ vs /kokorii/. There were also instances of monophthongization, linker omission; absence of verbal grade etc. which is not part of areas to be looked at by this research although also a phonological study like this one.

Munokon (1973) examines some aspects of Hausa as spoken by 'Bachama' people. He discovered some changes that occur on the Hausa language spoken

by Bachama in phonology, morphology and syntax. He found out that certain Hausa sounds like /k/ and /ts/are not in existence in bachama. Bachama speakers tend to substitute /ƙ/ and /k/, /ts/ with /s/, /c/ with /sh/. Consider the following as shown in example (3) below:

	Hausa	**Bachama**	**Gloss**
3). a.	ƙòoƙarii	kokari	effort
b.	tsaamiyaa	saamiyaa	tamarine
c.	ƙànwàataa	kanwataa	my junior sister
d.	tsàamaa	saamaa	picking out
e.	lookàcii	lokashi	time
f.	càn	shan	there

Munokon concludes that the substitution, especially that of /c/ and /sh/, are realized because they share common feature of voiceless post alveolar, then /ƙ/ and /k/ is that they are voiceless velars while /s/ and /ts/ are also voiceless alveolar fricatives. This work is related to the current study because they focus on phonological changes that that take place in l2 speech.

Salim (1981), in his analysis of assimilation of English loanwords in Hausa opined that such loans can either be adapted or adopted. He further observes that adaptation represents attempts by borrowers to reproduce sounds based on

the patterns of the source language, while adoptation represents attempts by borrowers to produce sounds based on the sound patterns, which are obtained in the target language. In terms of nativization, adaptations are nearer to be assimilated than adoptation. He identifies the following examples in (4) below:

ENGLISH   **HAUSA**

4) a. Clutch   Kulooci

   b. Trouser   Turoozaa

Although his work was on assimilation of English loanwords in Hausa, which is also related to the current research, they differ in case study for his work was on English loanwords in Hausa while the current research is on Hausa words as produced by the Babur/Bura.

Baba (1993) agrees that a nasal consonant becomes homorganic with the following consonant in the environment. For example, the grade I verb, /danƙà:/ "hand over" is phonetically realized as.[daŋkà:] after the application of the homorganic nasal assimilation rule convert the underlying /n/ to velar nasal /ŋ/ word-medially as a result of the following velar consonant. Consider the following examples in (5):

5) Examples of Hausa homorganic nasal assimilation:

(a) Grade I   meaning

   [gaŋgàra:]   descend

   [laŋkwàsa:]   bend

   [baŋka:]   set (fire) to

   [kjaŋkjàsa:]   brief

   [ɗandana:]   taste

   [tunzûra:]   incite

   [kammàla:]   conclude

(b) Grade II

   [ɓamɓara:)   peel off

   [ranta:]   borrow

   [ɸjintʃìkà:]   detach forcibly

   [mintsinà:]   pinch

   [raŋkwasà:]   hit with knuckles

(c) Grade III

   [mànjantà]   become advanced in age

   [tunzurà]   become angry

   [kumburà]   swell

   [dàŋkarà]   over-power (by load)

In the examples above, all the nasal consonants share the same place of articulation with the following segment word-medially. Morphophonological rules assimilating a nasal consonant to the following segment can be stated, as shown in example (6) below:

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6). Hausa homorganic nasal assimilation rules:

(a) [+ nasal] ⟶ $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$ — / — $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$

(b) [+ nasal] ⟶ $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$ — / — $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$

(c) [+ nasal] ⟶ $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$ — / — $\begin{bmatrix} - \text{ Syll} \\ - \text{ Cons} \\ - \text{ ant} \\ + \text{ Cor} \end{bmatrix}$

(d) [+ nasal] ⟶ $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$ — / — $\begin{bmatrix} + \text{ ant} \\ - \text{ Cor} \end{bmatrix}$

Baba (1993:19)

In rule .6a., a nasal consonant becomes [m] before labials, /n/ is realised as [n] before alveolar segments as indicated by rule 6b, and in 6c, a nasal consonant is realized as palatal nasal [ŋ] before a palatal sound while in rule 6d, a nasal phoneme is converted to [ŋ] before velars. In general, all the four rules state that in a sequence of nasal consonant plus another non syllabic segment, the nasal consonant becomes homorganic with the following non-syllabic segment, sharing the same place of articulation word medially. Thus a single rule can be presented as rule to cater for the four rules above as illustrated in (7).

7).Hausa homorganic nasal assimilation rule:

$$
\begin{bmatrix} + \text{Cons} \\ + \text{nasal} \end{bmatrix} \longrightarrow \begin{bmatrix} \text{ant} \\ \beta\text{cor} \end{bmatrix} \Big/ \underline{\quad} \begin{bmatrix} -\text{Syll} \\ \begin{bmatrix} -\text{Cons} \\ + \text{Cons} \end{bmatrix} \\ \text{ant} \\ \beta\text{cor} \end{bmatrix}
$$
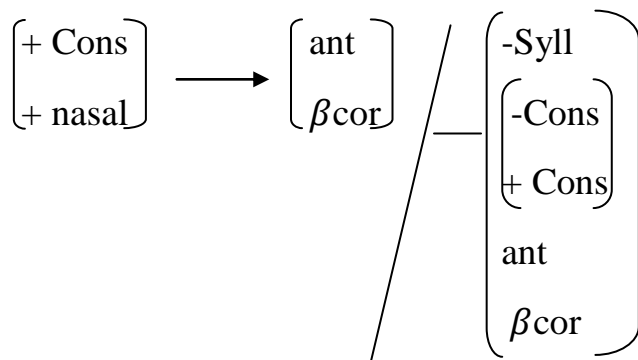
This rule states that in a sequence of two segments (words medially), if the second segment is labial [+ ant –cor], then, the nasal consonant as first segment must have the corresponding value '+' the future [ant] and '-' for the feature [cor].This is also true for alveolar palatal or velar because the first nasal consonant in the cluster assimilates its articulatory feature to the neighboring alveolar, palatal /j/ or velar segment.

Waya (2001) conducted a research on the features of Hausa as spoken by the "Fullo" people. She outlined certain interferences in the phonology ranging from consonants and vowels in the speech of Fulfulde speaking Hausa. She observed that these interferences occur as a result of the Fullo Hausa speaker super-imposing his own phonological sound system on the Hausa language. Below is an example of these interferences. Here, the Fullo speaker tends to substitute voiceless post alveolar fricative /sh/ with voiceless alveolar fricative /s/ in word initial position as exemplified in (8):

	Hausa	**Fullo**	**Gloss**
8). a.	shèekaràa	sekara	year
b.	wàashèegarii	wasegari	tomorrow
c.	shaanuu	sanu	cattle
d.	shàrada	sarada	sharada quarters
e.	àshìrin	aserin	twenty

As for word final position, she observed that the post alveolar fricative is pronounced as it is, despite the fact that it is absent in Fulfulde as shown in the following examples in (9):

	Hausa	**Fullo**	**Gloss**
9). a.	shii	shi	him
b.	ƙarshee	karshe	end
c.	in dà shi	in da shi	if there is

Another major observation by her is that /c/ and /sh/ tend to be in complementary distribution by the Fulfulde speaker of Hausa both in Hausa and Fulfulde as a result of the influence of Hausa over Fulfulde.

Consider the following examples in (10) below:

	Hausa	**Fullo**	**Gloss**
10). a.	coocìlàn	shoshilan	flashlight
b.	macidὸ	mashido	name of a person
c.	muncee	mun she	we said
d.	barcii	bershi	sleeping

In the word 'barci' for instance, three stages can be identified:

i.   Vowel raising   /à/ → [e]

ii.   Flap becomes trill /r/ → [r]

iii.   Voiceless post alveolar africate becomes voiceless alveolar fricative.

       /c/ → [ʃ]

Again for the influence of Hausa over Fulfulde where /c/ becomes /sh/, she gave

the following examples as illustrated in (11a-c):

Fullo	**Gloss**
11)a. pucco → pushhu	horse
b. caacam → shaasham	gravy
c. baccel → basshhel	small boy
d. ceedee → sheede	money

e. ficcirawo → fishishirawo   sister in law

Another point she identified is where the voiced alveolar fricative /z/ is substituted with the voice post alveolar affricate /j/ before a low central vowel /a/ as shown in the following example (12a-c) below:

	Hausa	**Fullo**	**Gloss**
12)a.	ɗanzàabuwa	ɗanjabuwa	Danzabuwa town
b.	zaunàa	jauna	Sit down
c.	zartoo	jarto	Saw

Amongst other things discussed, she gave instances on syllable structure, consonantal deletion, tone pattern, gender, diphthongization which we are not going to discuss in this research as the phonological differences that occurred here are quite different. However her research and this one are quite similar as both researches are looking at influence of one language over the other from a phonological perspective.

Dikwa, Mohammed and Askira (2002:84) investigate the concept of Ideophones in Babur/Bura and Kanuri languages. They made a descriptive analysis of types and structures of Babur/Bura and Kanuri Ideophones. Looking at the syllable structure, syntactic function and phonological description of Babur/Bura and Kanuri ideophones, the researchers made the following dispositions as shown in (13a-c) below:

Bura	Kanuri	Gloss
13) a. məngəllut	sələmpətək	very black

| b. nthàndit | bətchikuró | fall very hard |
| c. chímbàva | njittazâufít | very hot pepper |

From the above data, the first ideophones "lut" and "pətək" function as intensifiers. The second illustrates "ndit" and "bət" functioning as modifiers while the third one of 'vá' and 'fit' function as adjectives and intensifiers at the same time. For this, they made the following claim:

From the phonological perspective, the findings show that both Babur/Bura and Kanuri ideophones can largely be said to begin with a consonant immediately followed by a vowel or another consonant. Some ideophonic words reflect a cluster of consonants at word initial and medial positions but rarely in final position" (Dikwa et al 2002:86).

Dikwa et al also added that "In Babur/Bura, most consonants except for the velar nasal [ŋ] can be found in word initial and medial positions. It is observed that except for the lateral fricatives, affricates and approximants, all other phones are obtainable in word final positions. On the contrary, in Kanuri, all consonants are possible in word initial and word final positions". This study is related to the current study because its analysis is based on two distinct languages with Babur/Bura having to be one of them. Phonological references could also be drawn from the research for the intended study.

Mohammed, Shettima and Mu'azu (2002:44) observe four types of assimilation processes that operate in Babur/Bura; namely palatalisation, labialization, consonant assimilation and vowel assimilation. An example of palatalisation is therefore cited in their work as exemplified in (14) below:

	UR		SR

14) a. /ki/ ⟶ [ci] 'house'

  b. /nki/ ⟶ [nci] 'catch'

  c. /mwánki/ ⟶ [mwanci] 'women'

The velar stop /k/ in the data above is palatalized when it occurs before the vowel /i/. Thus the /k/ is converted into /č/. The following palatalisation rule is therefore formulated in (15) below:

15)

$$\begin{Bmatrix} +cons \\ +high \\ +back \\ -cont \\ -voice \\ -pal \end{Bmatrix} \longrightarrow \begin{bmatrix} -back \\ +pal \end{bmatrix} \Bigg/ \underline{\hspace{2cm}} \begin{bmatrix} +syll \\ +high \\ -back \end{bmatrix}$$
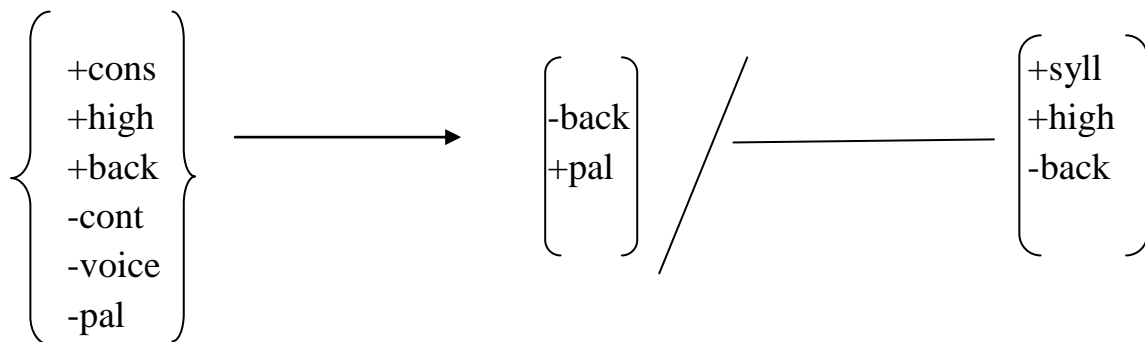
According to the rule, the velar stop becomes the palatal /c/ before a high front vowel /i̵/.

Similarly, in Babur/Bura, the voiced alveolar fricative /z/ is articulated with lip rounding when it occurs before the mid back vowel /o/ as shown below in example (16a-c) below:

  UR   SR

16) a. /zòI/   [zᵂól]   'stick'

  b. /fóri/   [fʷóri]   'forget'

c. /zóili/   [zʷóli]   'fool

To account for the forms above, the following labialization rule is formulated as illustrated in (17) below:

17)

$$
\begin{bmatrix} + \text{Cons} \\ - \text{Son} \\ + \text{Cont} \\ + \text{Cor} \\ + \text{Strident} \\ + \text{Voice} \\ - \text{round} \end{bmatrix} \longrightarrow [+\text{round}] \ / \ \underline{\quad} \ \begin{bmatrix} + \text{Syll} \\ - \text{high} \\ - \text{low} \\ + \text{back} \\ + \text{round} \end{bmatrix}
$$
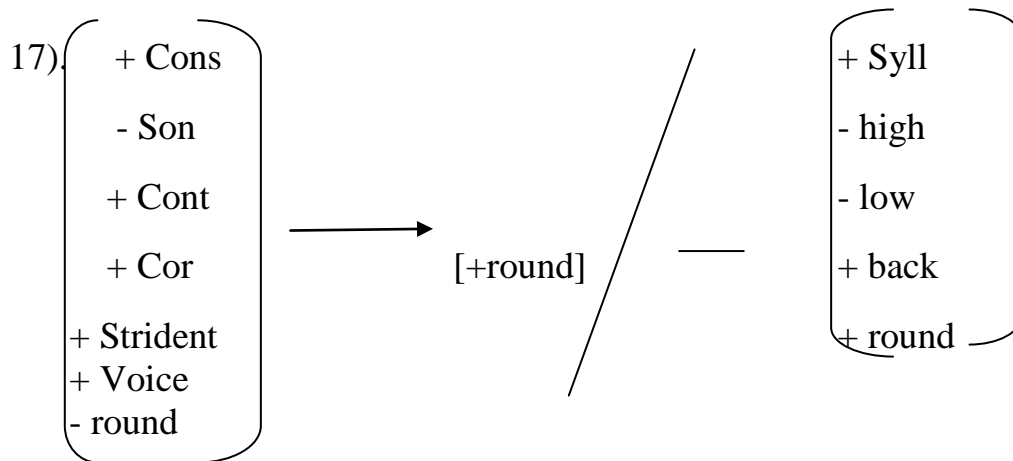
The rule states that a voiced alveolar fricative becomes rounded when it occurs before a midback rounded vowel.

Muhammed et al (2002) further asserted that in Babur/Bura, vowel assimilation involves the raising of the low vowel /a/ to a mid /ə/. The assimilation is therefore partial since the /a/ does not change to /i/ as shown in example (18):

	UR	SR	
18).	a. /áfá+ni/	[áfəni]	'arrow'
	arrow + the		
	b. /mdá+ni/	[mdəni]	'the man'
	man + the		
	c. /páltáni]	[páltəni]	'change form'

To account for the form above, a partial assimilation rule is formulated as shown in example (19) below:

19)

$$\begin{bmatrix} + \text{Syll} \\ + \text{low} \\ - \text{back} \\ + \text{front} \end{bmatrix} \longrightarrow / \begin{bmatrix} \text{low} \\ - \text{high} \end{bmatrix} \underline{\qquad} \begin{bmatrix} + \text{Syll} \\ + \text{high} \\ + \text{front} \end{bmatrix}$$
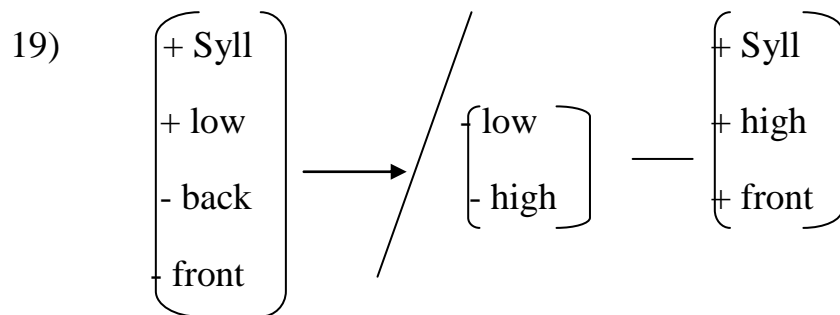
The assimilation involves one vertical movement of the /a/ to / ə;/ two vertical movements would result into the barred – i which does not exist in Babur/Bura. For the assimilation to be complete, that is, / ə/ becoming /i/, before /i/, there would be two horizontal movements after the two verticals. These movements are not impossible; however, they do not apply in Babur/Bura. Thus the partial assimilation is achieved (Mohammed et al /2002:46).This research is related to my work because they are both phonological studies and both employ the use of distinctive features to interprete data.

Yalwa (2002:27) gives an account of autosegmental morpho-phonological approach to some Hausa tonal processes. In his work he tries to show the tones of imperative instructions where there are tonal forms of verbs ; LL (H), i.e. HL---> LH, and there is also the other one which an imperative verb is the same as that of the base when an NP (noun or pronoun subject) precedes it, he calls it "zero derivation method". He also talked about tone pattern of some derived norminals such as abstract nouns, antonyms etc. Some autosegmental notions like stability of tones, polarity of tones, tone spreading etc. are looked at.

Yalwa (2002:27) describes imperatives as "verbs that begin with a low tone and is followed by a high and another low depending on what follows the verb (i.e. direct object noun or personal object pronoun)." He went ahead to give examples of verbs in Hausa like sayoo, karoo and wankoo a HH tone pattern which tend to be realized as a LH verbs in the imperative, i.e. they are then realized as sàyoo, kàroo and wànkoo respectively. He further gave the following illustration as shown in example (20a-c) below:

Base:	**Imperative**	**Verb +obj, Pron.**	**Gloss**
20)a. shaa	shàa	shi	drink it!
b. ɓi	ɓ ii	su	hate them!
c. jii	jii	su	hear them!

In the above examples, there is a rule that either raises or lowers tones (i.e. tone simplification). This is the case where one uses imperative I, where we have a change of a H+L---> L+H simplification rule. The examples are highly relatable to the current research as the current research shows tonal changes in the data collected. The Babur/Bura sometimes slightly modifies tonal structure of some words although major modifications occur mostly in the sound structure of the words. Similarly, Yalwa (2002:28) uses imperative II form where he uses toneless object pronouns i.e. H+L → H+L simplification rule as is shown below in (21a-c):

Base: Subject+ Imperative Verb+ obj. Pro.   Gloss

21) a. shaa   ká   shaa   Shi   'you drink it!

   b. ɓii   kú   ɓii   Sù   'you (Pl.) hate them

   c. jii   mú   jii   Sù   'let us hear them'!

He mentions that this process is only possible where there is a subject in the imperative sentence or where the imperative has a feature of [-conditional]. This is also what obtains when the verb has double objects as illustrated in the following example (22 a-c):

Base   Subject +Imperative verb+Io+(Noun):   Gloss

22) a. shaa   Ká   Shaa masá ruwaa   'you drink water for him'!

   b. ɓii   Kù   ɓii musú suu   'you (Pl.) hate them for them'!

   c. jii   Sù   jii manà làabaarin   'they should hear the story

                                                      for us/on our behalf!

He explains that the method used to form the imperative above is what is called "zero derivation method". In this method the imperative verb is the same as that of the base when a noun phrase subject precedes it, i.e. appears in the beginning of a sentence or when the person-aspect-complex (PAC) is not expressed.

Bukar (2004) examines structural modification of Hausa loanwords in Babur/Bura. He observes that modification takes place phonologically and morphologically. The former, having to experience consonant and vowel

substitution of Hausa loanwords, in Babur/Bura, such as glottalization, deglottalization, sound substitution etc while the latter, includes prefixation and suffixation of plural markers and possessive pronouns. Bukar provides the following examples of Phonological and Morphological processes illustrated in (23a-d) below:

	Hausa		Babur		
	Phonetic	Orthographic	Phonetic	Orthographic	Gloss
23) a.	[ƙáuyèe]	ƙauye	[kauyèe]	kauye	village
b.	[ƙuusaa]	ƙusa	[kuusaa]	kusa	nail
c.	[ƙirgì]	ƙirgi	[kirgì]	kirgi	tanned cowhide
d.	[ƙararrawaa]	ƙararrawa	[kararrawaa]	kararrawa	bell

Bukar(2004) concludes that from (3a-d) above, the Babur/Bura substitutes the voiceless velar ejective /ƙ/, for the voiceless velar stop/plosive of the Hausa loanwords at the word initial positions before the vowels /a/,/au/,/i/, and /u/ respectively. Hence, deglottalization is said to occur.

The addition of 'mdǝr' (person) and 'mjir' (people) (plural) are made at the initial position of the loanwords, mostly verbs, to derive a Noun agent as such prefixation. These Phenomena are explained below in (24)

	Hausa		Babur/Bura		Gloss
24)a.	[ɓarnáa]	ɓarna>	[mdǝr+ bannáa]	mdǝrbanna	destroyer
b.	[zambá]	zamba>	[mjir+zambáa]	mjirzamba	swindlers
c.	[sìyáasáa]	siyasa>	[mjir + sìyáasáa]	mjirsiyasa	politicians
d.	[rubuutuu]	rubutu>	[mjir + rubuutuu]	mjirrubuutuu	writers

Although his work is related to the current study, being that he focuses on modification of phonology, morphology and to some extent semantics of Hausa loanwords in the Babur/Bura Language, they differ in scope. The study in question intends to simply look at phonological features of Hausa as spoken by Babur/Bura speakers in Kano. Other works on comparative studies include (Salim, 1981; Bello, 1985; Yusuf, 2003; Abubakar, 2004; Shariff, 2010; and Schuh & Shalangwa, 2010).

Baba (2005:18) used a simple descriptive approach towards showing the phonological variations exhibited in the type of Hausa spoken as L2 in Jos/Bukur. He compared the Hausa spoken as L2 in Jos/Bukur with what is obtained in the standard variety (which he based largely on the Kano dialect). He also made an attempt to evaluate the socio-linguistic situation in Jos/Bukur as observed during fieldwork, with the view of providing a point of departure for a proper analysis of the level of linguistic interference or influence the surrounding languages exerted on Hausa spoken as L2 in Jos/Bukur. He pointed out some phonological variations that occurred which include deglottalisation, c:sh alternation, syncope, monophthongization of the diphthongs "ai" and "au" to [ee] and [oo] respectively, simplification of gender and tenses as well as morphosyntactic deviation. For the purpose of this research however, we looked at deglottalization only which is one of the processes that occur in data collected from the Babur/Bura speaker of Hausa. Baba did not provide phonological rules for the processes but as will be seen ahead, in chapter four, most of the phonological processes of this research were accounted for through

phonological rules. Below are selected examples of deglottalization as illustrated by Baba in (25 (i) a-f and (ii) a-f).

Standard Hausa	Jos/Bukur Hausa	Meaning
25(i) /ɓ/ → [b]		
ɓatà	batà	getting lost
ɓooyèe	booyèe	conceal
ɓeeraa	beeraa	rat
ɓaaci	baaci	spoil
ɓaawo	baawoo	bark
taɓàa	tabàa	touch

(ii) /ɗ/ → [d]

haɗàa	haɗàa	mix
kaɗanyàa	kaɗanyàa	shea fruit/trea
kàɗan	kàɗan	a few
gurɗèewaa	gurɗèewaa	dislocation
buuɗèe	buuɗèe	open widely
ɗinya	ɗinyaa	black plum tree/ fruit

Baba (2005:19) further asserted that the Hausa L1 phonemes tend to be difficult as such L2 Hausa speakers therefore opt for the universal sounds that are easier to produce.

Haruna (2008) tries to examine the features of Hausa as spoken by the "Igbo" speech community in Sabon Gari, Kano state. In his research he discovered certain interferences in the sound system (phonology) in both consonants and vowels and as such exposes the case of phonological variations in second language acquisition. He discovered a number of phonological changes that occurred in speech of Igbo Hausa speakers like vowel substation and consonantal change. Below are selected examples of vowel substitution and consonantal change respectively:

Monophtongization of /ai/ to /ee/: as illustrated below in (26a-j).

Underlying Hausa form	**Altered form**	**Gloss**
26) a. /baiwaa/	[beewaa]	gift
b. /tambai/	[tambee]	Hausa name
c. /zainàb/	[zeenà/seenà]	a kind of Hausa name
d. /kainuwaa/	[keenuwaa]	a kind of pond plant
e. /gwaiwaa/	[gweewaa]	enlarged testicles
f. /sâiwaa/	[sêewaa]	root
g. /daidai/	[deedee]	correct
h. /ƙwarai/	[koree]	an exclamation
i. /wasai/	[wosee]	fresh
j. /kai/	[kee]	you

The process, of monopthongization of /ai/ to [ee] are exemplified in the following rules as shown below in example a & b respectively. i.e examples (27-34).   Word medially

27). /ai/ ⟶ [ee] / C — (e.g: sâiwaa ⟶ sêewaa)

$$\left[\begin{array}{l} + \text{Cont,} \\ + \text{vd/-vd} \end{array}\right]$$

28)/ai/ ⟶ [ee] / C— (e.g: baiwaa ⟶ beewaa)

$$\left[\begin{array}{l} + \text{Cont.} \\ - \text{vd/+vd} \end{array}\right]$$

29) /ai/ ⟶ [ee] / C— (e.g: tambai ⟶ tambee)

$$\left[\begin{array}{l} + \text{Stop,} \\ + \text{vd/-vd} \end{array}\right]$$

30) /ai/ ⟶ [ee] / C — (e.g: Zainab ⟶ zeena/seena)

$$\left[\begin{array}{l} - \text{Stop,} \\ - \text{vd/+vd} \end{array}\right]$$

(b) Word finally

31)/ai/ ⟶ [ee] / C — (e.g: ƙwarai ⟶ koree)

$$\left[\begin{array}{l} + \text{Cont,} \\ + \text{vd/-vd} \end{array}\right]$$

32) /ai/ ⟶ [ee] / C— (e.g: daidai ⟶ deedee)

$$\left[\begin{array}{l} + \text{Cont,} \\ \text{vd/+vd} \end{array}\right]$$

37

33) /ai/ ⟶ [ee] / C — (e.g: kai ⟶ kee)

$$\begin{bmatrix} + \text{Stop,} \\ + \text{vd/-vd} \end{bmatrix}$$

34) /ai/ ⟶ [ee] / C — (e.g: ƙwarai ⟶ koree)

$$\begin{bmatrix} + \text{Stop,} \\ - \text{vd/+vd} \end{bmatrix}$$

Haruna (2008) says that "in the course of the research, it has been observed that in almost all the direct interviews conducted with the sample subjects the monophthongization is 99% fixed". He also added that, "an Igbo Hausa L_2 speakers tends to monophthongize the source diphthong i.e where /ai/ becomes long mid front vowel [ee]." Another example he gave regarding monophthongization is /au/ becoming long mid back vowel [oo] and short low central vowel /a/ becomes short mid front vowel [e]:

He asserts that "this process usually occurs before certain alveolar sounds and after certain velar sounds within the same utterance (word)."Consider the following examples given by Haruna (2008), illustrated in (35a-j) below.

Underlying Hausa form	Altered form	Gloss
35)a. /gàrii/	[gèrii]	town
b. /kàree/	[kèree]	dog

c. /cookàlii/   [cokèlii/shokèlii/shokòlii]   spoon

d. /haukàcee/   [ookèshee]   become mad

e. /wajee/   [wajee]   place

f. /akàsii/   [ekesii]   shortcoming

g. /katsèe/   [kesèe]   cut off

h. /ƙàshii/   [kècii]   bone

i. tashàa/   [tashàa/tecàa]   station

j. /shaddàa/   [sheddàa/ceddàa]   a particular

                                                        clothing material

Haruna explains that from the above data, there are a number of issues to be discussed. From example (35c, and d) for instance, where the voiceless post-alveolar affricate /č/ is substituted with voiceless post-alveolar fricative /š/ and vice-versa, see (35h) by some of the same subjects so far interviewed while others retain the original voiceless post alveolar affricate /č/ sound. By looking at example (35c,d&e) we can see an instance of defrication. Consider the following rules in (36c&d) below.

/a/   [e]   /k   -   (in: haukàcee   ookèshee)

/a/   [e]   /k   -   (in cookàlii   cokèlii/shokèlii/shokòlii)

     [o]

This feature can also be seen thus as illustrated in (37-41) below.

37).V $\longrightarrow$ $\begin{bmatrix} \text{-high} \\ \text{-high} \end{bmatrix}$ / C ―

[+low] $\begin{bmatrix} \text{+high} \\ \text{+bk} \\ \text{-vd} \end{bmatrix}$

38)   Item (d)

[tʃ] $\longrightarrow$ [ʃ] / V ― V   (an intervocalic consonant)

[+ low]   [- low]
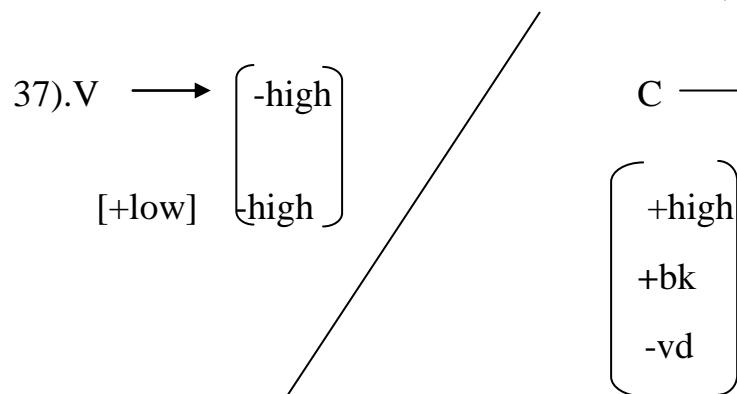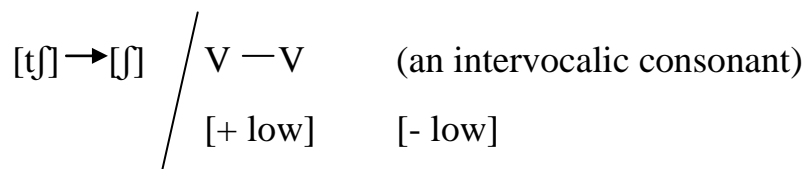
Other observations include:

 39)Item (g)

/ts/ $\longrightarrow$ [s] / ―――   V

40)

$\begin{bmatrix} \text{-syll} \\ \text{+ Cont} \\ \text{-Vd} \\ \text{-high} \\ \text{+del.rel} \\ \text{- Cont} \\ \text{+ glot} \end{bmatrix}$ $\longrightarrow$ $\begin{bmatrix} \text{+ Cont} \\ \text{-glot} \\ \text{-del.rel} \end{bmatrix}$ / ― $\begin{bmatrix} \text{-syll} \\ \text{+high} \\ \text{-bck} \\ \text{-low} \\ \text{-rd} \end{bmatrix}$

41)Item (h)

$$
\text{/sh/} \left[\begin{matrix} \text{-syll} \\ \text{+ Cont} \\ \text{-Vd} \\ \text{+ pal} \\ \text{+del.rel} \end{matrix}\right] \quad \text{[t\textipa{S}]} \left[\begin{matrix} \text{+ Cont} \\ \text{-glot} \\ \text{-del.rel} \end{matrix}\right] \Big/ \quad \text{- V} \left[\begin{matrix} \text{-syll} \\ \text{+high} \\ \text{-ble} \end{matrix}\right]
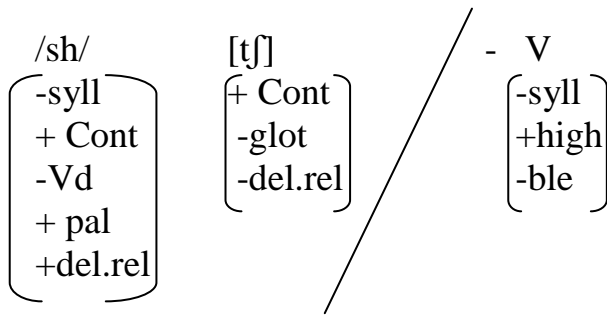$$
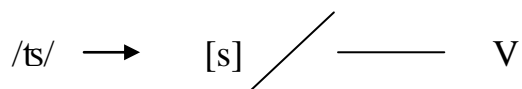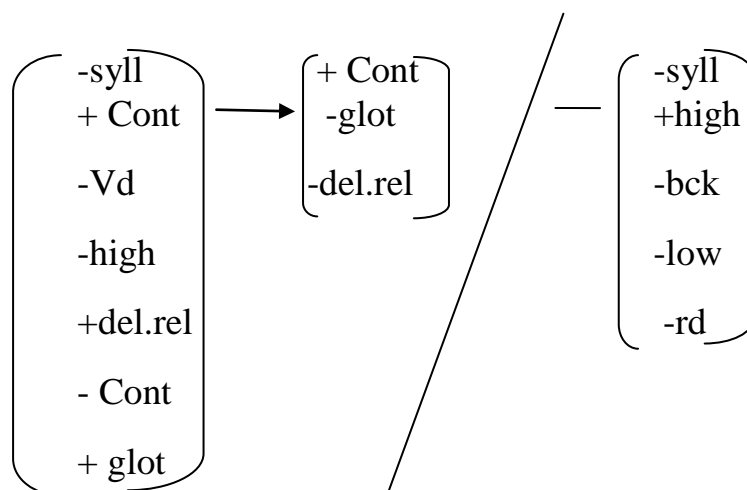
From the rule above, we have seen an instance of vowel raising from low central to mid front as pronounced by most Igbo L_2 learners of Hausa. Haruna (2008) went ahead to discuss the possible substitution between consonants that are found in the Igbo- Hausa speech. Consider the following examples in (42a-h).

	Underlying Hausa form	Altered form	Gloss
42) a.	/ɓàraawòo/	[bàraawòo]	thief
b.	/ɓeeraa/	[beeraa]	mice
c.	ɓaawoo/	[baawoo]	back shell
d.	/ɓuulàa/	[buulàa/kpuulàa]	hole
e.	/ɓatàa/	[batàa]	get lost
f.	/zimɓee/	[zimbee/simbee]	pointing using mouth
g.	/haɓòo/	[abòo/akpòo]	nose-bleeding
h.	/tàɓoo/	[tàboo]	mud

Haruna explains that it could be observed from the examples above that the subjects tend to replace the voiced bilabial implosive /ɓ/ for voiced bilabial plosive /b/ and at whichever position it appears. The change is static and without specification of an environment. He further explained through the following rule in (43) below.

43)
$$\begin{array}{l} ɓ \longrightarrow b \ / \ C \underline{\hspace{1cm}} \\ ɓ \longrightarrow b \ / \underline{\hspace{0.5cm}} C \underline{\hspace{1cm}} \\ \qquad\qquad \begin{bmatrix} +\text{lab} \\ +\text{imp} \\ +\text{ vp} \end{bmatrix} \end{array}$$

Another thing worth observing here is the substation of voiced bilabial implosive /ɓ/ for a voiceless labio-velar sound /kp/ a sound that exists in Igbo language phonetics. This can be seen in item 42 (d) and (g) above, repeated below in (44a &b)

44) a. /ɓuulàa ⟶ [kpuulàa] to piers a hole

   b. /haɓòo/ ⟶ [akpòo] nose bleeding

Voiced alveolar lateral /l/ becomes voiced retroflex flap [r]:

According to Haruna (2008:58), such interchange is common where the two consonants replace each other.In some instances /r/ occurs as the underlying phoneme while in others its /i/, the igbo speakers changes /L/ as can be seen for /r/ in the following example illustrated in (45a-d).

	Underlying Hausa form	Altered form	Gloss
45) a.	/hoolamaa/	[ooramaa/oolamaa]	a wind of paper
b.	/hùulaa/	[ùuraa/ùla]	cap
c.	/halwàa/	[aruwàa/aluwàa]	seclusion
d.	/kalwaa/	[karuwa/kaluwa]	seeds of locust bean tree

From what has been seen, the vowels /a/ /u/ and /o/ are the only vowels that come before or after /i/ and, the Igbos apply the use of substitution. Consider the following rule beiow in (46).

46) /l/ → [r] / { vv —v̄ }   (E.g: hoolamaa→ooramaa/oolamaa)
                 { — v }   (E.g halwàa →aŕuwàa/àluwa)

One more thing worthy of observation is the insertion of the vowel /u/ to break the cluster where the second consonant is the rounded approximant /w/ (Hausa:/halwaa/>Igbo: [aŕuwa]: Hausa: /kalwaa/ >Igbo : [kaŕuwa]). See the role in example (47).

47)

Ø → [u] / { r } - w (eg: kalwaa ⟶ karuwa/kaluwa)
           { l }

From the discussions above, it can be observed that Haruna (2008) based his research on the influence of first language over second language i.e Igbo on Hausa using phonological tools of analysis namely substitution, monophthongization and consonantal change. He also made use of phonological rules and intonations which makes it similar with the present research. Where they only differ is in terms of languages of study and phonological processes found to occur during speech.

Blench (2010:3) in a draft of Bura dictionary observes that almost all plurals are formed by adding _ (a) "yeri" to the end of the noun. Some examples cited in his work includes the following in example (48a-c) below:

BURA

Singular	Plural	Gloss
48) a. kwara	kwarayeri	donkey
b. malgum	malgumayeri	she-goat
c. mutipi	mutipiyeri	guest
d. uzum	uzumayeri	stick
e. pazhi	pazhiyeri	friend

He further explained that there are some irregular or suppletive plurals as shown below in (49a-e)

Singular	plural	Gloss
49) a. sal	shili	man
b. mwala	mwanki	woman
c. mji	mda	person/people

d. bzər   madar   son

         e. nkwa   madankwi   daughter

As seen above, the plural marking of the words do not follow a specific rule

marker. Abstract nouns, pronouns, verbs, adjectives and adverbs are also major

issues in his discussion of the Bura language. He also talks of the Bura writing

system and insists that the system of writing should be based on the complete

inventory of the sounds of Bura and it should be as logical as possible so that it

will be easy to write. He points out that it is difficult to represent the Bura sound

with the usual English alphabets and therefore cites the following letters below:

a, b, ɓ, d, d, e, ə, f, g, h, i, j, k, ƙ, l, m, n, o, p, r, s, t, u, v, w, x, y,   z.

He also enumerates the following digraphs /ts/,/dz/ and /pd/ which are written with

two or more letters in English but are infact only one sound. For instance, "/ts/, are

distinct sounds. However for those familiar with the principle of English

alphabetisation, it is probably safer to treat them as made up of two separate

letters." He added that a good number of words have tentative spellings only and

that a final decision on how to write them has not been made.

Blench's work on Babur/Bura lexicons, provides a stepping stone to understanding

the morphology and phonology of Babur/Bura words. Even though this is not too

different from the focus of this research which intends to look at the sound and

word structure of Hausa words, it will only look at it, as it is produced by Babur/Bura speakers. This nonetheless, makes Blench's work relevant to the study.

An analysis of Bura verbs are divided into five according to Muazu and Balami, (2010:12). They are Bura verbal derivation, Bura verbal inflection, Bura verbal morphological processes, Bura verb Tone and Bura verb syllable structure; four syllabic patterns including monosyllabic, disyllabic, trisyllabic and polysyllabic. Below are selected examples from this work:

These are verbs with CV and CVV and CVC structures. Verbs which have such structures are said to have low tones as illustrated below in (50a-e).

	Simple verb stems	Gloss
50)	a. hà	to wear
	b. pà	to fold
	c. shàa	to sting
	d. tsàa	to hit
	e. pìi	to sleep

Having a brief knowledge of how the Babur/Bura derive verbs and mark tones, contributes a great deal to this research in the sense that one would be able to see the differences between Hausa words and Babur/Bura words and even tonal differences. Even though, their work is restricted to morphology and to some extent grammar, this current study intends to focus on phonological aspects of Hausa as spoken by the Babur/Bura speaker.

"Very young children develop almost miraculously the ability of speech, without apparent effort, without even being taught as opposed to the teenager or the adult

struggling, who seems, ever being able to reach the same level of proficiency as five year olds in their first language" (Meisel, 2011:i)

> *The idea that learning crucially implies changing previously acquired behaviour seems to have been deeply rooted in language teaching. It is therefore not surprising that interference from L1 was and in part still is regarded as the major factor determining the shape of L2 speech. The research paradigm which elaborated this idea in considerable detail is Contrastive Analysis (C.A)*

The Contrastive Analysis goes a long way in expressing the frequently, quoted statement by Fries (1945:9) as cited in Meisel (2011:4)

> *The most efficient materials are those that are based upon a scientific description of the language to be learned carefully compared with a parallel description of the native language of the learner.*

Munkaila and Baba (2014:52), in studying the linguistic features of Hausa spoken as L2 in the multilingual environment of Potiskum, found out that some features of Guddiranci tend to influence the L2 Hausa spoken by the non native speakers of Hausa in Potiskum. They therefore came up with the following examples as shown belo in (51a-f).

Substitution of [q] for /ɓ/

	Guddiranci	Potiskum	L2 Speakers
51)	a. ɓàhoo/ɓafoo	qàhoo/qàfoo	horn
	b. ɓoonàa	qoonàa	burn
	c. ràaqumii	r̄àaqumii	camel
	d. ròoqoo	r̄òoqoo	begging

e. qwaryaa	qwaryaa	calabash
f. qyauree	qyauree	door cover

It is clear to note that in the pronunciation of L2 Hausa speakers in Potiskum, Hausa is characterized by replacement of the ejectives /ƙ/ /ƙw/ and /ƙy/ with the plosive [q], [qw] and [qy] respectively. The substitution occurs in both initial and medial positions. This work is relevant to the current study as it identifies phonological changes or linguistic influence of Guddiranci on Potiskum Hausa. They only differ in scope because the current research intends to look at phonological perspectives of the Hausa spoken by the Babur/Bura speaker.

"Hausa dialects are best classified on the basis of their linguistic similarities rather than the native speaker's social status" (Munkaila and Baba 2014:51). They further affirm that "Hausa scholars adapt the terms East Hausa (EH) and West Hausa (WH) when making reference to Hausa dialects in a much wider linguistic sense" they thus classify Hausa dialects into two "EH dialects as Bauchi, Guddiri, Hadeja, Kano, Zaria and to some extent Daura and WH dialects as Sakkwato including Kebbi and Zamfara areas (and to some extent Katsina)". This difference could be seen in the example provided by Munkaila and Baba (2014:51) in example (52a-d)

EH	WH	meaning
52) a. [roodùi]	[roodùi]	rod
b. [rubuutaa]	[rubuutaa]	write
c. [kurnàa]	[kurnàa]	type of tree

d. [rootsʊ̀i]   [rootsʊ̀i]   dent

From the above data, the researchers try to classify dialects of the Hausa language based on linguistic differences namely East Hausa and West Hausa dialects. The current study will be based only on the Standard Hausa closer to the one spoken in Kano which belongs to the East dialect not on the level of dialect study but on the level of phonological and morphological influence of Babur/Bura language.

Nasuk (2016) investigates the phonological problems the Pan learners of English encounter in the learning of English as a second language furthermore, he compares the consonants, vowels and some selected phonological processes of both languages, where he mentions that, Pan has ten vowels while English has twenty-five, there are eight short vowels in Pan and two long vowels. Also the following consonants occur in Pan but not in English: /dj/, /fj/, /gj/, /kʷ/, /gʷ/, /ɣ/, /v/ /ɗ/ and /ʔ/ while, the following English consonants /Ɵ/, /ð/, /ʃ/, /ʧ/, and /ʤ/ do not occur in Pan.

He also states that palatalization is the super-imposition of tongue raising on a segment. An example of palatalization in English includes the phrase *did you* --+ [diʤu] while in Pan language. This phenomena is exemplified in example (53).

53)   a.   /peedye/ --+ [pe:dje] dawn

b. /ndyik/ --+ [ndjik] build (house)

The rule that account for palatalization in Pan language is given thus in example (54) below:

54)
$$\begin{bmatrix} +\text{cons} \\ -\text{syll} \end{bmatrix} \quad \begin{bmatrix} +\text{high} \end{bmatrix} \Bigg/ \underline{\qquad} \begin{bmatrix} +\text{syll} \\ +\text{high} \\ -\text{rnd} \end{bmatrix}$$

Nasuk's work is a highly insightful material for this research, the only difference been that this research is based on chadic languages. His research is based on the interaction between applied linguistics and phonology while this work is based on some phonological processes of the language in question.

Modu (2017) provides a phonological description of Kanuri loanwords in Margi. He also, shows the contact between the two languages and how the contact affected the lexicon of the two languages, hence, the loanwords are classified into different themes deriving from the contacts between the two languages.

Furthermore, the study provides the phonological adoptations and the adaptations of the loanwords. The adaptation processes identified with respect to this are denasalization, degemination, devoicing, consonant substitutions, vowel lengthening, vowel substitution, vowel raising and vowel fronting. The nature of the phonological adaptation accounted for the phonological behaviours of the loanwords, especially their phonological transcriptions. Also, the loanwords are

distributed into different domains of contact between the two languages. The research also reveals that most of the Kanuri loanwords go through adaptation processes in order to fit into Margi speech system. This work proves highly beneficial to this research as it employs the use of phonological tools of analysis and makes use of phonological rules as well for data presentation.

CHAPTER THREE

RESEARCH METHODOLOGY AND THEORETICAL FRAMEWORK

3.0 INTRODUCTION

This section focuses on the methodology used in collecting, processing and analysing data for this research and the theoretical framework used for the research.

3.1 METHODOLOGY

The methods through which data for this research were collected are discussed under the following Area of study, Method of data collection, Sample selection and Data collection procedure.

3.2 AREA OF THE STUDY

This research was based on Hausa spoken as L2 in Kano, specifically: Nassarawa, Kumbotso and Ungogo Local Government Areas. Therefore, the areas covered by the research are: Kawo, TundunMurtala, Rimin Kebe and Farawa. The reason for choosing these areas is because the Babur/Bura native speakers live there in large numbers.

3.3 METHOD OF DATA COLLECTION

Interview and observation methods were adopted primarily to collect data from respondents for the purpose of the research.

3.3.1 THE INTERVIEW

An unstructured interview was administered on selected groups of (20) of Babur/Bura native speakers (Hausa L2 speakers). Tape recorder was used to record the articulation of the lexical items for record purpose.

3.3.2 THE OBSERVATION

Here, Babur/Bura speakers were observed as they carried out their normal activities. It was important that these activities involve Hausa speech amongst Babur/Bura native speakers. Hence the researcher has attended activities such as Naming ceremonies, wedding ceremonies, Eid celebrations ,family gatherings, places of mourning etc.

3.4 DESCRIPTION OF THE METHOD

Focused and unstructured interview were adopted. The interview was divided into two sections. Section one is the introductory part, designed to collect the biodata of the respondents. These include the name, age, occupation, educational level and town or village of the respondent. In section two, direct and indirect questions were administered in Hausa and the respondent responses were in Hausa.

3.4.1 SAMPLE SELECTION

Twenty (20) respondents were selected from the four areas covered by the research, five people from each area: that is 3 males, 2 females. The average age of the sample population interviewed ranged from 25 to 60. This is because people of such age range tend to have full mastery of a language. consider the table below:

Table Showing the Babur/Bura Respondents from four Areas Covered by the Research

Area	Age	Education	Social Background	Sex
Farawa Quarters	60	Secondary	Town head	M
Farawa	60	Secondary	Civil servant	M
Farawa	60	Degree	Businessman	M
Farawa	40	Secondary	Housewife	F
Farawa	30	NCE	Public servant	F
Kawo Quarters	57	Degree	Retired banker	M
Kawo	50	Traditional	Businessman	M
Kawo	50	NCE	Educationalist/Philantropist	F
Kawo	27	Degree	Teacher	M
Kawo	25	Degree	Teacher	F
RiminKebe	58	Secondary	Carpeting/Interior décor	M
RiminKebe	55	Secondary	Company worker	M
RiminKebe	45	Secondary	Businessman	M
RiminKebe	38	Secondary	Housewife	F
RiminKebe	33	NCE	Teacher	F
TudunMurtala	60	Traditional	Retired company worker	M
TudunMurtala	38	Secondary	Construction worker	M
TudunMurtala	59	Traditional	Housewife	F
TudunMurtala	45	Secondary	Housewife	F
TudunMurtala	38	Secondary	Mechanic	M

3.5 DATA COLLECTION PROCEDURE

Periodic visits to the sampled areas within Kano metropolis were carried out. Oral interviews, conversations, and tape recording were the procedures employed to directly collect data from the target group of speakers. Other sources of data collection include books, journals, researches etc.

3.6 THEORETICAL FRAMEWORK

This research adopts the theory of Generative phonology which was developed by Chomsky and Halle in (1968), in an effort to treat English Phonology and do away

with the orthodox phonemics in North America. Generative phonology differs from phonemic theory not merely in technical terms, but in the numbers and nature of devices that it allows itself to use. It seeks to establish a single underlying representation for every morpheme from which the speaker will then derive or generate the appropriate phonetic surface form in a given context. "Typically, a phonological rule states that a certain class of segment undergoes a change in some particular environment. For example, a rule may state that obstruents are voiced following any voiced segment using the distinctive features of SPE (sound pattern of English). The rule is demonstrated as follows in example (55) below:

55. [-sonorant] →[+ voiced] / [+ voiced] _

The slash comes before the environment specification and the bar on the line indicates the position of the affected segment. A precise but cumbersome reading of the rule is: "any segment which is among other things, nonsonorant is also voiced when standing after any segment which is, among other things, voiced" (Clark,Yallop&Fletcher,2007:131-132).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 INTRODUCTION

This section focuses on some phonological features of the Hausa spoken by Babur/Bura speakers in four areas in Kano namely: Kawo, Tudun Murtala, RiminKebe and Farawa. These processes include (i) Deglottalization (ii) Glottalization (iii) Vowel Lengthening (iv) Sound Substitution (v) Vowel Shortening and (vi) Deletion.
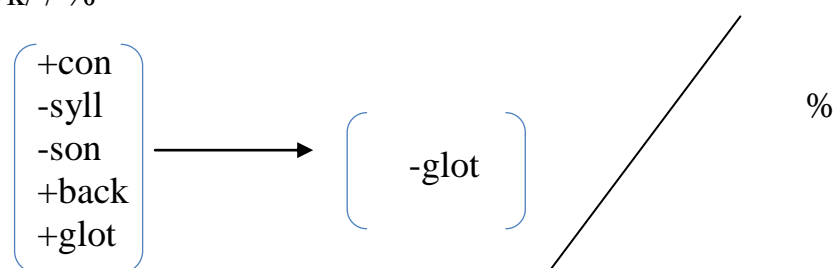
4.1   Deglottalization

This term is used to refer to the process of replacing a glottal sound with a non-glottal counter part in a particular phonetic environment (ƙ → /k/). The Babur/Bura substitutes the voiceless velar ejective /ƙ/ for the voiceless velar stop/plosive /k/, of the Hausa words. This is illustrated in the following examples as shown below in (56).

		Underlying Hausa Form	Altered Form inBabur/Bura	Gloss
56)	i.	/ƙarfèe/	[karfèe]	iron
	ii.	/ƙootàa/	[kootàa]	wooden handle of a hoe
	iii.	/ƙàhoo/	[kàhoo]	horn

iv.	/wuɠaa/	[wukaa]	knife
v.	/waaɠàa/	[wakàa]	song
vi.	/baɠii/	[bakii]	black
vii.	/bàaɠii/	[bàakii]	guests
viii.	/ɠudaa/	[kudaa]	fly
ix.	/ɠwai/	[kwai]	egg
x.	/ɠwaryaa/	[kwaryaa]	calabash

The above data shows that the voiceless velar ejective /ɠ/ is simplified for easy articulation by the Babur/Bura, to a voiceless velar stop/plosive /k/. This is in an effort to making the sound conform to that of the Babur/Bura language. This process occurs in all environments (i.e at initial, medial or final position).The rule can be formulated as: /ɠ/ becomes /k/ wherever they occur, thus:

57. /ɠ/ → /k/ / %

$$\begin{bmatrix} +con \\ -syll \\ -son \\ +back \\ +glot \end{bmatrix} \longrightarrow \begin{bmatrix} -glot \end{bmatrix} \Big/ \qquad \%$$

This may be connected to the fact that /ɠ/ sound does not exist in the language phoneme inventory, hence its substitution with a more pleasant available/closest phoneme /k/.
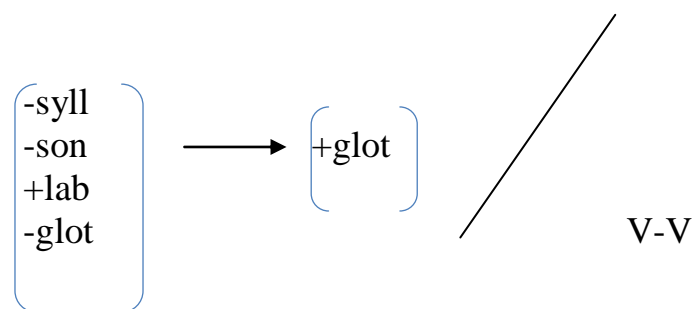
4.2   Glottalisation

Here, the Babur/Bura, substitutes the voiced bilabial stop/plosive /b/ for the voiced bilabial implosive /ɓ/. Consider the following examples in (58) below:

		Underlying Hausa Form	**Altered Form in Babur/Bura**	**Gloss**
58)	i.	/riibàa/	[riiɓa]	gain/profit
	ii.	/rìbaa/	[riɓa]	Interest
	iii.	/kwalbaa/	[kwalɓaa]	Bottle
	iv.	/tabòo/	[taɓòo]	Scar
	v.	/ƙibàa/	[kiɓàa]	Fat
	vi.	/dabiinòo/	[diɓinoo]	Date

The examples above show the substitution of the voiced bilabial plosive /b/ for the voiced bilabial implosive /ɓ/ intervocalically. The rule is stated as follows in example (59).

59. /b/ → /ɓ/ / v-v

$$
\begin{bmatrix} \text{-syll} \\ \text{-son} \\ \text{+lab} \\ \text{-glot} \end{bmatrix} \longrightarrow \begin{bmatrix} \text{+glot} \end{bmatrix} \Bigg/ \qquad \text{V-V}
$$

The general assumption in this operation is that, /b/ becomes /ɓ/in the second syllable of a given word. However, since /b/ is also a phoneme in Babur/Bura, it

does not undergo glottalization process as in the following: '*baba*' father is the same surface and underline form in Hausa.

4.3 Vowel Lengthening

This is a process of prolonging a vowel sound than expected. The Babur/Bura makes adjustment to the low central vowel /a/, high front vowel /i/ and high back vowel /u/ during speech. Consider the following in (60) below:

		Underlying Hausa Form	Altered Form in Babur/Bura	Gloss
60)	i.	/ƙawaa/	[kaawa]	female friend
	ii.	/kàmaatà/	[kàamaata]	be fitting
	iii.	/tunàa/	[tuunàa]	Remember
	iv.	/jiraa/	[jiiraa]	wait for
	v.	/gàmayyàa/	[gàamayyàa]	Merger
	vi.	/ita cèe/	[itàacee]	she's the one

In the examples provided above, it could be seen that the Babur/Bura lengthens the vowel sounds that occur between two or more consonant sounds usually in the first syllable of the word for easy articulation. This could be represented by the rule below in (61).

61.   a→aa $\Big/$ [+ consonantal] _ [+consonantal]

[+ Syllabic] →   [+ long] $\Big/$ [+ consonantal] _ [+consonantal]
[- long]

The above rule can be interpreted as the short vowel /a/ becomes long /aa/ when it occurs immediately after a consonant or in between two consonantal morphemes.

4.4   Sound Substitution

Based on the data collected from the field, it has been observed that the Babur/Bura, substitutes sounds to fit into the language's phonological system as illustrated in the following processes namely: (i) /ts/→/s/, (ii) /h/→/f/, (iii) /r/→/l/. The above three phenomenon are illustrated under 4.41-4.4.3 respectively.
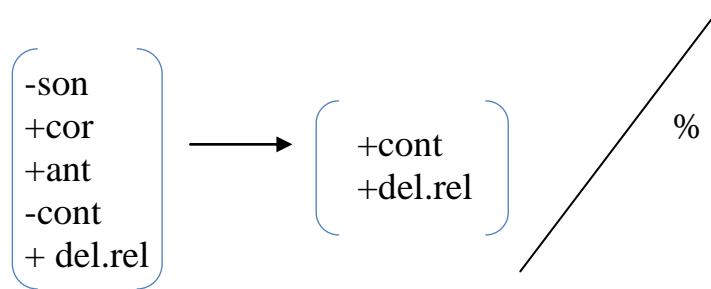
4.4.1 The voiceless Alveolar Ejective /ts/ becomes the voiceless Alveolar Fricative /s/

Here, the Babur/Bura substitutes the voiceless alveolar ejective /ts/ for the voiceless alveolar fricative /s/ at the initial position, medial position or final position of a word. This is illustrated in the following examples below in (62).

		Underlying Hausa Form	Altered Form in Babur/Bura	Gloss
62)	i.	/tsuntsuwaa/	[sunsuwaa]	Bird
	ii.	/tsintsiyaaa/	[sinsiyaa]	Broom
	iii.	/tsûmmaa/	[summaa]	Rag
	iv.	/katsèe/	[kasèe]	to stop abrubtly
	v.	/tsàkaanii/	[sakaanii]	Between
	vi.	/rintsii/	[rinsii]	difficult situation

60

vii.	/tsugùnaaa/	[sugunaa]	Squat
viii.	/tsinkee/	[sinkee]	broom stick
ix.	/rantsuwaa/	[ransuwaa]	Swear

63./ts/→/s/ / %

$$
\begin{bmatrix}
\text{-son} \\
\text{+cor} \\
\text{+ant} \\
\text{-cont} \\
\text{+ del.rel}
\end{bmatrix}
\longrightarrow
\begin{bmatrix}
\text{+cont} \\
\text{+del.rel}
\end{bmatrix}
\Big/ \quad \%
$$

The voiceless Alveolar Ejective /ts/ becomes the voiceless fricative /s/ when it occurs at the beginning of a word or in a medial position of a word. The general commentary about the distribution of /ts/ and /s/ sounds is that, even though the /ts/ is prevalent in the language phonemes, it is restricted to certain speeches that are peculiar to Babur/Bura, and not to words of Hausa based speech. The distribution occurs in any environment as seen above.
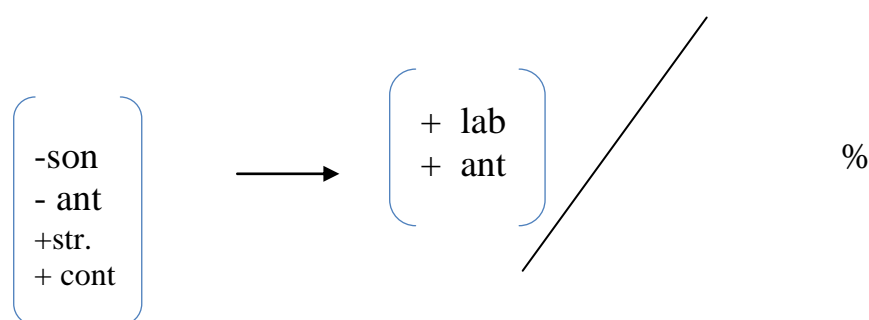
4.4.2 The voiceless Glottal Fricative /h/ becomes Voiceless Labiodental Fricative /f/

Based on the data collected from the field and analysed, it shows that the Babur/Bura substitutes the voiceless glottal fricative /h/ for the voiceless labiodetal fricative /f/ in the initial or final positions. Consider the following the following in (64) illustrated below.

		Underlying Hausa Form	Altered Form in Babur/Bura	Gloss
64)	i.	/ƙàhoo/	[kafoo]	Horn
	ii.	/huudàa/	[fuda]	to Pierce
	iii.	/hùulaa/	[fula]	Cap
	iv.	/murhùu/	[murfu]	Stove
	v.	/haihù/	[haifu]	to give birth
	vi.	/hòotoo/	[foto]	Picture
	vii.	/hùuhuu/	[fufu]	Lungs
	viii.	/huutuu/	[futu]	break/rest

As seen above, the Babur/Bura changes the voiceless glottal fricative consonant /h/ even with the existence of the sound in the Babur/Bura sound inventory, for the voiceless labiodental fricative /f/ in the initial or final positions to fit into the Babur/Bura pronunciation rule. This can be represented in the rule below in (65).

65. [h]→ /f/ / %

$$
\begin{bmatrix} -son \\ -ant \\ +str. \\ +cont \end{bmatrix} \longrightarrow \begin{bmatrix} +\ lab \\ +\ ant \end{bmatrix} \Big/ \qquad \%
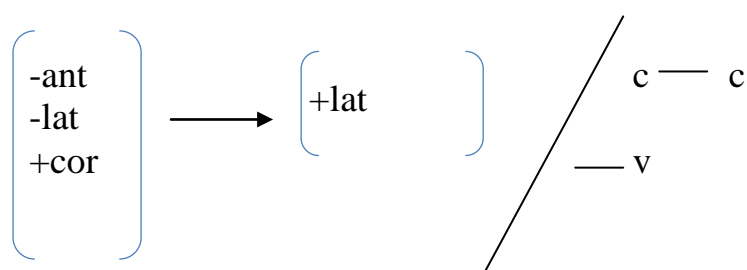$$

4.4.3 Voiced Alveolar Trill /r/ becomes Voiced Alveolar Lateral /l/ or the Reverse

The Babur/Bura substitutes the voiced alveolar trill /r/ for the voiced alveolar lateral /l/ in the medial position. Examples below illustrate this fact in (66).

	Underlying Hausa Form	**Altered Form in Babur/Bura**	**Gloss**
66)	i. /tùràaree/	[tùlare]	Perfume
	ii. /gàrmaa/	[gàlma]	Plough
	iii. /farkàa/	[falkà]	tear open
	iv. /gurgùu/	[gulgùu]	cripple
	v. /sarkii/	[salki]	king
	vi. /rìigaa/	[lìiga]	shirt
	vii. /gìshirii/	[gìshilii]	salt

In the preceding examples, it appears that the Babur/Bura unconsciously substitutes some sounds that are closely related in terms of their place and manner of articulation and state of the glottis in this case, /l/ for /r/. The following rule is stated as follows in (67).

67. /r/→/l/

$$
\begin{bmatrix} \text{-ant} \\ \text{-lat} \\ \text{+cor} \end{bmatrix} \longrightarrow \begin{bmatrix} \text{+lat} \end{bmatrix} \Big/ \begin{array}{c} \text{c} \text{---} \text{c} \\ \text{---} \text{v} \end{array}
$$

From the above rule it could be seen that the voiced alveolar trill /r/ becomes the voiced alveolar lateral /l/ right before a consonant segment such as /m/, /k/ and /g/. However, this could also occur right after a vowel segment as is seen in /tùràare/ → [tùlàare] meaning "perfume".
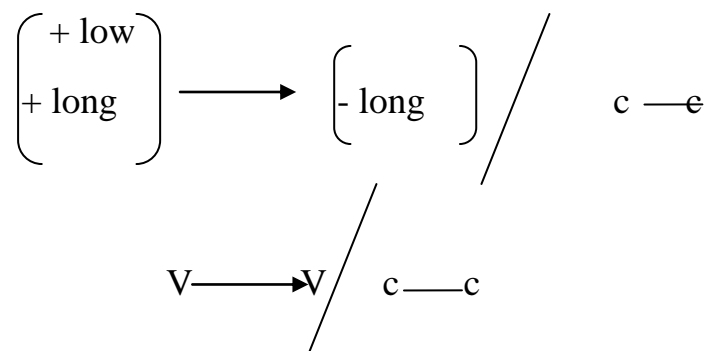
4.5   Vowel Shortening

This is a process whereby a vowel is reduced in length for a certain linguistic purpose. The Babur/Bura shortens the vowel sound /aa/, to   /a/. This is illustrated in the following example in (68).

		Underlying Hausa Form	Altered Form in Babur/Bura	Gloss
68)	i.	/kaataakoo/	[katako]	wood
	ii.	/kàanuuri/	[kanuri]	a tribe in Borno state
	iii.	/sàagàagi/	[sagagi]	name of a place in Kano

This could be illustrated in the following rules;

69. /aa/ → /a/ / [+consonantal] _ [+consonantal]

$$
\begin{bmatrix} +\text{low} \\ +\text{long} \end{bmatrix} \longrightarrow \begin{bmatrix} -\text{long} \end{bmatrix} \Big/ \quad c \underline{\quad} c
$$

$$
V \longrightarrow V \Big/ \quad c \underline{\quad} c
$$

 Long vowel /aa/ becomes short vowel phonemes. It could be remembered in example 60, where vowel lengthening is said to have occurred, the Babur/Bura lengthens the low central vowel /a/, in between consonant sounds as is seen in 60.ii.   /kàmaatàa/(Be fitting). → [kàamaata] Here, the reverse is the case. The Babur/Bura shortens the low central vowel sound.

4.6　Deletion

This occurs when a sound is removed during production of a word. The Babur/Bura deletes some sounds during speech. This is evident in the following examples in (70) below.

		Underlying Hausa form	**Altered Form in Babur/Bura**	**Gloss**
70)	i.	/yariimà/	[yarmà]	name/traditional title
	ii.	/baarikì/	[barki]	barracks
	iii.	/kaarùwà/	[karwa]	harlot
	iv.	/durùmii/	[durmi]	fig tree
	v.	/jàarumai/	[jàrmai]	brave men
	vi.	/gàa ruwà/	[gàrwa]	seasonal immigrants
	vii.	/jàrabàa/	[jàrbà]	desire

This process mostly occurs in the second syllable of trisyllabic words and only vowel phonemes become affected as illustrated in the rule below in (71).

71. V $\longrightarrow$ Ø $\Bigg/$ c——— c
$$\begin{bmatrix} +\text{cons} \\ -\ \text{Lat} \\ -\ +\text{cor} \end{bmatrix}$$

The above rule states that a vowel segment gets deleted in the environment where it occurs after the consonant flap /r/. This is because the Babur/Bura finds it easier to say the words in two syllables there by deleting the medial vowel segment.

4.7. Vowel substitution

The Babur/Bura substitutes the high front unrounded vowel /i/ for the mid central unrounded vowel /ə/ during Hausa speech. This is illustrated in the following examples in (72) below:

	Underlying Hausa form	Altered Form	Gloss
72)	i. /bireedi/	[bəredi]	bread
	ii. /damina/	[daməna]	rainy season
	iii. /dígàa/	[dəgàa]	digger
	iv. /aljífu/	[aljəfû]	pocket
	v. /binne/	[bənne]	bury
	vi. /bírki/	[bərki]	brakes
	vii. /fífita/	[fəfita]	fan
	viii./kiristà/	[kərəsta]	christian
	ix. /girbì/	[gərbi]	reap

This could be illustrated in the following rule below in (73)

73)   /i/   /ə/   ╱c —— c

As seen above, the Babur/Bura, substitutes the high front unrounded vowel /i/ for the mid central unrounded vowel /ə/ in the environment where it occurs inter-consonantally.

Similarly the Babur/Bura substitutes the high back rounded /u/ for the mid central unrounded /ə/ during speech. This phenomena is illustrated in example (74) below:

	Underlying Hausa form	**Altered Form**	**Gloss**
74)	i. /bùrgaa/	[bərga]	bragging
	ii. /burjìi/	[bərjii]	feeder road
	iii. /laabulee/	[labəlee]	curtain
	iv. /tuuraawaa/	[tərawa]	whitemen
	v. /turbàa/	[tərba]	road
	vii. /jùgum/	[jəgum]	tostand flaccidly
	viii. /ƙùsumbi/	[kəsumbi]	to reap
	xi. /muunàanaa/	[mənana]	bad, evil, ugly
	x. /mùnaafùkii/	[mənàfiki]	hypocrite

The above phenomena can be illustrated in the following rules in example (75):

75. /u/ $\longrightarrow$ /ə/ $\Big/$ c —— c

As seen above, the Babur/Bura, substitutes the high back rounded vowel /u/ with a mid central unrounded /ə/in the environment where it occurs inter-consonantally.

4.8. Insertion

This is a zero segment replacing something in unoccupied positions. The Babur/Bura inserts segments at the initial and medial positions in order to suit its phonological convenience.

Initial insertion (prosthesis) – The Babur/Bura inserts segment(s) in the initial position of Hausa words as can be seen in the following in example (76):

Underlying Hausa form	Altered Form	Gloss
76) i. /àlàamàa/	[hàlàamàa]	flag, sign
ii. /gûnàgûnìi/	[ngûnagûnìi/	grumbling
iii. /gurli/	[ngurli]	a green vegetable

This could be illustrated in the following rules in example (77) below :

77. $\emptyset \longrightarrow$ /h/ $\Big/$ ___ /a/

  $\emptyset \longrightarrow$ /ŋ/ $\Big/$ ___ /g/

As seen above, the Babur/Bura, inserts /h/ and /ŋ/, respectively before the vowel /a/and the consonant/g/at the initial position.

Medial position insertion (Anaptyxis) – Babur/Bura inserts segment(s) in the medial position of the Hausa words as can be seen in (78) below:

Underlying Hausa form	Altered Form	Gloss
78) i. /àmàryàa/	[àmàliyàa]	bride
ii./kûrìi'à/	[kûrìya]	vote
iii. /wàrwàròo/	[wàròwàròo]	bracelet

  iv. /àddu'àa/   [àddûwa]   prayer

This could be illustrated in the following rules below in (79) :

79) ∅ ⟶ /i/ /c—c

. ∅ ⟶ /j/ /c——c

 ∅ ⟶ /o/ /c—— c

 ∅ ⟶/w/ / c—— c

As seen above, the Babur/Bura, inserts /i/,/j/,/o/ and /w/ at the medial position of the words above.

4.9 Summary

This chapter provides a detailed analysis of some Hausa words as produced by Babur/Bura speakers of Hausa. The Hausa words were outlined alongside the ones produced by the Babur/Bura and phonological analysis were carried out. It is clear that, based on the analysis, different phonological processes or changes were realized and these changes were duly represented in phonological rules. The result of the analysis shows that phonological adaptation process like vowel deletion, deglottalization, glottalization, sound substitution, vowels lengthening, insertion etc were said to have taken place in the data presented and analysed.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.0 Introduction

In the preceding chapter, the data collected were presented and analysed simultaneously. The present chapter provides the synopsis of the findings and the conclusion of the study.

5.1 Summary

The study examines and accounts for the phonological representations of some Hausa words as adapted by the Babur/Bura speakers of Hausa. It therefore provides a number of phonological processes that occur such as, vowel deletion, vowel shortening, sound substitution, vowel lengthening, glottalisation, deglottalisation etc.

This work is divided into five chapters. Chapter one is the general introduction to the work under which the historical background of both languages i.e Hausa and Babur/Bura are given. This is followed by the statement of the problem, research question, aim and objectives, scope and limitation and significance of the study.

In chapter two, we reviewed relevant and related works to the current research. In chapter three, the method through which data were collected as well as the theory that was adopted for analyzing the data is discussed. Chapter four is the analysis of the data, under which the data are presented in different processes in which they occurred during speech by the Babur/Bura. This is immediately followed by the

main analysis in which the data is discussed in detail and phonological rules drawn out. Chapter five, which is the final chapter, is the summary and conclusion of the entire research.

5.2 CONCLUSION

This research has given a phonological description of Hausa lexical items as articulated by the Babur/Bura. We were able to see the contact between the two languages and how the contact affected Babur/Bura pronunciation of some of the phonemes of Hausa language. The research reveals that Babur/Bura tends to modify pronunciation of some Hausa words during speech rarely because of the absence of a particular sound in the Babur/Bura inventory. Infact few changes occurred in this light as was seen. However, the substitution of the sound appears to be systematic where the affected segment is changed with a closer segment in terms of their natural class. The substitution may also be said to occur among Babur/Bura natives not because the phonemes are totally absent in their sound system but because of simplicity as is the case with Fulfulde speakers when pronouncing Hausa words such as *tàabarmaa* mat→ *taberma*,thus /a/ →/e/ in any environment.

The data collected and analyzed were drawn from the observations, interviews, and conversations between researcher and respondents. Some of the phonological changes that occurred include glottalization, deglottalization, sound substitution, vowel lengthening etc. This research does not claim treating every aspect of the

features of Hausa as spoken by the Babur/Bura, rather, it serves simply as an insight or clue to further studies and adds to the existing literature of the two languages, specifically Babur/Bura which is regarded as an endangered language. Similarly, it does not claim absolute regularity, especially because of the dialectical variation in pronunciation and usage of the Hausa words. The phonological adaptations which occurred in the Hausa lexical items were fully represented. The phonological rules that followed also accounted for the phonological behaviour that took place. Majority of the data was sourced from Native Babur/Bura speakers of ages ranging from 25 to 60, all living in Kawo, Riminkebe, Farawa and Tudun Murtala in Kano state.

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APPENDIX 1

INTERVIEW QUESTIONS

SECTION A

Kindly provide the following information.

Name:_____

Sex:_____

Age:_____

Tribe:_____

Language:_____

Local Government Area of origin:_____

Town of Residence:_____

Educational Background:_____

Occupation:_____

APPENDIX 2

SECTION B

Kindly tell me about yourself.

Can you give me a history about your people?

_____
_____

When did your family move to Kano state?

_____
_____

For how long have you been residing in Kano state?

_____
_____

What did you find different from your place and Kano?

_____
_____

Appendix 3

RESPONDENTS FROM KAWO QUARTERS

The following are names and information of every respondent interviewed for this research under the area, Kawo.

Kawo Quarters

1. Mallam Abdullahi Bukar

   Occupation: Retired banker/business man

   Place of Birth Ngulde; Askira local government

   Age: 57 years

   Time spent in Kano: 45 years

   Address: Farmland street, Kawo.

2. Malam Bukar Muhammad

   Occupatiion: Business man

   Place of Birth: Biu

   Age: 50 years

   Time spent in Kano: 35 years

   Address: Kawo, layin Police station

3. Malama Halima Uwar Marayu Kawo

   Occpuation: Educationist

Place of Birth: Kano

Age: 50 years

Time spent in Kano: 50 years

Address: Farmland street, Kawo.

4. Mallam Izzudeen Abdullahi

Occupation: Student

Place of Birth: Kano

Age: 27 years

Time spent in Kano: 27 years

Address: Farmland street, Kawo.

5. Malama Nabila Abdullahi

Occupation: Student

Place of Birth: Kano

Age: 25 years

Time spent in Kano: 25 years

Address: Farmland street, Kawo.

Appendix 4

RESPONDENTS FROM TUDUN-MURTALA QUARTERS

The following are names and information of every respondent interviewed for this research under the area Tudun-Murtala.

TudunMurtalaQuarters

1. Alhaji Mamman Abba Shariff

   Occupation: Retired company worker

   Place of Birth: Ngulde/Askira local government

   Age: 60

   Time spent in Kano: 55 years

   Address: layin transformer, tudun murtala.

2. Mallam Mansur Mamman

   Occupation: construction worker

   Place of Birth: Kano

   Age: 38 years

   Time spent in Kano: 38 years

   Address: Layin transformer, tudun Murtala

3. Hajiya Yaya (Fatima) Mamman

   Occupation: Housewife

Place of Birth Kimba

Age: 59 years

Time spent in Kano: 57 years

Address: Layin transformer Tudun murtala

4. Mallama Shafa'atu Mamman

Occupation: Housewife/businesswoman

Place of Birth: Kano

Age 45 years

Time spent in Kano: 45 years

Address: Layin transformer, Tudun murtala

5. Mallam Rabilu Mamman

Occupation: Mechanic

Place of Birth: Tudun Murtala, Kano

Age: 38 years

Time spent in Kano: 38 years

Address: layin transformer

Appendix 5

RESPONDENTS   FROM FARAWA QUARTERS

The following are names and information of every respondent interviewed for this research under thearea, Farawa.

Farawa Quarters

1. Mallam Ali Yamta

   Occupatiion: Wazirin kwaya, unguwar Baburawa, Farawa.

   Place of Birth: Biu

   Age: 60 years

   Time spent in Kano: 35 years

   Address: Babbanlayi, Farawa Kano

2. Mallam Zakari

   Occupation: Civil servant/ Hakimin kwaya

   Place of Birth: kwaya kusar

   Age: 60 years

   Time spent in Kano:

   Address: Babban layi, Farawa, Kano

3. Alh Madu Bam

   Occupation: Business man

   Place of Birth: Beitara

Age: 60 years

Time spent in Kano: 32 years

Address: Babban layi, Farawa, Kano.

4. Hajiya Amina Adamu

Occupation: Housewife

Place of Birth; Biu

Age: 40 years

Time spent in Kano: 30 years

Address:

5. Halima Farawa

Occupation: Public servant

Place of Birth: Giginyu, Kano

Age 30 years

Time spent in Kano: 30 years

Address: Gerawa, Farawa, Kano

Appendix 6

RESPONDENTS FROM RIMIN-KEBE QUARTERS

The following are names and information of every respondent interviewed for this research under the area,Rimin kebe.

RiminKebeQuarters

1. Mallam Muhammadu

   Occupation: Carpeting/interior décor

   Place of Birth: Tudun wada Kano

   Age: 58 years

   Time spent in Kano: 50 years

   Address: layin transformer, Riminkebe

2. Mallam Adamu Ali

   Occupation: company worker

   Place of Birth: Ngulde; Askira/uba local government

   Age: 55 years

   Time spent in Kano: 45 years

   Address:

3. Mallam Bala Abdullahi

   Occupation Business man

   Place of Birth Tudun Wada

Age: 45 years

Time spent in Kano: 45 years

Address: Rimin Kebe

4. Asabe Abdullahi

Occupation: Housewife

Place of Birth: Tudun wada, Kano

Age: 38 years

Time spent in Kano: 38 years

Address: Rimin kebe

5. Farida Sani

Occupation: Teacher

Place of Birth: Rimin kebe, Kano

Age: 33 years

Time spent in Kano: 33 years

Address: Layin Ali Babur, Rimin Kebe