A PHONOLOGICAL STUDY OF KANURI LOANWORDS IN MARGI

BY

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DECLARATION

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ABSTRACT

This study investigates how Margi borrows words from Kanuri. Although some words were adopted (i.e. borrowed into the language without any changes), some require some phonological adaptation processes to enable the transfer of phonological features of the Kanuri to Margi. The study identified and described the phonological changes that the loanwords from Kanuri go through in order to fit into the Margi speech system and established phonological rules that account for the changes. The study adopted the theory of Generative Phonology which was propagated by Chomsky and Halle (1968) as the theoretical framework. It was evident that there were lot of both consonantal and vocalic changes like palatalization, denasalization, degemination, devoicing, rule inversion, vowel lengthening, vowel raising, vowel fronting and vowel backing. Also, the loanwords were distributed into different domains in which eleven specific domains are identified.

CHAPTER ONE

INTRODUCTION

1.0 General Introduction

Borrowing is the process of importing linguistic items from one linguistic system into another, a process that occurs when two languages are in contact over a period of time. The language from which elements are taken is known as donor/source and the one which takes from another is known as recipient/target language (Ogah, and Amos, 2009). Borrowing of words from one language into another has long been a topic of interestamong linguists. One reason for this is that the phonological nativizations seen in loanwordsare a useful source of extragrammatical evidence (along with language games, poetics, speech rate, style and variation) about how the phonological system of the borrowing language operates (Crawford, 2009). Similarly, Ogah and Amos (2009:76) observes that "when new words are borrowed, they go through certain processes of change called adaptation (or phoneme substitution) to conform to the native sounds and phonetic constraints."

1.1 Background of the Study

The two languages under study are from different language families. As classified in Greenberg (1966), Kanuri is a member of the Saharan family of the Nilo-Saharan phylum of the African languages, while Schuh (1982) in his classification of the Chadic family included Margi as the member of the Chadic

family of the Afro-Asiatic Phylum. However, with the contact between the two languages, borrowing becomes inevitable.

1.1.1 Brief History of Kanuri Language

According to Greenberg (1966:30) in Shettima & Bulakarima (2012), Kanuri is a member of the Saharan branch of the Nilo-Saharan phylum of African languages. This has been widely accepted and followed. He presents the Saharan branch according to the following groupings: Saharan (a) Kanuri and Kanembu, (b) Teda and Daza, (c) Berti and Zaghawa. However, Greenberg (1971:423) in a latter publication reduced the number of Saharan sub-branch, simply by listing the major languages of each group as follows: Saharan: Kanuri, Teda, Zaghawa and Berti. These he refers to as four basic units of the Saharan language family.

In an attempt to provide the etymology of the term Kanuri, Cyffer (1997:21) states that "with regard to the term Kanuri, several attempts at interpretation have been made, such as:

Kanuri is derived from a) *kánnú* fire +-*ri* place of

- b) ka nominal prefix + $n\hat{u}r$ light
- c) Kán m region east of Lake Chad + -ri place of
- d) *Káno* Kano town + -ri place of

The claim by Cyffer above is in line with the different speculationsearlier advanced by scholars like Abubakar (1980); Alkali(1987) and Dikwa(1988), as

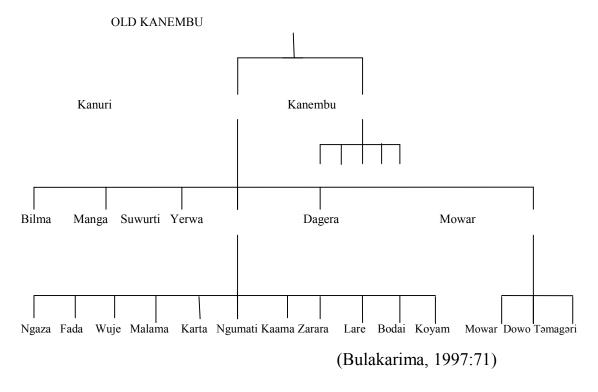
well as the view of Borno Arabic/Islamic scholars who opined that the word had emanated from the Arabic word $n\hat{u}r$ - light. According to Cyffer (1997) it is believed that Kanuri is derived from the Arabic $K\acute{a}nn\acute{u}ri$ meaning "like light" or "people who accepted Islam willingly". The two-morpheme word " $k\acute{a}l$ - $n\^{u}r$ or $k\acute{a}nnuur$ " is borrowed from Arabic (i.e ka- a particle of simile known in Arabic grammar as Kaaf al- tashbih 'like' and -mur 'light'.

Another view holds that *Kanuri* were referred to as "light of Islam" not only because they are all Muslims but also because they were the first people to spread the teachings of Islam in the region. Another argument suggests that the term refers to their light-skinned complexion. Still another highly contested view was that the word was not *nur* "light" but *nar* "fire" which is attributable to the fact that they are hot tempered, hence the Fulani call them "fire-like" instead of "light-like" (Abubakar, 1980). Suffice it to say that whilst Kanembu, was regarded as the *ensemble* or mixture of all the mutually intelligible dialects of Kanem, Kanuri was the language of the learned elite who were not only speakers of the most mutually intelligible dialects but also of Arabic as the language of administration and instruction (Abdullahi, 2008).

The term *Kanuri* also denotes both the people and the language. However, there is a phonological variation in the realization of the term to mark the differences as *Kànùri* refers to "the language", while *Kànúri* is the person. This can better be clarified through the application of tone in order to evoke the distinction. The

tonal pattern used for the people or to a Kanuri person is low-high-low, whereas if pronounced with low-low-high tone, it refers to the language (Shettima, & Bulakarima, 2012).

Kanuri is dialectally fairly diversed. Standard Kanuri is the variety spoken in and around Maiduguri and is the variety now used on radio and television broadcast and seen in most works printed in Kanuri (Cyffer, and Hutchison, 1990). Similarly, Bulakarima (1997) identifies six dialects of Kanuri instead of the four dialects earlier proposed by Bulakarima (1983, 1986, 1987). According to him, these six dialects constitute what is referred to as the Kanuri Language. They are Bilma, Dag ra, Manga, Mowar, Suwurti and Yerwa. The genetic model of these dialects and their sub-dialects as presented in Bulakarima (1997) as shown below:



In an earlier investigation, Bulakarima (1987) says that, in Niger republic, the major dialects of Kanuri are Manga, Bilma, Fachi and Dag ra. They are spoken by a substantial number of people in the region from Zinder in the west down to the Lake Chad region in the east. In Chad Republic, there are pockets of Kanuri communities; these are the Kan mbu and Malama speakers, who are concentrated in the Kan mand Chari-Logone regions respectively. A few Kan mbu speakers also live on the west side of the Lake Chad in Nigeria and Niger (Shettima and Bulakarima 2012:2). Kanuri in diaspora, in places such as Democratic Republic of Congo, are mostly concentrated in cities such as Kinshasa, Kisangani, Bakubu and Lubumbashi. They went there either from Nigeria, Chad or Cameroon. In Sudan also, there are a few Kanuri communities who settled there while on their way to Saudi Arabia to perform the holy pilgrimage in the colonial and pre-colonial periods. In Nigeria, the Kanuri are concentrated chiefly in Borno and Yobe states. Most significantly, Kanuri is a lingua franca in most parts of Borno and Yobe states. In other states like Adamawa, Bauchi, Kano, Gombe, Jigawa, Plateau and Nassarawa, they live with other major ethnic groups such as Hausa and Ful e (Shettima and Bulakarima, 2012:3).

According to Alkali (1978) cited in Dikwa (1988) the development and expansion of the Kanuri language is "closely related to their political history which was said to have been established as early as the ninth century". The

Kanuri language was said to have been of great importance in the Lake Chad region towards the fifteenth century.

Shettima & Bulakarima (2012) were of the view that Kanuri is predominantly spoken in Nigeria as a mother tongue by several million people. It is widely spoken as mother tongue in three West and central African countries namely; Niger, Chad and Cameroon. In addition, there are also the Diaspora populations of Kanuri in Sudan, Libya, Saudi Arabia and the Democratic Republic of Congo (Shettima & Bulakarima, 2012:2).

The population of the Kanuri people in Nigeria according to Cyffer (1997) is between three and four million. They are, therefore, one of the major ethnic groups in West Africa. As stated in Bulakarima and Opoku (1988:3), the Kanuri people are the fifth largest ethnic group in Nigeria coming after the Hausa, the Yoruba, the Igbo and the Fulbe.

1.1.2 Brief History of Margi Language

In relation to the linguistic position of the Margi Language, Hoffmann (1963:9-10) States that:

"Since Barth first published detailed information about the Margi, there have also been attempts to classify the Margilanguage and determine its position amongstother African languages, first by Barthhimself, later by Nachtigal, Strümpell, Delafosse, and Thomas"

According to Greenberg (1963:95) Margi language belongs to the Chadic languages that have not been studied extensively. He further classifies the African languages into four (4) Phyla which are Afro-Asiatic, Niger Congo, Nilo-Sahara and Khoisan. Similarly, the most recent classification is that of Newman (1990), who classifies Chadic as a family which belongs to the Afro-Asiatic phylum (Jungraithmayr and Ibriszmov, 1994). The Chadic phylum consists of four coordinate branches – West, Biu-Mandara, Central, East and Masa. Margi belongs to the Central Chadic, Biu-Mandara Sub-group A: thus, making it a close relative of Bura and Kilba and more distant relative of Hausa (Dlibugunaya, 1999).

Furthermore, Greenberg (1963) divides the Afro-Asiatic into five (5) major branches usually called families. These include Chadic, Berber, Semetic, Cushitic and Ancient Egypt. Hence, Afro-Asiatic is the least controversial of the four phyla postulated by Greenberg for the African continent. Afro-asiatic is the only phylum that includes some languages spoken exclusively outside Africa e.g. Semitic. That is the reason for calling it Afro-asiatic. Some prefer calling it "Afrosian" or "Afrasan" (Dlibugunaya, 1999).

Hoffmann (1963:3) in his attempt to classify Margi dialects recognized four divisions as:

- 1.
- a. The Màrygí Bàbál means 'the Margi of the plain (bàbál "open place")',
- b. The M argyi Dz y u, means 'the Margi of near (udz r) the mountain (yu)',
- c. The Màrgyì Pùtái means 'the Margi of the West (Pùtái)' or briefly 'West Margi' and
- d. The *Màrgyí tí nt m* (also simply *mjir tí nt m*) is explained as 'the Margi (or "people") who cry (mourn) with a pot' (*tí nt m* instead of *tìd nt m*, from *tì* 'to cry', *dú* 'with', *nt m* 'pot').

However, according to Hoffmann, Margi is defined as a dialect cluster, and in the average present-day use, the name Margi includes at least the dialects of the above mentioned four divisions of the Margi (i.e. the *Màrygí bàbál, Màrgyí Dz ηú*, West Margi and South Margi).

The Margi live in the extreme Northern part of Adamawa State and the South Eastern part of Borno state of Nigeria. In Borno, they are mainly found in Askira/Uba, Damboa, Gwoza and Konduga Local Government Areas; while in Adamawa state, they inhabit Madagali, Mubi-North, Michika and parts of Hong Local Government Areas (Dlibugunaya, 1999).

1.1.3 Contact between the two Languages

According to Löhr (1998), linguistic findings established connections between Kanuri and Margi via Malgwa (Formerly known as "Gamergu"). Similarly, Cyffer, et al (1996:49) states that:

"The area around the Lake Chad is characterized as an example for aregion where ethnic changes abundantly took place and still do. For example some Kanuri districts, or the leaders of those districts, are (unofficially) named after other ethnic names (e.g. *Margi, Shuwa*) or Kanuri clan names are identical with ethnic names of other groups, eg. Tera, Bade. Both people speak a Chadic language andlive in the south and west of the Kanuri respectively. These are indications that the Kanuri formerly absorbed and integrated these peoples".

The above assertion shows that Kanuri has contact with many Chadic languages in which Margi is not an exception. As a result of these contacts, most of these languages have been absorbed by Kanuri and many have shifted to the Kanuri language.

The Malgwa are considered the original settlers of the north eastern region of Nigeria before Kanembu/Kanuri migrated increasingly into the area in 14th and 15th century from the eastern side of the Lake Chad. In the course of time, the Kanembu/Kanuri dominated almost all the settled Chadic people, strengthened through political power and the introduction of Islam. Under the pressure of Borno expansion, a large number of Margi drifted gradually to the South. From

about the 14th Century they appeared to have lived in the region they now occupy (Abubakar, 1980).

Löhr (1998:68) states that:

"The process of "Kanurization" spread over a long period of time without strong resistance of Chadic ethnic groups. Due to various reasons and exposedto multiple pressures, some Chadicspeaking peoples, over time declared themselves being Kanuriand adopted the Kanuri language.

Today's Malgwa settlement area is located in Borno state between Dikwa, Bama, Pulka down to Sambisa. They also live along the road from Gwoza to Damboa. Malgwa are living predominantly with Kanuri but they are also found most often within communities together withMargi in Damboa (Meek, 1931).

Bulakarima (1987:48) says that:

"Kanuri was (and is still) used by the Bodai, Ngizim, Karekareand Bolawa in the West, Shuwa-Arabs, Kotoko, Mandara, Gamergu, Margi (of Damboa), Wula, Bagirai, Buduma and Fulani as a lingua franca during the Tran Saharan tradein the second half of the eighteenth century. Since peoples like Karekare, Bolewa, Ngizim, Wula, Bagirai and Fulani left this region a long time ago to different destinations, some of them can still speak it occasionally but not as lingua franca."

Meek (1931)also explains that the Margi of Adamawa consists roughly of three strata:

- 2. (a) indigenous people (in a relative sense);
 - (b) Pabir and;
 - (c) Kanuri.

He explains that the indigenous inhabitants belong to the same group as the indigenous Bura and Kilba, which is a group that has fused to some extent with the Higi, Gudur, and Fali. He is of the opinion that the Higi, in particular, show definite linguistic and cultural connection with the Margi.

1.2 Statement of the Problem

Although a lot of researches have been conducted on Kanuri loanwords (Greenberg(1960); Dikwa(1988); Bulakarima(1999); Abdullahi (2008); Grema (2011)), to the best of our knowledge, there is yet to be any investigation that focuses on 'the Phonological study of Kanuri Loanwords in Margi.'This is more so, considering the fact that the available literature studied Kanuri as a donor or recipient of loanwords in relation to other languages, but we have so far not laid our hands on any research that studied the borrowings from Kanuri to Margi language. Therefore, this study explores the phonological study of Kanuri loanwords in Margi within the theoretical framework of Generative Phonology.

1.3 Research Questions

The following three research questions are raised to serve as a guide for this research:

- (i) How do Margi borrow words from Kanuri (i.e. direct or indirect)?
- (ii) What are the possible phonological processes that take place in the borrowing process?
- (iii) Do Margi adapt or adopt Kanuri loanwords (or both)?

1.4 Aim and Objectives

The aim of this research is to make phonological study of Kanuri loanwords in Margi. The objectives of the study are:

- (i) to identify Kanuri loanwords in Margi.
- (ii) to determine the extent to which the loanwords are adapted.
- (iii) to provide the phonological processes of the adaptation.

1.5 Significance of the Study

This research provides an insight into the long existing linguistic borrowing between Kanuri and Margi languages. On this basis, it serves as a valuable reference material for linguists who may be interested in the study of loanwords. It also stands to be of great help to teachers, students and researchers who may wish to further their investigation in comparative linguistics between Kanuri and Margi and other African languages.

1.6 Scope and Limitation of the Study

This work covers phonological analysis of Kanuri loanwords in Margi. It is however limited to Margi Putai (West Margi)dialect spoken in Damboa Local Government Area of Borno State because of its contact with the Kanuri language. Thus, other Margi dialects are not part of this work. As part of the theoretical framework adopted for analysis, the research limits itself to the Theory of Generative Phonology.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this Chapter, an attempt is made to review the related and relevant works to the topic under study. It is divided into the following sections as: (1) General Reviews of Literature on Loanwords (2) Reviews on Kanuri(3) Reviews on Margi.

2.1 General Reviewsof Literature on Loanwords

Under this sub-heading, reviews of works on loanwords in all languages are provided. These include both theoretical as well as descriptive. However, Bloomfield (1933:461) states that "cultural borrowing is ordinarily mutual. It is one sided only to the extent that no one has more to give than the other". Salim (1981:22) states that:

"adoptation of loanwords represents attempts by borrowers to reproducesounds based on the patterns of the source language, while adaptation represents attempts by borrowers to produce sounds based on the sound patterns, which are obtained in thetarget language. In terms of nativization, adaptations are nearer to be assimilated than adoptation."

In other words, Kenstowicz (2003:98) is of the opinion that "the adaptation of a loanword involves the resolution of often conflicting demands to preserve as much information from the source word as possible while still satisfying the

constraint that make the lexical item sound like a word of the recipient language".

According to Thomason and Kaufman (1988)as cited in Abdullahi (2008:24), "borrowing is an instance where foreign elements are introduced in the native language, while in the substrata interference speakers adopt another language and abandon their own". They also distinguish between lexical borrowing and non-lexical (structural) borrowing. They assert that "contrary to the common opinion of most linguists, large scale non-lexical borrowing can and does take place without concomitant lexical borrowing, but in their view, this takes place only in the process of substratum interference". A summary of Thomason and Kaufman model (1988) as cited in Abdullahi (2008:25) is depicted as follows:

Categories	Borrowing	Substratal/Adstratal
Lexicon	Very Strong	Moderate
Phonology	Weak	Strong
Morphology	Moderate	Strong

The above model suggests that when speakersadoptanotherlanguage, they tend to transfermorphosyntactic patterns and phonological features from their language (native) to the foreign language. On the other hand, they hardly use wordsoftheir native language in the new language learned. The assumption according to Abdullahi (2008:25) is that, "since they would like to communicate with strangers, it would be inappropriate to communicate with words their guests

could not comprehend. An exception could bementioned of terms not available locally i.e. food, trees, clothes etc."

Yalwa (1992) is one of the researches on Hausa loanwords that have provided a comprehensive discussion on Arabic loanwords in Hausa. The work identified five sources from which Hausa borrowed words. The sources as provided in Yalwa (1992:104) are:

3. a. Islam and trade;

- b. Literature and grammar;
- c. Islamic school systems;
- d. Administration, law and politics; and
- e. Modern writing.

Yalwa (1992) further discusses some phonological and morphological changes that Arabic loanwords go through in order to fit into Hausa speech system. In doing this, he discussed the alternation between /p/ and /f/. In relation to this, Yalwa (1992:107) asserts that:

"At the phonemic level, the question of alternation between [p] and [f] does not arise, since they both occur in Hausaand no distinction or change of meaning is involved. So there is only one phoneme /f/. However, looking through the loans we find that sometimesthe Arabic /f/ when borrowed into Hausa is realized as /b/ intervocalically, word finally, or after a semi-vowel followed by a vowel".

He gave the following examples:

4. a. Arabic: al-kìtàab > Hausa: littaafiî 'book'

b. Arabic: al- ayb Hausa: lâifii/aibìi 'fault'

The change above can be represented by the following general rule:

Ar: b>Has: f / |V-V|; |V-#|; |G-V| or |G-C|

The process above shows /f/ is a distinct phoneme in Hausa. However, in the Arabic loans it is realized as /b/ an all environments (i.e initial, medial or final). Apart from the alternation above, he provided other ones like nasal assimilation, the morphophonemic alternation (i.e. changing of /o/ or /e/ to schwa / /) and palatalization of alveolar consonants /t/, /d/, /s/ and /z/ to palatal sounds / /, /d/, / / and /j/ before front vowels.He further described how Arabic words having /x/ are realized as /h/ and change of *ayn*/ / to glottal stop / / which according to him is also borrowed from Arabic. According to him, "sometimes the *ayn*or glottal stop is replaced with a /w/ as in Arabic: *allafa>* Hausa: *wallàfaa* (to compose/publish a book/paper/poem). As for the *ayn* / /, there is sometimes a merger, and the vowel quality is found as in Arabic: *mu allim*(teacher, Arabic: *na ib* > Hausa: *naa'ibii* (deputy)". This process was represented as:

a. u b. a

a a

Yalwa (1992) is related and serves as valuable reference material for the current research, because it is on loanwords and it makes its analysis using Generative

Phonology in which the current research is based. Thus, they differ in case study for it studied Arabic loanwords in Hausa by treating Hausa as a recipient of Arabic words while the current research studies Kanuri loanwords in Margi by treating Kanuri as the donor of the loans.

Sadiq (2012) in his analysis of Fulfulde loanwords in Hausa found that loanwords undergo certain morphophonological processes like deletion, vowel insertion (epenthesis), substitution of both consonants and vowel, syllable deletion and denasalization in order to fit into the Hausa speech system. He identified the themes and grammatical category of the words borrowed as: names of diseases, Fulani titles, common nouns, adjectives, cultural elements, kinship names, personal names and toponyms in Taraba and Adamawa states. His analysis shows that grammatical category of words that are mostly borrowed is noun, because they are physical entities or material culture. More so, verbs were borrowed in a few instances and that the verbs borrowed were used at informal situations. Although Sadiq (2012) has presented and analyzed a number of Fulfulde loanwords in Hausa, but he has not adopted anytheoretical framework for the analysis and that the researcher has not clearly indicated morphological as well as the phonological changes that have taken place in the loanwords.

2.1.1 Types of Linguistic Borrowing

Bloomfield (1933:44) distinguishes between cultural borrowing and dialect borrowing. According to him, the former involves borrowing from a different language, while the latter involves borrowing from within the same speech area. He also makes a distinction between ordinary cultural borrowing and intimate cultural borrowing. In his assertion, Bloomfield (1933:44):

"Ordinary cultural borrowing is mutual, while intimate cultural borrowing, which is usually one-sided, occurs when one culturehas more to give in terms of ideas and concepts than the other. In this case, people who are under subjection, who also speak a less prestigious language, borrow more from their conquerors".

Similarly, Muhammed (1987:29) quoted Haugen (1972:59-78) and says that "types of borrowing are related to the nature and degree of contact between two languages". He reviews three types of contact: intimate linguistic contact, directed cultural change, and less intimate contact. Muhammed (1987:29-30) further explains that:

"In intimate contact, words for allkinds of cultural novelties are freely borrowed and adopted. The adoption resulted because of the frequency in the use of these words and the degree of imposition of these words on the receiving culture by sheer force of repetition."

The second which is the directed-culturechange contactresults in one-sided borrowing. Inthiscase, those people who do the borrowing areusuallythe ones who find themselves in a socially subordinate position. An example of this

involves the contactbetween theAmericanIndians and the early Spanishsettlers. The third type, the less intimate contact, is thecasualcontactoftravellers, tourists, emigrants and sailors. In this context, borrowedwords enterthereceiving language from four sources: written language, schools, books and films and words that come inthrough bilingual activity who have learned their coming language as foreign language".

Salim (1981:16-19) also identifies two types of borrowing; intra-language and inter-language borrowing. He explains that "both types of borrowing have similarity in that the behaviour of given speakers may be either a conscious or/an unconscious one". He further identifies two more kinds of borrowing process(i.e. vertical and horizontal). Vertical borrowing means borrowing involving two or more languages or dialects where the source language(s) or dialect(s) is identified as being higher on a social (or economic) scale, or more communicatively facilitative than the target language(s) or dialect(s). Horizontal borrowing on the other hand is a kind of borrowing involving two or more languages or dialect(s) where the source language(s) or dialect(s) is not identified as being higher on a social (economic) scale, or more communicatively facilitative than the target language(s).

Muhammed (1987:69) discusses two types of linguistic borrowing. These are direct borrowing and cultural borrowing. According to him, "direct borrowing deals with borrowing within the same speech area, and cultural borrowing is

when the borrowed items are from different languages". Consequently, Mohammed realizes that there is inadequacy in distinguishing between the two by saying that "there is no absolute distinction to be made between dialect boundaries and language boundaries. That is why he asserts also that "linguistic borrowing also depends upon the nature and degree of contact between two languages".

2.1.2 Reasons for Borrowing

Sa'id (1981:41) also points out that, as a result of the contact between Hausa and other foreign languages in terms of religion, trading, neighbourhood or war, a lot of linguistic items were imported into it. He provides the following examples:

5.		Fulfulde	Hausa	Gloss
	a.	goggo	gwággò	Aunty
	b.	yadikko	yàdikkò	Step-mother
	c.	bappa	báffà	Uncle
	d.	yapendo	yàfendò	Aunty

Some of the Fulfulde words above have been borrowed into Hausa with some phonological modifications. For example, the examples in (a) and (b) are adopted without any apparent change in its structure, while in examples (c & d), the consonants are optionally substituted from plosives to fricatives.

Bature (2002) also observes that contact with Europeans, particularly the colonial masters, led to linguistic borrowing by Hausa. The colonial masters too came along with new concepts, ideas and objects related to western culture, science and technology. As a result of that contact, Hausa borrowed extensively from English. He cited the following:

6.ENGLISH HAUSA

a. Change cànjíi

b. Lawyer láuyàa

c. Set sáitìi

d. Load lóodìi

e. Mark máakìi

f. Corner kwánàa

Grema (2011) identifies several reasons that lead to linguistic borrowing.

Among which are:

- 7. a. contact with foreign languages;
 - b.the desire and need to designate new things;
 - c. feelings of inferiority complex;
 - d. replacing lost words;
 - e. prestige;
 - f. solving the problems of homonyms;
 - g. semantic extension and;
 - h. language development.

Each of these is discussed in concomitance with the views and findings of different scholars and or researchers on different languages.

The works of Sa'id (1981),Bature (2002) and Grema (2011) reviewed above are relevant to the current study for they study some reasons that led to borrowing of words between two languages. They differ with the current study in that they treated loanwords in different perspectives while the current research looks at some of the phonological changes that loanwords go through in order to fit into Margi speech system.

2.1.3 Differences between Code switching and Borrowing

Abdullahi (2008:39) claims that "up to now, there is no consensus in an attempt to distinguish between code-switching and borrowing". However, the chief criteria used in distinguishing them have been:

- 8. a. degree of use by monolinguals, and;
 - b. degree of morphophonemic integration.

The first criteria entails that established loans are commonly used by monolingual speakers, whereas code-switching tend to be a transitory phenomena. Some linguists however, argue that frequency of occurrence is an inconclusive measure to differentiate between code-switching and borrowing.

Similarly, Hoffer (2002:6) says that:

"Since 1950 many attempts have beenmade to find diagnostic criteria which will distinguish borrowing, transfer, interference, code-switching, code-mixing, so on".

One approach indistinguishingcode-switchingfrom borrowing is that of Scotton (1988:160) who usesthe level of socialsignificance of the item. His view is that if the non-native itemcarries social significance, it is acode-switch. The criterion might not be helpful wherethe form and meaning are identical but the label is different.

Similarly, Poplack (1988:220) seems to suggest that "the use of a borrowed item is code-switching until enough speakers use it and it is accepted by native speakers into their dictionary". Weinreich (1953) as cited in Romaine (1995: 52) in hisattempt to distinguish interference and borrowing says that interference is "the rearrangement of patterns that result from the introduction of foreign elements into the more highly structured domains of language". Moreover, he attributes a more complicated meaning to interference and argues that borrowing only refers to the transfer of the lexical item. Romaine(1995:53) also favours this distinction and claims "that interference is an individual linguistic phenomenon, whereas borrowing is of a systematic nature".

On the other hand, some scholars, for example Thomason & Kaufman (1988)as citedin Scotton (2002: 236) have argued in favour of a strong connection between interference and borrowing and have described the latter as "the incorporation of foreign features into a group's native language by speakers of that language: the native language is maintained but is changed by the addition of incorporated features".

From the above views of different scholars, we can deduce that the main difference between borrowing and code-switching is that borrowed items are integrated into the borrowing language, while code-switching implies the use of two or more different language codes within the same stretch of speech.

2.2 Reviews of Loans on Kanuri

Under this sub-section, reviews are made on works on loanwords in Kanuri language. Most of the works discussed have treated Kanuri as donor or recipient of loanwords. This is because Kanuri has borrowed from many different languages, and other languages have also borrowed from it.

Koelle (1854) as a missionary with a deep interest in philology, gives a lexical documentation of about 3000 entries in his *African Native Literature, Proverbs, Tales, Fables, and Historical Fragments of Kanuri or Bornu Language* (1854 pp. 257-343). The existence of a substantial number of archaic words in his vocabulary remains a useful linguistic piece for more than a century without

which the compilation of the present Kanuri lexicon could have suffered from inaccuracy.

Greeenberg (1960) in his study on the linguistic evidence for the influence of Kanuri on Hausa points out that Hausa borrowed Kanuri vocabulary in earlier times, e.g.,

9.a. kasùwá (market),

b. karátú (reading) and,

c. rubútú (writing).

In his Hausa reference grammar, Newman (2000:315) makes an interesting statement about this by saying that:

"The number of words borrowed from Kanuri is undoubtedlyunderestimated because many words of Arabic origin that are included inlists of Arabic loanwords in fact came into Hausa via Kanuri."

Cyffer (2006:36) conclude that:

"From the point of view of thepresent linguistic landscape, this statement may appear to be counter intuitive. However, when considering that the political, social and linguistic situation in the areakept changing in past periods of time, we have to take Newman's quotation as realistic. Phonological and morphological arguments also support the influence of Kanuri on Hausa".

Greenberg's work is one of the early researches on Kanuri loanwords.It linguistically identifies the influence of Kanuri on Hausa. Not only that, it also traces the early contacts between Kanuri with the Arabs which also led to the

introduction of Islamic and Arabic terms to Hausa and other Chadic languages. His work is relevant in that it studies Kanuri loanwords in Hausa. Its limitation is that it has not studied Kanuri loanwords in Margi. Therefore, the current study stands to bridge the gap by studying the Kanuri loanwords in Margi thereby analysing them phonologically within the theory of Lexical Phonology.

Dikwa (1988) is one of the comprehensive works on Arabic loanwords in Kanuri that also serves as a valuable reference material for historical linguistic purposes. The work has collected a number of Arabic loanwords in Kanuri. Consequently, the work as stated in Abdullahi (2008) has not adopted any theoretical framework, no indication of differences between Kanuri and Arabic morphological systems, no indication of the grammatical class of the loans, and in terms of phonological description, no indication of which Arabic phonemes have equivalents in Kanuri, and what the substitute are in the absence of one. Although he indicates the substitution of /q/ with /k/, but there is no indication of the environment where the substitution takes place. These are some of the reasons Abdullahi (2008:52) argues that:

"The bulk of Dikwa's work hinges upon the apparent Arabic loans in Kanuri, he did not bother to go further than what Baldi (1991) did".

Although, Dikwa (1988) is one of the serious works on Arabic loanwords in Kanuri, we take the quote above as realistic because the work identified the loans alone without any apparent morphological, phonological and or

morpgophological changes that the loanwords go through in order to fit into Kanuri speech system.

Baldi (1991) investigates Arabic loans that are common to Hausa and Kanuri and in the process, he categorizes the study under the following headings:

- 1. Common Arabic loans to Hausa and Kanuri;
- 2. Peculiar Arabic loans to each language;
- 3. Transfer of Arabic loans from one language to the other;
- 4. Hausa loans in Kanuri; and
- 5. Kanuri loans in Hausa.

For this study, Baldi (1991) collected about 272 items and indicted that most of the loans are nouns, with very few verbs. On Kanuri, he indicated that it did almost 'completely refuse to borrow Arabic verbs, and concluded that this was as a resulted of Kanuri grammatical structure (p.253). But, this, as emphasized in Abdullahi (2008:52) is an 'over generalization'.

Mohammadou (1997) in his study of Kanuri imprint on Adamawa Ful e and Fulfulde found that the Fulfulde-Kanuri contacts successively took place in a double contrasting environment Borno and Fombina. In his findings, Mohammadou (1997) obtained 2,221 Kanuri loanwords in Fulfulde. For statistical distribution and of the loans, he distributed them into eight sections:

10.

- a. environment 237 Loans,
- b. man and society 585 Loans,
- c. sedentarization 317 Loans,
- d. islamization 409 Loans,
- e. Jihad 346 Loans,
- f. Abstracts 173 Loans,
- g. Arts 64 Loans, and
- h. Language 86 Loans.

Mohammadou (1997) further provides samples of the Kanuri loanwords in Adamawa Fulfulde. His work further discusses some culture infererences from the loanwords. Traces Fulbe-Kanuri relations in Borno, under which the discussions on the Fulbe-Kanuri twin villages or Kanuri satellite groups, fictive kinship and joking relationship and various effects of *n ngi*are given.

Bulakarima (1999) in his analysis of Kanuri loanwords in Guddiranci states that "Guddiranci borrowed words from Kanuri either directly or indirectly. Although Guddiranci has intimate contacts with other Chadic languages, KaraiKarai, Ngizim, Bole, Ngamo and Bade as well as some Niger-Congo languages (Fulfulde)". His findings reveal that out of the 91 loanwords found in Guddiranci, 45 are from Kanuri while the remaining 46 are from Karai-Karai, Ngizim, Bole, Ngamo, Fulfulde and Bade. This is the reason why Bulakarima (1999:48) claims that:

"Investigation reveals that, beyond any reasonable doubts, Guddiranci in fact borrowed some of the lexemes said tohavebeen borrowed from Bade, Ngamo, Bole, Ngizim and Krai-karai from Kanuri via Karai-karai. Therefore, the lexemes said to have been originated from Karai-karai, Ngamo, Ngizim, Bole and Bade in Guddiranci as postulated in Baba (1997) were in fact originated from Kanuri".

Bulakarima (2001) provides not only an important collection of English and French loanwords in Kanuri but also discusses their sound correspondences. According to him, since the ultimate aim of the study is to pave way for the incorporation of all the necessary loanwords and phrases, even the Greek compound words like *demos cracia* which was Anglicised to 'democracy' and transferred to the Kanuri language via Arabization by suffixing 'tiya' to the roots 'demos'- people and 'kratein'—to rule—to form the word 'dimukratia' in Kanuri.

The work of Schuh (2003) is one of the important works that focuses on the phonological and morphological adaptations of Kanuri words as they have been borrowed into other Chadic languages (Bade and Ngizim). The very large majority of loanwords identified are "substantive" items- nouns and verbs. For example, in his analysis, of the 561 Kanuri loanwords in Ngizim, 390 are nouns and 118 are verbs, the remaining 53 being a mixture of adjectives, adverbs, ideophones, interjections, particles and conjunctions.

In her work, Rothmaler (2006) examines how Arabic words are integrated into Kanuri and used in producing the shape of the words in fitting into the Kanuri lexicon throughthe insertion and weakening of an epenthetic vowel at word initial position. Example:

- 11. (a).álájì<al-hajj "Title for somebody who has undertaken the pilgrimage to Mecca"
 - (b). àlkálì< al-khadi "Judge"

Here, the nouns are incorporated including the article *al* which is the definite form of the noun. While in these words:

- 12. (a). líwúlà<al ibra "Needle"
 - (b). láirà<al akira "here after"

This is a case of weakening of the sounds /b/ and /k/ in the borrowed words as nouns with the article and the initial vowel dropped.

Similarly, Allison (2007) in his study of lexical borrowings from Kanuri into Makary Kotoko language identifies 86 lexemes (predominantly nouns) from various semantic domains that provide linguistic evidence in support of the claim that the islamization of the Makary Kotoko was due to Kanuri influence. He presents other lexical borrowings from a range of lexical categories limiting the discussion to those borrowings from Kanuri which have no apparent Classical Arabic source, which are verbs, adjectives, adverbs and adverbs.

Based on the outcome of the data analyzed, Allison found that there are very few verbs that have been borrowed from Kanuri into Makary Kotoko. According to him, this is likely attributable to the relatively complex verb morphology of Kanuri, due, in part, to its 'elaborate system of tense-aspectmoods'.

Abdullahi (2008) in his analysis of loanwords in Kanuri newspapers attempts to explain the nature of loanword adaptation in Kanuri. In doing this, he adopted the phonetic approximation model by Haugen (1950) which views the assimilation of foreign sounds in terms of phonetic approximation, an approach that directly maps the phonetic shape of the sound with the closest native phonetic system. He finally concludes that Arabic, English and Hausa have relative proportion of influence on Kanuri and thus subsequently enriched the Kanuri lexicon.

In his discussion on how English words that are borrowed into Kanuri were modified to fit into the phonological system of Kanuri, Abdullahi (Ibid) shows that vowel epenthesis is introduced in Kanuri in order to satisfy the basic syllable structure of Kanuri (i.e. CV and CVC). This also indicates that Kanuri prefers open syllable, as a result of this, all onset and codas of loanwords must have epenthetic vowels, unless if the codas are sonorants /l/, /m/, /n/, and /r/ as in the words: *l basar*(onion) or sibilant /s/ as in *fos ofis*(post office). He, however, states that "if the coda is a cluster of consonants and the final

consonant is a stop, then, it has to be deleted unless if the preceding consonant is nasal. Nasals that are part of coda clusters are incorporated as syllabic consonants, and stop is considered an onset that demands an epenthetic vowel". He illustrated this with the following words that don't have a nasal:

	Onse	t		Coda			
13.	English		Kanuri	English		Kanuri	
a.	Bread	>	Bùródì	Belt	>	Bêl	
b.	Prisoner	>	Fúr s ná	First	>	Fês	
c.	Trader	>	T rèdá	Post Office	>	Fòs òfis	

However, in the case where the coda consists of a nasal, an epenthetic vowel is inserted, as in the following examples:

14.	English	Kanuri	
	a. Min <u>t</u>	>	Míntì
	b. Pain <u>t</u>	>	Péntì
	c. Cemen <u>t</u>	>	Sìmíntì

Hence, he summarized the syllabic changes as:

15.

- a. CCV onset> CVCV
- b. CVC {-nasal} C coda > CVC
- $c. \ \ CVC \ \{+nasal\} \ C \ coda > CVCV$

Schuh (2011) recently studied the grammatical influence of Kanuri on Chadic languages of Yobe State with an inclusion of Bole which is also one of the Chadic languages in Yobe State that was not discussed in Schuh (2003). The work has highlighted two different points:

- 16. (a). The different levels of influence which is pervasive in speech in all languages, and;
- (b). The documentation of the type of grammatical markers.

 According to Schuh (2011:89)

"This is because some of the abstract items do not have straightforward grammatical function or transaction in the borrowing language. The relative number of borrowed items found in the workalso indicates that Kanuri has influence on Bole-Tangaleand Bade-Ngizim and thatthe Influence musthavedated to a time when this group occupied geographically contiguous area and less differentiated from each other".

Grema (2011) in his analysis of Kanuri loanwords in Hausa classifies the loans based on semantic domain of usage of the loanwords in Hausa as well as the phonological and morphological adaptations of the loanwords. Eight specific domains were identified in the work. They are the domains of Education, Religion and Culture, Politics, Transportation, Farm, Personal and Place names, Homes and Anomalous. Percentages of each of these domains were identified. Based on the findings, the domain of religion and culture has the greatest

number of loanwords from Kanuri to Hausa with 48.10 percent. This is according to him, due to the fact that Islam came to the Kanem Borno Empire before reaching the Hausa land.

In his recent publication, Allison (2015:5) says that "the socio-cultural influence the Kanuri had on the Makary Kotoko language is evident from the number of Kanuri loanwords in the language". He identified 916 borrowings in a database containing a little over 3000 distinct lexical entries, out of which 401 have a Classical Arabic (C.A.) source. Of those with a C.A. source, 133 show evidence of having been borrowed through Kanuri. In addition, another 379 borrowed items (with no apparent C.A. source) have been borrowed from Kanuri. This makes borrowings from Kanuri (512 in total) account for more than half of the known borrowings in the language and for about one sixth of the Makary Kotoko lexical database. The table below shows how the borrowings from Kanuri (considering only those with no apparent C.A. source) are distributed among the different lexical categories of Makary Kotoko.

Kanuri	borrowings	Number
ixamum	bollowings	runnoci

Nouns 302

Verbs 12

Adjectives 32

Adverbs 15

Ideophones 8

Grammatical 10

morphemes

TOTAL 379

The above distribution shows that Nouns were heavily borrowed by the Makary Kotoko language with a total number of 302 lexical items. This is followed by adjectives with 32 lexical items, 15 adverbs, 12 verbs, 10 grammatical morphemes and 8 ideophones were borrowed, making ideophones the least lexical category borrowed from Kanuri.

The works of Baldi (1991), Mohammadou (1997), Bulakarima (1999), (2001), Schuh (2003), Rothmaler (2006), Allison (2007), Abdullahi (2008), Grema (2011) Schuh (2011) and Allison (2015) reviewed above are related to the current research because they seriously studied Kanuri as donor or recipient of lexical items. The gap identified by the present research is that they were not able to focus on the loanwords from Kanuri to Margi, specifically on phonological perspective. Therefore, the current research is studying the Kanuri loanwords in Margi based on phonological perspective within the theoretical framework of Lexical Phonology.

2.4Review of Works on Margi

According to Dlibugunaya (2004), the most extensive single work on Margi and also the most detailed and reliable is Hoffmann (1963) who provides a detailed description of the phonology, morphology and syntax of Babal Margi. Hoffmann's work shows that indeed Margi is a language endowed with linguistic processes that need further exploration.

Schuh (1982)citedin Dlibugunaya (2004) discusses the most recent classification of the Chadic family and included Margi as a member of the Chadic family: Central Chadic branch and; Biu Mandara sub-group A, which includes Bura, Tera, Kilba, Higi and Bachama.

Hoffmann (1963) identifies six vowel phonemes out of the seven letters (a, e, , i, o, u, u) that represent vowels. According to him, /u/ (and sometimes /i/) are allophones of / /. The descriptions and examples of each of these sounds have been adequately given in the work. In relation to consonant phonemes, Hoffmann (1963) also argues that consonants in Margi are of two different types: simple and compound consonants. The number of simple consonants identified in his work is 37 with an addition of two sounds /f/ and /v/ as allophones of the phonemes /v/ and /v/ occurring only in combination with certain other fricatives. In discussing the compound consonants, Hoffmann (Ibid) states that:

"Apart from the simple consonants, there are also compound consonants in Margi, i.e. consonants which involve morethan one simultaneous articulation, usually at different points, but which from the point of view of their phonemic value, are only one sound. Such consonants are labialized consonants, the labio-alveopalatals, the labio-palatals, and the nasal compounds".

(Hoffmann, 1963:27)

Dlibugunaya (2004) observes that Margi has four syllable types: VC, CV, CVV and CVC (where VV is a long vowel or a diphthong) and CVC (where the final C – can be the first part of a long (or geminate) consonants which we write as C=). Apart from this, he goes further to discuss the possible syllable pattern for Margi words in which he identifies monosyllabic pattern, disyllabic pattern, trisyllabic pattern and quadrasyllabic pattern. Their descriptions as well as examples have been given.

Kenstowicz and Kisseberth (1979) in their work on Generative Phonology also have section on Margi tones. Drawing examples from Margi based on Hoffmann's work, they observe that Margi has three types of tonesas shown in the following examples:

- 17.
 - (a) Rising tone as in fi "to swell"
 - (b) Low tone as in tì "cry"
 - (c) High tone as in kyí "compound"

They use the behaviour of the tones in Margi to argue for the supra-segmental representation of tone units. Fourteen years later, Kenstowicz (1993) presents more arguments for non-linear auto-segmental representation using evidence from the tonal structure of Margi (Dlibugunaya, 2004:28). Dlibugunaya (2004:28) further explains that:

"a similar and later study of Margi tones is that of Tranel (1994) who investigates contour tonesand series of related issues in Margi. In viewing Margi rising tones as a combination of a low with a high tone, he prefigures Hoffmann's non-linear phonology interpretation of contour tones as the fixed clustering of two level tones, concluding that they too can, by and large, be regarded as a derived clusters butunder special condition. Tranels's observation of tonal interactions in this language raises interesting theoretical questions and how tonal realizations can be accounted for, and then how they could be put into a theoretical framework".

As observed in Hoffmann (1963), some cases of assimilation of both consonants and vowels are also found in Margi. This is clearly stated in his work by saying that:

"a frequent assimilation (progressive and regressive) is that of an to *u* in the neighbourhood of another *u* or before *w* or labialized consonants"

(Hoffmann, 1963:40)

He exemplifies the above claim with the following:

- 18. (a). $\partial n\dot{u} \eta k \dot{w} \partial g \dot{v} \partial h$ for my daughter $\langle \partial n + \eta k w \partial h \rangle$.
 - (b). $d\acute{u}$ wàgù in the evening $< d + \dot{w}$ àgụ.
 - (c). *màlà dú wù u* a pregnant woman < *d* with+wù *du* belly, pregnancy.

Dlibugunaya (2016) establishes a Margi phonemic inventory by using the classical phonemic discovery procedure particularly minimal pairs and free variation. The work identifies the consonant and the vowel system of Margi andprovides their detailed descriptions with regard to their distribution into different environment in a word. The finding of the work reveals that the consonant / / do not occur in word intial position, while the consonants / , w, f, v, t, d, , z, dz, n, tl, dl, sh, zh, c, gy, ky, hy, ghy, ny, k, g, h, gh, j, 'w, 'y/ do not occur in word final position. But the consonants /j, / can only occur in word initial and medial positions. With respect to the distribution of phonetic vowel in Margi, Dlibugunaya (2016) founds that can occur in all the three positions in a word, i.e. word-initial, word-medial and word-final positions.

Although Margi is one of the less extensively written language, the works of Hoffmann (1963), Kenstowicz and Kisseberth (1979), Schuh (1982), Tranel (1994), Dlibugunaya (2004;2016) etc. reviewed above are relevant and important sources of literature to the present research because they have laid a foundation to the phonological structure of Margi of which this research will be based on.

CHAPTER THREE

METHODOLOGY AND THEORETICAL FRAMEWORK

3.0. Introduction

This section focuses on the methodology used in collecting the data for this research and the theory that is used for analysing them.

3.1 Methodology

The methods through which data for this research is collected are discussed under sub-headings: the area of the study, method of data collection, description of the method, sample selection and data collection procedure.

3.1.1 Area of the Study

This research is based on the Margi (Margi Putai) or West Margi spoken in Damboa Local Government Area of Borno state. Therefore, the areas to be covered by the research are DamboaRoad, S lemanti, S l mb ri, Kululuri and Polo, all in the Maiduguri Metropolitan Council. The reason for choosing those areas is because most of the Damboa people displaced by the insurgency reside there. The researcher covers the entire five settlements of Margi West (Margi Putai) dialect because of its contact with the Kanuri language.

3.1.2 Method for Data Collection

An unstructured interview is applied on the selected groups of *MargiPutai*native speakers. Tape recorder is also used to record the articulation of the lexical

items for the purpose of transcription by the researcher. This method is adopted in order to give a chance to those who can neither read nor write. Therefore, obtaining information from such people is impossible by the application of questionnaire.

3.1.3 Description of the Method

The interview questions are divided into two sections: Section one being the introductory part where information about the participants are collected, it consists of questions such as; name, age, occupation, his or her language variety, Local Government, Village and Educational background (if any). In section two, the researcher lists the selected number of basic vocabulary as in the Bulakarima et al (2003)*Kanuri-English Dictionary*. Informants are asked to provide their Margi Putai equivalents. However, the researcher is at liberty to read out the words in the list to his informants.

3.1.4 Sample Selection

Twenty (20) respondents will be selected from the proposed five (5) areas covered by the research. Four (4) people from each of the areas: that is two (2) males; two (2) females. The average age of the sample population of people interviewed will range from 25 to 50. This is because people of that agerange tend to have full mastery of a language.

From the responses of the total number of 20 people selected for the interview only that of ten (10) respondents will be used for our data analysis. The

remaining ten (10) will be used for checking the accuracy of the data collected. The selection will be randomly made from each of the five (5) areas already mentioned; this is to give every element of the population an equal chance of being selected for the study.

3.1.5 Data Collection Procedure

The researcher lists 300 words randomly drawn from Bulakarima et al (2003) Kanuri-English Dictionary will be presented to the respondents to give their Margi Putai equivalents on the question schedule prepared for the interview. The same manner is maintained from one respondent to the other.

3.2 Theoretical Framework

This research adopts the theory of Generative Phonologywhich came to prominence with Chomsky & Halle's (1968) Sound Pattern of Englishas its theoretical framework. The aim of the theory is to consider a more abstractrepresentation which will be called an underlying representation that allowsphonological rules and principles to be more transparently and economically stated (Harrington, 2007). Their emphasis in the Sound Pattern of English is to eliminate redundancy from phonological analyses and fill them in by rule. This is done mostly by representing words using the phonemicrather than a phonetic representation. For example, there are some aspectsof pronunciation that are redundant (e.g. aspiration of oral stops in English) and so this redundancy can be factored out and subsequently fill it in by rule that will

in turn end up with aconsiderably more abstract sound representation of the word (e.g./p n/ rather than [p n]) i.e. one which is one stage further removed than a phonetic transcription from the actual details of the production of speech and how the vocal organs are coordinated (Harrington, 2007).

3.2.1 Components of Generative Phonology

The following are crucial components of Generative Phonology:

3.2.1.1Levels of Phonological Representation

As discussed in Kenstowicz and Kisseberth (1979), Generative Phonology posits two levels of phonological representations:

1. Underlying (phonemic, mental) representation which is the most basic form of the word before any phonological rules have been applied to it. Underlying representation shows what a native speaker knows about the abstract underlying phonology of the language (Kenstowicz and Kisseberth, Ibid). an underlying representation consist of a string of highly abstract phonological segments that were converted by phonological rulesinto surface representations that mirrored pretty faithfully the actual pronunciation of phonetic sequences. The features used by Chomsky and Halle were defined primarily in articulatory terms and not in acoustic ones as they were in the Jakobsonian model(Ogunsiji and Sunday, 2011).

2. Surface (phonetic) representation is the form of the word that is spoken and heard (Kenstowicz and Kisseberth, Ibid). It is the level of sound representation which provides a detail of sounds produced. In the generativist view, the surface phonological representations are realized only after the application of phonetic interpretation rules, which differ from language to language (Chomsky and Halle, 1968: 295-298).

For example in Hausa, the process of plural formation can be seen in terms both underlying and surface representations:

19.	Singular	Underlying forms (plural formation)	Surface forms (plural forms)	Gloss
a.	taasà	taa-oo-s-ii	taasooshii	'bronze'
b.	gidaa	gid-àa-d-ee	gidàajee	'house'
c.	cìizaa	cìz-ee-cìz-ee	cije-cijee	'bite'

With regard to the examples above, Yalwa (1992:113) states that "...alternation in Hausa can be reduced to generalization that /s, t, d and z/ alternate with the closest palato-alveolar segment. /z/ and/d/ are voiced and realized as /j/ because it is the only voiced palato-alveolar sound. /s/ is realized as /š/, because /š/ is the only fricative voiceless palato-alveolar sound. And /t/ is realized as /č/, because /č/ is the only voiceless non-continuant available". He further continued to postulate a general formal rule for these processes as:

In Suwurti (one of the dialects of Kanuri)the process of palatalization which normally occurs before front vowels is realized through the underlying representations (which also serves as the common Kanuri form) of the words.

20.	Underline Representation	Surface Representation	SKO	Gloss
a.	/sîm/	[îm]	shim	eye
b.	/séli/	[é i]	sheli	canine tooth
c.	/sílà/	[ílà]	shila	bone

The above example from Kanuri indicates that alveolar fricative /s/ at the underlying level changes completely to a palatal fricative [] at the surface levelbefore front vowels /e/ or /i/ (Bulakarima, 2000).

A palatalization rule is also formulated by Bulakarima (2000:23) as:

Also, In Hausa, for example: the change of plain velar consonants /k/, /k/ and /g/ before the vowels /i/ or /e/ is said to be a case of palatalization. This can be seen in the words below:

21.	Underline Representation a. /gidaa/	Surface Representation [g da:]	Gloss
	b. /baƙii/	[bak i:]	black
	c./gee oo/	[ge: o:]	millet
	d. /maagee/	[ma:g e:]	cat

What is observed from the examples above is that the underlying plain velar consonants are phonetically realized as velars before the vowels /i/ and /e/ (see Abubakar, 1999:4).

Apart from palatalization, the process of depalatalization also occurs in Hausa. This is observed in a situation in which a noun in Hausa undergoes verbalization. For example:

22.	Noun+Verb Formative	Verb Derived	Gloss
	a. /kaa ii+ajee/	[ka:saje:]	dung
	b. /law ii+asa/	[lausasa]	softness
	c. /numfaa ii+asaa/	[numfa:sa:]	breathing

In some of the examples from English, Kanuri and Hausa considered so far, it will be noticed that palatal consonants occur before front vowels.

3.2.3 Phonological Rules

According to Goldsmith (1995), phonological rules are the mappings between two different levels of sounds representation (the abstract or underlying level and the surface level) while Hayes (2009) describes them as "generalizations" about the different ways a sound can be pronounced in different environments. That is to say, phonological rules describe how speakers go from abstract representation stored in their brain, to the actual sound they articulate when they speak. For example, when an underlying form has many surface forms, it is

often referred to as allophony. Considering the English plural marker /s/, it can be realized as:

[s] when the noun ends in a voiceless consonant (as in [khæts], [phæts]);
[z] when the noun ends with a voiced consonant (as in [dogz], [khæbz]);
and

[iz] when the noun ends with sibilants (as in [b siz] [hi iz]).

These forms are all theorized to be stored mentally as the same –/s/, but the surface pronunciations are derived through the underlined form.

In otherwords, phonological rules translate phonemes to the real sounds (phones). They delete, insert, or change segments, or change the features of segments. Consider the examples of aspiration below:

24.	Orthographic Representation	Underline Representation	Surface Representation
a.	pit	/pit/	[p ^h it]
b.	spit	/spit/	[spit]
c.	tap	/tæp/	[t ^h æp]
d.	stop	/stop/	[stop]
e.	king	/kiŋ/	$[k^h i \mathfrak{y}]$
f.	skin	/skin/	[skin]

From the examples above, we can conclude that /p, t, k/ being the only voiceless stops in English are aspirated when they appear at the initial position of a word, and, un-aspirated in other environments (i.e. medial or final positions). We can therefore formulate a rule for this process as: voiceless stops become aspirated at the beginning of a word.

3.3 Kanuri and Margi Sound Systems

Before delving into the main analysis of the loanwords, it is important to introduce the sound systems of the two languages under study (i.e. Kanuri and Margi). The Kanuri phonetic chart adopted for work in this work is based on the Yerwa dialect, on which the SKO is based. This is because the Yerwa dialect is the one used for literacy purpose (Shettima and Bulakarima, 2012) while the Margi sound system adopted is based on Hoffmann (1963). This is to illustrate in more details, how the sound systems determine the orthographic structure of the languages in question, and see in detail the numerous sound changes, which occur in the process of borrowing. As such, the consonants and vowels of both languages are briefly described.

3.3.1 Kanuri Consonant Phonemes

Muhammed (2008:46) identified 25 consonant sounds in Kanuri.Below is the Kanuri consonant phonemes chart as adopted from Muhammed (2008:17):

	Bilabial	Labiodentals	Alveolar	Palato	palatal	Velar	Glottal
				alveolar			
Plosive	p		t			k	?
	b		d			g	
Affricate				dz č			
Fricative		f	S Z				h
Nasal	m		n			ŋ	
Pre-nasal	mb		nd		nj		
Glide	W				J		
Lateral			1				
Non-			r				
lateral							

Fig 3.3.1 Kanuri consonants chart. Adopted from Muhammed (2008:17)

3.3.2 The Kanuri Vowel Phonemes

According to Bulakarima (1987), there are six vowels in Kanuri which occur in the medial and final positions of word. This indicates that Kanuri does not have diphthong. What can be seen as a diphthong in Kanuri orthography takes place as a result of weakening of consonant, which also leads to vowel lengthening (Abdullahi, 2008:52). Bulakarima (1991) also presented seven vowels with the addition of / / whose status is doubtful (Muhammed, 2008:52). Below is the chart of Kanuri vowels as adopted from Muhammed (2008:20).

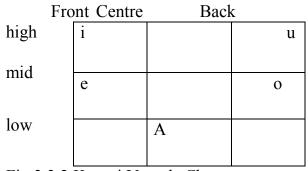


Fig 3.3.2 Kanuri Vowels Chart.

3.3.3 The Margi Consonant Phonemes

Hoffmann (1963:22-27) identified 37 consonants sounds in Margi.Below is the consonant chart for illustration:

	Bil	abial	La	bio-	Alve	eolar	Palato-	Pala	tal	Vel	ar	Glottal
			dei	ntal			alveolar					
Plosive	p	b			t d			gy	ky	kg		
Implosive												
Fricative			f	V	S	Z		ghy	hy	gh	h	
Affricate					dz	ts						
Nasal	m				n			ny		ŋ		
Lateral					tl	dl						
Trill					r							
Flap			vb									
Semi-vowel	W	W						j	j			
Lateral					1							
Approximant												

Fig. 3.3.3Margi consonant chart adopted from Hoffmann (1963:22-27)

3.3.4 Margi Vowel Phonemes

According to Dlibugunaya (2004:58), Margi operates six vowel systems: /a, e, i, o, , u/. To Hoffmann (1963:18), there is seventh vowel [u]and sometimes [i] which are allophones of / /.The vowel [u] occurs word finally and it is not a phoneme by itselfbut allophone of / / in the final position Hoffmann (1963:18).The vowel chart is presented below:

	front	Centre	Back
high	i		u
mid	e		0
low		a	

Fig. 3.3.4 Margi vowels chart. Adopted from Hoffmann (1963:18)

3.3.5Differences between the two Languages

From the sound systems of the two languages, we can deduce thatKanuri and Margi differ greatly in terms phonemic inventory (especially with respect to the consonant sounds). In terms of the consonants, Kanuri has bilabial fricative / /, the pre-nasals: /mb/, /nd/ and /nj/ and lastly the bilabial glide /w/ which are all absent in Margi. However, Margi has the palatal plosives /gy/ and /ky/; the implosives / / and / /, the voiced labio-dental fricative /v/ (which Kanuri has the voiceless counterpart /f/); the voiceless alveolar fricative /s/ (while Kanuri has the voiced counterpart /z/); voiced palato-alveolar fricative / / (which also the voiceless counterpart / / appears in Kanuri); the palatal fricatives /ghy/ and /hy/; the velar fricative /gh/; the alveolar affricates /ts/ and /dz/; palatal nasal /ny/; alveolar laterals /dl/ and /tl/; labiodentals flap /vb/; voiceless bilabial semi-vowel / w/ and voiceless palatal semi-vowel / j/which are all not found in the Kanuri consonant phonemes.In relation to vowels, both Kanuri and Margi operate six vowel sounds each.

Having identified the sound systems of both languages under investigation, we now proceed to discuss the adoptation and adaptation processes in the borrowing process in the next chapter.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter deals with the presentation and analysis of the data collected for this research. The first part is the presentation of the data, giving their classification into different domains based on the theme derived from the contacts between the two languages. The second part is the main analysis where the data collected is analysed based on the phonologically adopted Kanuri loanwords in Margi (i.e. loanwords without any apparent phonological changes) and those that have undergone phonological changes (i.e. phonologically adapted) in order to fit into the Margi speech system. The orthographies adopted in the work are the Standard Kanuri Orthography (SKO) and Margi Orthography. We also use the International Phonetic Alphabet (IPA) transcription method in presenting the pronunciation systems at the phonetic level.

4.1 Classification of The Loanwords

The classification of the loanwords was established on the basis of the themes derived from the contact between Kanuri and Margi. As such, the loanwords are classified into domains as in Brann (2006) who identified sixteen domains of incidence as: Assembly, Bar, Club, Community, Court, Dispensary, Farm,

Home, Legion, Market, Office, Religion, School, Theatre, Unibus and Workshop.

Based on the data obtained for the current research, eleven domains are identified. These are the domains of:

4.1.1 Education

The Kanuri loanwords in this group belong to the domain of education. By education here, we mean Islamic not western education. Consider examples (25a-g) below:

25.Kanuri	Margi	Gloss
a. kakkadə	kakadu	'book'
[kákkádə]	[kákádu]	
b. Mal m	Malum	'teacher'
[mál \m]	[málùm]	
c. k ra	k rk ra	'reading'
[k ['] rà]	[k [/] rk ˈrá]	
d. goni	gwani	'scholar'
[gòní]	[gwání]	
e. fasari	pasari	'translation'
[fàsárì]	[pàsárì]	
f. ruwo	rubo	'writing'
[rúwò]	[rúbó]	

g. masku	masku	'expert'
[máskù]	[máskú]	

The words above are found only in Islamic education within the Kanuri speaking communities. For example, $m\acute{a}l$ is used mostly in referring to a person that teaches small children Quran at the Sangayalevel while $g\acute{o}n\acute{i}$ is a teacher to the $m\acute{a}l$ is who taught the advanced aspect of the religion. Therefore, comparing with the western education, $m\acute{a}l$ is equivalent to an NCE, Diploma or Degree holder, while $g\acute{o}n\acute{i}$ can be accorded the level of a Masters or PhD holder.

4.1.2 Administrations

The words in this subsection are mostly used in traditional system of administration in Kanuri Language. They are borrowed into Margi language to serve the same purpose. These are exemplified in (26a-f) below:

26.Kanuri		Margi	Gloss
a.	maina	maina	'prince'
	[màiná]	[màiná]	
b.	yerima	yerima	'prince'
	[jèrímà]	[jèrímà]	
c.	b lama	bulaama	'ward head'
	[b 'làmà]	[bùláámá]	

d.	galadima	galadima	'senior title'
	[gàládímà]	[gàlàdìmá]	
e.	kaigama	kaigama	'senior title'
	[kàìgámà]	[kàigámà]	
f.	Nana	Nana	'princess'
	[nàná]	[nàná]	

In the above examples (a-e), the words *máinà* and *yerima* in (a and b) with the same gloss 'prince' are used in different cases. The one in (a) is used generally for the King's son, while the one in (b) is used to denote the senior prince of the ruling house. The senior title *Kaigama* is used to denote commander of the Army whereas *galadima* is derived from the word *galt* >*galat* which literally means 'advice' together with the bound morpheme(suffix) -*ma* which is used to derive agential noun from verb. As such, *galt ma*>*galat ma*>*galadima* is a traditional title given to an adviser of the Shehu or Emir.

4.1.3 Market

The Kanuri loanwords in this group are made up of those that belong to trade and occupation. For example:

27.	Kanuri	Margi	Gloss
a.	butu	butuu	'cheap'
	[bútù]	[bútúu]	

b.	kung na	kunguna	'money'
	[kúŋg¹ná]	[kúŋgùnà]	
c.	zau	jau	'expensive'
	[zâu]	[âu]	
d.	kasuwu	kasuku	'market'
	[kàsúwù]	[kàsúkú]	
e.	riwa	riba	'profit'
	[ríwà]	[rìwá]	
f.	zar	jaar	'capital'
	[zâr]	[aár]	
g.	reta	reta	'half'
[rétà]	[rétà]		
h.	kare	kari	'load'
	[kàrê]	[kàrí]	
i.	kag l	kakil	'smith'
	[kág¹l]	[kákìl]	
j.	kag lma	kakilma	'blacksmith'
	[kág´lmà]	[kákilmà]	

The data above indicate that several lexical items were borrowed to Margi language within the domain of market. This is to show that the two languages have contact with respect to trading and occupational affairs. In example (d) above, the Kanuri word *kasuwu* was borrowed as *kasuku* by changing the bilabial

semi-vowel /w/ to velar plosive /k/. This is because the word as used in SKO is a sonorized form of *kasug*, and due to early contact between the two languages, Margi borrowed and maintained the old form as *kasuku* with some phonological modifications which will be discussed in detail in the following sub-headings.

4.1.4 Religion

The loanwords identified in this group are those that have to do with religion. By religion here we mean Islamic religion. Although some Margi speakers are Christians while others are Muslims (especially the Margi *Putai* dialect spoken in Damboa Local Government Area). We can say that as a result of their early contact with Kanuri people, the following words are borrowed into Margi within the domain of Islamic religion as given below:

28.		Kanuri	Margi	Gloss
	a.	asham	asham	'fasting'
		[à âm]	[à ám]	
	b.	mashidi	mashidi	'mosque'
		[má ídì]	[má ídì]	
	c.	luwuran	lukuran	'Quran'
	[1	ùwùrân]	[lùkùrán]	
	d.	sala	sala	'prayer'
		[sálà]	[sálá]	

e.	liman	liman	'imam'
	[límân]	[límân]	
f.	laira	laira	'hereafter'
	[làìrá]	[làìrá]	
g.	ladan	ladan	'muezzin'
	[làdân]	[làdân]	
h.	zanna	janna	'paradise'
	[zánnà]	[ánnà]	

From the words above, we can conclude that Margi borrows many lexical items from Kanuri that are used in the domain of religion.

4.1.5 Theatre

The Kanuri loanwords in Margi in this domainare the ones found in the area of theatre. That is to say, the words are used at entertainment centres. Consider examples(29 a-b):

29.	Kanuri	Margi	Gloss
a.	ganga	ganga	'drum'
	[gàŋgá]	[gàŋgá]	
b.	duwu	duku	'praise singer, musician'
	[dúwù]	[dúkù]	

The words above are used in entertainment, especially during ceremonies and occasions. For example, it is a commonly known fact that there are people in

Kanuri communities who go from one occasion to the other praising people and at times singing to earn their livings. Such kinds of people are called *dúwù*in Kanuri. When borrowed into Margi it became *duku*. The reason for the change can be seen in the next heading.

4.1.6 Names of Person and Body Parts

The words included in this sub-section are those that are used in naming person and body parts. Those names are used in Kanuri communities and were borrowed into Margi as a result of interaction between the speakers of the two languages. This is exemplified in the following words:

30.	Kanuri	Margi	Gloss
	a. Kaka	Kaka	'grandparent'
	[kàká]	[káká]	
	b. Gaji	Gaji	'lastborn'
	[gà í]	[gâ í]	
	c. Gambo	Gambo	'a unisex name given to'
	[gàmbó]	[gàmbó]	a child born after twins'
	d. bibi	bibi	'upper arm'
	[bìbí]	[bíbí]	
	e. fufu	pupu	'lungs'
	[ú ù]	[púpù]	

f.	ngulondo	gulandaa	'finger'
	[ŋgùlòndó]	[gùlàndáa]	
g.	ngumi	gum	'chin'
	[ŋgùmí]	[gùm]	
h.	d mber	dimbur	'buttocks
	[dəmb 'r]	[dìmbúr]	
i.	shimalo	shimalo	'tears'

[ìmálò]

The examples (a-c) above which are names of people are used as common nouns. This is because the name $k\hat{a}k\hat{a}$ meaning 'grandparent' can be used by any man or woman who has grandchildren. $G\hat{a}j\hat{i}$ is used in naming a last born in a family. It is also used for both sexes. $G\hat{a}mb\hat{o}$ is used to name one who came after twins, and it is a unisex name. Therefore, the Kanuri loanwords that are used in naming people which have been borrowed into Margi are mostly common nouns and at the same time unisex names. As such, there is no evidence so far in this research that identified any instance in which personal names are borrowed from Kanuri to Margi.

4.1.7 Home

[ímálò]

The lexical items in this group are those related to objects, structures, materials and food items that are used at home. The following examples illustrate this:

Kanuri 31. Margi Gloss njitta cita 'pepper' a. [n ìttà] [tà] b. bəji 'mat' buchi [b' ì] [bu] c. k ndai kindai 'woven raffia basket' [k ndâi] [k ndaì] 'smoke' d. kange kangi [kàŋgê] [kàŋgí] e. guwam gubam 'pot' [gùwàm] [gùbàm] f. t mb li tumbuli 'toilet' [t mb/lí] ' [tùmbùlí] g. buwu buku 'ashes' [búwú] [búkú] 'wall' h. garu garu [gàrú] [gàrú] 'metal dish' i. tasa tasa [tásà] [tásà] j. sanduwu sanduku 'box' [sàndúwù] [sàndúkú]

k. k maski kumaski 'neighbour' [kəmáskî] [kúmaski]

The example (f) above t'mb'li toilet is dialectal and it is used mostly in Yerwa dialect. This is because other dialects like *Mowar* prefer $s\acute{a}lg\acute{a}>salaa$. Other dialects do use $ng\grave{a}w\grave{u}d\acute{t}$ in referring to the same place (toilet).

4.1.8 Colour, Time and Direction

The Kanuri loanwords in Margi under this domain are those which are used in association with time, colour and direction. See example (32) below:

32.	Kanuri			Marg	i	(Gloss
a.yala	a		yala			'North'	
[jàlá]			[jàlá]				
b.	an m		anum			'South'	
	[àn fh]			[ànùm	n]		
c.	f te			putai		6	West'
	[f tě]		[pútaì]]			
d.	g di			gidi		4	East'
[g dí] `	[gìdí]					
e.	mawu		maguı	1		'week'	
	[máwù]			[mágu	ıù]		
f.	S bd		Subdu	l	'Satur	day'	
[s bd	1]'		[súbdì	ì]			

g.	Talawu	Talaku	'Tuesday'
	[tàláwù]	[tàlákù]	
h.	Z ma	Jumaa	'Friday'
	[z´mà]	[úmàà]	
i.	kurwum	kurkum	'yellow'
	[kùrwúm]	[kúrkùm]	
j.	s l m	sulum	'black'
	[s'l`m]	[sùlúm]	
k.	liwula	lipila	'blue'
	[lìwùlá]	[lìpìlá]	
1.	larawa	larapa 'We	ednesday'
	[láráwà]	[láràpá]	
m.	. lamis	lamisu	'Thursday'
	[làmís`]	[làmísù]	

4.1.9 Animal

The words in this domain are those restricted to both domestic and wild animals. Below are some of the words that were collected for this research.

33.	Kanuri	Margi	Gloss
	a. fatu	patu	'kitten/new born child'
	[fàtú]	[pàtú]	

b.tarwuna	targuna	'rabbit'
[tárwúnà]	[tárgùnà]	
c. tautau	toto	'spider'
[tàutaú]	[tòtò]	
d. koro	kwara	'donkey'
[kóró]	[kwárà]	
e. f r	pur	'horse'
[f^r]	[púr]	
f. dag 1	dagil	'monkey'
[dág`l]	[dágìl]	

The examples (a-e) above are domestic animals used mostly at home for day-to-day use, but the example (f) *dag l>dagil*seem to be confusing as to whether it will be classified as domestic or wild animal. In this work, it can bear both domestic and wild animal in this sense that even though it is found mostly in the bush, some people do keep it as pet in their houses.

4.1.10 Weather and Climate

There are some words which are related to weather and climate. That is to say, they describe certain periodsof time. For example:

34.Kanuri	Margi	Gloss	
a. kasam	kasam	'wind'	
[kàsâm]	[kàsâm]		

b. kulongu		kulonku	'dew'
[kùlóŋgù]	[kùloŋkù]		
c. bant g ne		bantukune	'harmattan'
[bànt g' n'è]	[bànt	ùkùné]	

4.1.11 Anomalous

The words in this group are those that cannot be adequately classified into the above domains. Hence, they have been grouped into the domain of anomalous as in example (35):

35.Kanuri	Margi	Gloss
a. s mana	sumana	'conversation'
[s màná]	[sùmáná]	
b. shawa	shawa	'beautiful'
[áwà]	[áwà]	
c. ashir	ashir	'secret'
[à ír]	[à ír]	

The example 35 (b) above shows no apparent change from /w/ to any other different sound as in kurwum > kurkum in 32 (i) above. This is because the base form of the word is shawa, so it is adopted without any apparent phonological modifications. But, in other cases (as in 32i), the base form of the word in Kanuri is kurk m, and due to sonorization (weaking) process in Kanuri, it was

changed to *kurwum*and Margi adopted and maintains the base form due to their early contact with Kanuri.

4.2 Phonologically Adopted Loanwords

Some Kanuri words have been borrowed into Margi without any apparent change in their phonological, morphological, and, or morphophonological features. That is to say, in the process of borrowing, such lexical items are produced based on the phonology of the source language (i.e. Kanuri). However, the recipient language (i.e. Margi) finds it easier to adopt and use the loanwords as they are in the donor language (i.e. Kanuri) because of the sameness in the sounds of the loanwords. The following illustrates the adopted words from Kanuri to Margi:

36. Kanuri	Margi	Gloss
a. bibi	bibi	'upper arm'
[bíbí]	[bíbí]	
b. kaka	kaka	'grandparents'
[kàká]	[káká]	
c. fufu	pupu	'lung'
[ú ú]	[fúfú]	
d. kasam	kasam	'air'
[kàsâm]	[kàsâm]	

e. ganga	ganga	'drum'
[gàŋgá]	[gàŋgá]	
f. dabba	daba	'animal'
[dábbà]	[dábà]	
g. kalkal	kalkal	'correct'
[kálkál]	[kálkál]	
h. masku	masku	'expert'
[màskú]	[màskú]	
i. garu	garu	'wall'
[gàrú]	[gàrú]	
j. gaji	gaji	'lastborn'
[gá ì]	[gà ì]	
k. asham	asham	'fasting'
[à ám]	[à ám]	
1. Nana	Nana	'princess'
[náná]	[náná]	
m. yala	yala	'north'
[jàlá]	[jàlá]	
n. maina	maina	'prince'
[máinà]	[máinà]	
o. reta		(1 10
	reta	'half'

p.	dalo	dalo	'bull, ox'
	[dàlò]	[dàlò]	
q.	shimalo	shimalo	'tears'
	[ìmálò]	[ìmálò]	
r.	tasa	tasa	'metal dish'
	[tásà]	[tásà]	
S.	fasari	pasari	'translation'
	[fàsárì]	[pàsárì]	
t.	sala	sala	'prayer'
	[sálà]	[sálà]	
u.	liman	liman	'Imam'
	[lìmân]	[lìmán]	
v.	mashidi	mashidi	'mosque'
	[má idí]	[má idí]	
W.	shawa	shawa	'beautiful'
	[áwà]	[áwà]	
x.	ashir	ashir	'secret'
	[à ír]	[â ír]	
y.	ladan	ladan	'muezzin'
	[làdân]	[ládàn]	
Z.	laira	laira	'hereafter'
	[làirá]	[làirá]	

In the examples 36(a-z) provided above, we observe that Margi language adopted the words without any phonological modifications. This is because the affected sounds were possible to be produce by the recipient language based on the sound patterns of their language. Therefore, they do not require any phonological alternations.

4.3Phonologically Adapted Loanwords

In the adjustment of some Kanuri loanwords in Margi, we observe a case of phonological adaptations. That is, the loanwords go through the processes of phonological modifications in order to suite the phonological system of Margi language. The phonological adaptations identified in this case are divided into consonantal and vowel changes. With respect to the consonantal changes, there is the phonological processes of denazalization, degemination, devoicing, substitutions of w > 2/2, w >

4.3.1Consonantal Changes in Kanuri Loanwords in Margi

As observed in the review, Kanuri and Margi have some differences in their consonant sounds and that those Kanuri words that have found their way into Margi have undergone some phonological alternations to fit into the Margi speech system. As such, this section looks at some of the consonantal changes

that take place when Kanuri words are borrowed into Margi. The analyses are made under the well-defined aspects of:

4.3.1.1 Denasalization

Denasalization occurs when a nasal sound loses its nasal feature to a different sound. In the process of borrowing lexical items from Kanuri to Margi, a number of Kanuri loanwords having pre-nasal sounds at the initial position of the word go through phonetic changes in order to fit into the Margi speech system. The examples 37 (a-f) below illustrate this:

37.	Kanuri	Margi	Gloss
a.	ngulondo	gulandaa	'finger'
	[ŋgùlòndó]	[gùlàndaá]	
b.	ngumi	gum	'chin'
	[ŋgùmí]	[gûm]	
c.	ngalo	galo	'beans'
	[ŋgálo]	[gálo]	
d.	ngamd	gamdu	'thin, dry'
	[ŋgámd`]	[gàmdù]	
e.	ngum	gum	'forehead'
	[ŋgûm]	[gùm]	
f.	ngurtu	gurtu	'hippopotamus'
	[ŋgùrtú]	[gùrtú]	

The examples above show that the words containing velar nasal are denazalized to velar plosive. This is because Margi does not have velar nasal /ŋ/ in its phoneme inventory, so they recourse to adopt its closest sound which is /g/.

The rule can be formulated as follows:

The above rule states that nasal consonant sounds becomenon-nasals at the word initial position.

This is becausethere is other environment in which the velar nasal /ŋ/ maintains its original form, especially when it appears in the medial position of word. For example, when the word [g a g a] 'drum' in Kanuri is borrowed into Margi, it is produced as same[g a g a] with the velar [ŋ] in the middle of a word.

4.3.1.2 Degemination

This is a linguistic process in which double consonant sounds are reduced to a single one. From the data gathered, we observe that the phonological process of degemination takes place in the process of borrowing words from Kanuri to Margi. For instance, the sound combination of /kk/ in Kanuri become degeminated to a single velar consonant /k/, the combination /tt/ are degeminated to a single alveolar stop /t/ and the alveolar nasals /nn/ degeminated and reduced to a single alveolar nasal /n/ as can be seen in the examples(38 a-c) below:

38.	Kanuri	Margi	Gloss
	a. njitta	cita	'pepper'
	[n ìttá]	[tà]	
	b. kakkadə	kakadu	'book'
	[kákkádè]	[kákádù]	
	c. cinna	cina	'door'
	[ínnà]	[ìnà]	

The above data show that the geminated consonants in Kanuri are simplified when borrowed into Margi language. From the examples above, the geminated consonants that appeared inter-vocalically are reduced to single consonant. This is as a result of making the structure of the syllable conform to that of the Margi language.

The rule can be formulated as follows:

$$CC \rightarrow Cv/v$$

The rule above states that double obstruent consonants are reduced to one intervocalically.

4.3.1.3 Devoicing

Devoicing is a linguistic process in which a voiced consonant sound changes to a voiceless one. In the process of borrowing words from Kanuri to Margi, some consonants are devoiced in order to fit into the language. This is common when the affected consonant is followed by a high vowel sounds /u/ and /i/. The

affected consonants in this case are the consonants /g/ and / /. Consider the following examples in (39a-f) below:

39.	Kanuri	Margi	Gloss
a.	talag	tala <u>k</u> u	'Tuesday'
	[tàlág`]	[tàlákù]	
b.	kulongu	kulon <u>k</u> u	'dew'
	[kùlóŋgù]	[kùlòŋkú]	
c.	kag 1	ka <u>k</u> il	'blacksmithing'
	[kág ´1]	[kákíl]	
d.	kag lma	ka <u>k</u> ilma	'blacksmith'
	[kág′lmà]	[kákílmà]	
e.	bant g_ne	bantu <u>k</u> une	'harmattan'
	[bànt\g\né]	[bàntakùné]	
f.	b ji	buci	'mat'
	[b' ì]	[bú]	

From the data above, we can deduce that Kanuri words having voiced velar stop /g/ or voiced palatal affricate / / change to their voiceless counterpart /k/ and / / respectively when adopted into Margi. This situation is triggered when the conditioning factor comes from the context whereby the sound that takes up the voiceless quality occurs before high vowels.

Rule:
$$\begin{bmatrix} C & V \\ [+voiced] & \longrightarrow \end{bmatrix}$$
 [-voiced] $\Big/$ [+high]

The rule above is interpreted as: voiced consonant becomes voiceless when it appears before a high vowel.

4.3.1.4Consonant Substitution

This is a linguistic process in which a consonant is replaced by a completely different consonant. In the process of some Kanuri loanwords adaptation in Margi, some consonants are substituted so that the words can fit into the Margi speech system. These substitution processes can be seen in terms of:

4.3.1.4.1 Substitution of /w/>/g/ and /k/

When Kanuri words having voiced bilabial glide /w/ enter to Margi, the sound is substituted withvoiced velar plosive /g/, voiceless velar plosive /k/. The data below illustrate this change:

40. Kanuri	Margi	Gloss
a. ma <u>w</u> u	maguu	'week'
[máwù]	[mágùu]	
b. tar <u>w</u> una	targuna	'rabbit'
[tárwúnà]	[tárgunà]	
c. kasu <u>w</u> u	kasu <u>k</u> u	'market'
[kàsúwù]	[kàsúkú]	
d. kur <u>w</u> um	kur <u>k</u> um	'yellow'
[kúrwùm]	[kúrkúm]	

e. buwu	buku	'ash'
[bú:]	[búkú]	
f. duwu	duku	'singer, musician, drummer'
[dúwù]	[dùkù]	
g. luwuran	lukuran	'Quran'
[lùwùrân]	[lùkùrán]	
h. sanduwu	sanduku	'box'
[sàndúwú]	[sàndúkú]	

From the data above, it is clear that the Kanuri words having voiced bilabial glide /w/ are substituted with voiced and voiceless velar plosives /g/ and /k/. This substitution took place as a result of the sound appearing before the high back vowel /u/.

The rule above states that voiced bilabial glide /w/ becomes velar plosives /g/ and /k/ at the environment before high back vowel /u/.

Another substitution pattern is when voiced bilabial glide /w/ is substituted with voiced bilabial plosive /b/. This can be seen in the data below:

a.	gu <u>w</u> om	gu <u>b</u> am	'water pot'
	[gùwòm]	[gùbàm]	

The examples above show that when Kanuri words having /w/ change to /b/ when borrowed into Margi. We can formulate a rule for this process as:

$$[w] \rightarrow [b] / [+syllabic] _$$
 [+high]

The above rule can be interpreted as: voiced bilabial glide /w/ becomes voiced bilabial plosive /b/ after high vowels /i/ or /u/ as in the case of substitution of /w/ with /b/.

4.3.1.4.2 Substitution of /z/ > /

When Kanuri words having voiced alveolar fricative /z/ are borrowed into Margi, the sound is substituted with voiced palato-alveolar affricate / /. This can be seen in the following examples:

41.	Kanuri	Margi	Gloss
a.	zau	jau	'expensive'
	[zâu]	[àu]	
b.	z ma	jumaa	'Friday'
	[z 'mà]	[úmàa]	
c.	zar	jaar	'capital'
	[zâr]	[aár]	

Based on the data above, it is clear that the Kanuri words having voiced alveolar fricative /z/ are substituted with voiced palate-alveolar affricate / /. Although, the recipient language has/ / and /z/, its speakers optionally substitute it with /z/ for their speech convenience. The conditioning factor is when it appears before the low central vowel /a/.

The rule above states that voiced alveolar fricative becomes voiced palatoalveolar affricate at the environment before low unrounded vowels.

4.3.1.4.3 Substitution of f/ > p/

This involves a process in which Margi substitutes the voiceless bilabial stop /p/ with a voiceless labiodental fricative /f/ of Kanuri. Here, Kanuri sound /f/ is substituted with its nearest equivalent /p/ in Margi. Consider the examples below:

42.	Kanuri	Margi	Gloss
a.	fatu	patu	'kitten/new born baby'
	[fàtú]	[pàtú]	
b.	f t	putai	west
	[f\té]	[pútaì]	

c. f lai	pulai	'grass made plate'
[f\lái]	[pùlái]	
d. f ska	puska	'face'
[f´skà]	[púskà]	
e. fato	pato	'house'
[fátò]	[pàtó]	
f. fasari	pasari	'translation'
[fàsárì]	[pàsárì]	
g. fufu	pupu	'lungs'
[ú u]	[púpu]	

These examples indicate the Margi substitution of the voiceless bilabial stop /p/ with the voiceless labiodentals fricative /f/ of the Kanuri loanwords before central vowels /a/ or /u/. In this case, though Margi has both /p/ and /f/ in its phoneme inventory, the speakers optionally substitute /p/ to /f/ for their speech convenience.

$$\begin{array}{cc} C & C \\ \text{[+continuant]} \rightarrow \text{[-continuant]} \middle/ \ \# \ - \end{array}$$

The above rule says that/f/ continuant consonant becomes/p/ non-continuantat the initial environment of words.

4.3.2 Vowel Changes in Margi Loanwords from Kanuri

The Kanuri vowel system does not differ significantly with that of Margi as identified in this study. Therefore, the vowels do not go through much change in

the process of borrowing from Kanuri to Margi. The changes identified are vowel lengthening, vowel substitution, vowel raising, vowel fronting and vowel backing.

4.3.2.1 Vowel Lengthening

This situation deals with making vowel sounds longer than they actually are. In relation to loanword adjustment from Kanuri to Margi, the low central vowel /a/ and high back vowel /u/ tend to go through the process of vowel lengthening. As observed in the data below, the low central vowel /a/ becomes long /aa/ while the high back vowel /u/ becomes long /uu/ when borrowed into Margi language. This is cited in examples below:

43.	Kanuri	Margi	Gloss
a.	b l <u>a</u> ma	bul <u>aa</u> ma	'ward head'
	[b'làmà]	[bùlààmà]	
b.	z m <u>a</u>	jum <u>aa</u>	'Friday'
	[z´mà]	[ùmàà]	
c.	zar	jaar	'capital'
	[zár]	[aár]	
d.	ngulond <u>o</u>	guland <u>aa</u>	'finger'
	[ŋgulòndó]	[gùlàndaá]	
e.	butu	butuu	'cheap'
	[bútù]	[bútúu]	

As observed in the data above, the low central vowel /a/ and the high back vowel /u/ become lengthened when borrowed into Margi language. The motivations for this can be discerned when the vowel sound occurs after nasals and stops but not fricatives or affricates.

The rule may be formulated as:

The above rule states that short vowels become long when they appear after high unrounded consonants.

4.3.2.2 The Substitution of $\frac{1}{0} > \frac{1}{a}$

Some Kanuri loanwords in Margi go through the process of substituting their mid back vowel /o/ with lowcentral vowel /a/. This can be seen in the examples in (44) below:

44.	Kanuri	Margi	Gloss
a.	z <u>o</u> w <u>o</u> r	z <u>a</u> w <u>a</u> r	'divorced woman'
	[zówòr]	[záwàr]	
b.	k <u>o</u> r <u>o</u>	kw <u>a</u> r <u>a</u>	'donkey'
	[kóró]	[kwárà]	

The data show that mid back vowel /o/ in Kanuri is replaced with low central vowel /a/ when borrowed into Margi. This process can be formulated in the following rule:

$$V$$
 V C Rule: [+mid] $-$ [+low] [+cont]/ [+son]

The rule above states that mid vowel becomes low when it appears after sonorant continuant consonants.

4.3.2.3 Vowel Raising

This is the process in which a low or midvowel is raised to high position in words. In the course of borrowing some words from Kanuri to Margi, there are quite a number ofwords in which the mid front vowel /e/ is raised to high front vowel /i/. The raising process occurs at the end of a word. For example:

45.	Kanuri	Margi	Gloss
a.	jir <u>e</u>	jir <u>i</u>	'truth'
	[jírè]	[jírí]	
a.	kar <u>e</u>	kàr <u>i</u>	'load'
	[kàrê]	[kàr]	
b.	kang <u>e</u>	kang <u>i</u>	'smoke'
	[kàŋgê]	[kàŋgí]	

From the data above, we can conclude that the vowel /e/ is raised to /i/ at the end of a word. The rule for this process is formulated as follows:

$$\begin{array}{cccc} [-high] \\ [-low] & \rightarrow & [+high] & \not -\# \end{array}$$

The rule states that a front midvowel becomes high when it is at word final position.

Apart from raising the mid front vowel /e/ to high front vowel /i/, there is another situation in which the mid central vowel / / is raised to high back vowel /u/. Consider the following examples:

46.	Kanuri	Margi	Gloss
a.	kung_na	kung <u>u</u> na	'money'
	[kúŋg´ná]	[kúŋgunà]	
a.	an_m	an <u>u</u> m	'south'
	[àn^m]	[ànúm]	
b.	t_mb_li	t <u>u</u> mb <u>u</u> li	'toilet'
	[t'mb'lí]	[tùmbúl]	
c.	b_lama	b <u>u</u> laama	'ward head'
	[b [/] làmà]	[bùáamà]	
d.	s_bd_	s <u>u</u> bd <u>u</u> a	'Saturday'
	[s′bd`]	[súbdùa]	

e.	b_ji	b <u>u</u> ci	'mat'
	[b′ ì]	[bú]	
f.	talag_	talak <u>u</u>	'Tuesday'
	[tàlág\]	[tàlàkú]	
g.	z_ma	<u>ju</u> maa	'Friday'
	[z'mà]	[úmàà]	
h.	f_r	f <u>u</u> r	'horse'
	[f^r]	[fúr]	
i.	s l m	sulum	'black'
	[s'l`m]	[súlùm]	
j.	s mana	sumana	'conversation'
	[s' màná]	[sùmánà]	
k.	lamis	lamisu	'Thursday'
	[làmís\]	[làmísù]	

From the data above, it is observed that the mid central vowel / / in Kanuri words is raised to high back vowel /u/ when borrowed into Margi. This also shows that when theaffected sound appears in between two consonants.

The rule above can be interpreted as: non-high vowels become high when they appear inter-consonantally.

4.3.2.4 Vowel Fronting

Vowel fronting is the process in which a central or back vowel is fronted in words. As such, in the adjustment of some Kanuri loanwords into Margi, some words that have mid central vowel / / are fronted to high vowel /i/.

47.	Kanuri	Margi	Gloss
a.	dag_l	dag <u>i</u> l	'monkey'
	[dág¹ l]	[dágìl]	
b.	b_rb_r	b <u>i</u> rb <u>i</u> r	'dust'
	[b/rb`r]	[bírbír]	
c.	k_ndai	k <u>i</u> ndai	'woven raffia basket'
	[k\ ndâi]	[k ndaì]	
d.	d mb_r	dimb <u>i</u> r	'buttocks'
	[d\mb'r]	[dìmbír]	

We can analyse this as being change of the central vowel / / to high front vowel /i/. This process takes place when the sound appears after obstruent.

Rule:

$$\begin{array}{ccc} V & V & C \\ \hline [-front][+front] & \hline [-cont] / \\ \hline [+mid] & \hline [-round] \end{array}$$

The rule above states that non-front vowel is fronted when it appears after non-continuant, lateral consonants.

4.4. Conclusion

This chapter provides a detailed analysis of the Kanuri loanwords in Margi. The loanwords were first distributed into different domains of language use, where eleven domains were identified and discussed. This is followed by the phonological analysis of the loanwords. It is clear based on the analysis that some of the Kanuri loanwords were borrowed into Margi without apparent phonological changes, and, were grouped under phonologically adopted words. Others that require some phonological changes in order to fit into the Margi speech system were grouped under phonologically loanwords. The result of the analysis shows that the phonological adaptation processes of denasalization, degemination, devoicing, consonant substitution, vowel lengthening, vowel raising, vowel fronting and vowel substitution are the phonological processes that the loanwords go through.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 Summary

This study focuses on the examination of phonological study of Kanuri loanwords in Margi. It is carried out to account for the extent to which Margi borrows words from Kanuri. Hence, the loanwords are classified into different themes deriving from the contacts between the two languages; eleven specific domains are identified in the study. It provides the phonological adoptations and the adaptations of the loanwords. The adaptation processes identified with respect to this are denazalization, degemination, devoicing, consonant substitutions, vowel lengthening, vowel substitution, vowel rising and vowel fronting.

The work is divided into five chapters. Chapter one is the general introduction to the work under which the historical background of both donor and recipient languages are given. This is followed by the statement of the problem, research questions, aim and objectives, scope and limitation and significance of the study are all clearly explained. In chapter two, we reviewed the relevant and related works to the current research. In chapter three, the method through which data are collected as well as the theory that is adopted for analysing the data is discussed. Chapter four is the analysis of the data, under which the loanwords

were distributed to different domains deriving from the contacts between Kanuri and Margi. This is followed by the main analysis in which the phonological treatment of the loanwords is carried out where the adopted as well as the adapted Kanuri loanwords in Margi are discussed in detail. Chapter five which is the final chapter is the summary and conclusion of the research.

5.2 Conclusion

This research provides a phonological description of Kanuri loanwords in Margi. We have shown the contact between the two languages and how the contact affected the lexicon of the two languages. The data were able to support the research questions. 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 data analysis also reveals that most of the Kanuri loanwords go through adaptation processes in order to fit into Margi speech system. Also, this research work does not claim treating every aspect of Kanuri loanwords in Margi, rather, it serves as an insight or clue to further studies and adds to the existing literature of the two languages, specifically Margi which has not been well promoted.

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APPENDIX A

KANURI LOANWORDS IN MARGI

Kanuri		Margi		Gloss
b lama	[b làmà]	bulaama	[bùláámá]	ward head
Mal m	[mál m]	Malum	[málùm]	teacher
fasari	[fàsárì]	pasari	[pàsárì]	translation
masku	[máskù]	masku	[máskú]	expert
ruwo	[rúwò]	rubo	[rúbó]	writing
maina	[màiná]	maina	[màiná]	prince
k ra	[k rà]	k rk ra	[k rk rá]	reading
goni	[gòní]	gwani	[gwání]	scholar
yerima	[jèrímà]	yerima	[jèrímà]	prince
galadima	[gàládímà]	galadima	[gàládímà]	senior title
Nana	[nàná]	Nana	[nàná]	princess
kaigama	[kàìgámà]	kaigama	[kàìgámà]	senior title
butu	[bútù]	butuu	[bútùu]	cheap
kung na	[kúŋg ná]	Kunguna	[kúŋgùnà]	money
zau	[zâu]	jau	[âu]	expensive
kasuwu	[kàsúwù]	kasuku	[kàsúkú]	market
riwa	[ríwà]	riba	[rìbá]	profit

zar	[zâr]	jaar	[aár]	capital
reta	[rétà]	reta	[rétà]	half
kare	[kàrê]	kari	[kàrí]	load
kag l	[kág l]	kakil	[kákìl]	smith
kag lma	[kág lmà]	kakilma	[kákilmà]	blacksmith
asham	[à âm]	asham	[à âm]	fasting
mashidi	[má ídì]	mashidi	[má ídì]	mosque
Luwuran	[lùwùrân]	Lukuran	[lùkùrán]	Quran
sala	[sálà]	sala	[sálà]	prayer
liman	[límân]	liman	[límân]	imam
Laira	[làìrá]	Laira	[làìrá]	hereafter
ladan	[làdân]	ladan	[làdân]	muezzin
Zanna	[zánnà]	Janna	[ánnà]	paradise
ganga	[gàŋgá]	ganga	[gàŋgá]	drum
duwu	[dúwù]	duku	[dúkù]	praise singer,
				musician
kaka	[kàká]	kaka	[kàká]	grandparents
gaji	[gà í]	gaji	[gà í]	lastborn
gambo	[gàmbó]	Gambo	[gàmbó]	a unisex name
				given to a child
				born after twins

bibi	[bìbí]	bibi	[bíbí]	upper arm
Fufu	[ú ù]	Pupu	[púpù]	lungs
ngulondo	[ŋgùlòndó]	gulandaa	[gùlàndáa]	finger
ngumi	[ŋgùmí]	gum	[gùm]	chin
d mber	[d mb r]	dimbur	[dìmbúr]	buttocks
njitta	[n ìttà]	cita	[tà]	pepper
shimalo	[ímálò]	shimalo	[ìmálò]	tears
bəji	[b ì]	buchi	[bu]	mat
kəndai	[k ndâì]	kindai	[k ndaì]	woven raffia
				basket
kange	[kàŋgê]	kangi	[kàŋgí]	smoke
guwam	[gùwàm]	gubam	[gùbàm]	pot
t mb li	[t mb lí]	tumbuli	[tùmbùlí]	toilet
buwu	[búwú]	buku	[búwú]	ashes
garu	[gàrú]	garu	[gàrú]	wall
tasa	[tásà]	tasa	[tásà]	metal dish
sanduwu	[sàndúwù]	sanduku	[sàndúwù]	box
k maski	[k máskí]	kumáski	[kumáskí]	neighbour
Yala	[yàlá]	Yala	[yàlá]	North
Anəm	[àn m]	Anum	[ànùm]	South
F te	[f té]	Putai	[pútaì]	West

G dí	[g dí]	Gidi	[gidí]	East
mawu	[máwù]	maguu	[mágùu]	week
S bd [s bd	l]	Subdu	[súbdù]	Saturday
Talawu	[tàláwù]	Talaku	[tàláwù]	Tuesday
Z ma	[z mà]	Jumaa	[úmàà]	Friday
kurwum	[kùrwúm]	kurkum	[kùrkúm]	yellow
s 1 m	[s 1 m]	Sulum	[sùlúm]	black
liwula	[lìwùlá]	lipila	[lìpìlá]	blue
Larawa	[láráwà]	Larapa	[láràpá]	Wednesday
Lamisə	[lamisə]	Lamisu	[làmísù]	Thursday
fatu	[fàtú]	patu	[pàtú]	kitten/newborn
				child
tarwuna	[tárwúnà]	targuna	[tárgúnà]	rabbit
tautau	[tàutaú]	toto	[tòtò]	spider
koro	[kóró]	kwara	[kwárà]	donkey
f r	[f r]	pur	[púr]	horse
dagəl	[dág l]	dagil	[dágìl]	monkey
kasam	[kàsâm]	kasam	[kàsâm]	wind
kulongu	[kùlóŋgù]	kulonku	[kùlóŋgù]	dew
bant g ne	[bànt g nè]	bantukune	[bàntùkùné]	Harmattan
səmana	[s màná]	sumana	[sùmáná]	Conversation

shawa	[áwà]	shawa	[áwà]	Beautiful
ashir	[à ír]	ashir	[à ír]	Secret

APPENDIX B

INTERVIEW QUESTIONS

SECTION A

Kindly provide me with the following information:
Name:
Sex:
Age:
Tribe:
Language Variety:
Local Government Area:
Village:
Educational background (if any):
Occupation:
SECTION B
Kindly provide me with Margi (Margi Putai) equivalents of the following words:

English	Margi Form	Transcription
Handsome,		
beautiful		
To close, to cove		
Conversation,		
discussion		
Paradise		
Cap		
Way, road		
Mad, fool		
Sweat		
Type of small		

smelly rat	
Culture	
Secret	
Night	
Wooden bowl	
Housefly	
Singer, praise	
singer, praise	
To change	
Student, pupil	
Shade, shelter	
To carry	
Veil	
Swimming	
Green	
Hunger	
Sleep	
Sun	
Red	
Question/asking	
Baobab tree	
Muezzin	
Hereafter	
Thursday	
Story/news	
Greeting	
Time for the last	
prayer of the day	
Go, to go	
Fight	
Imam	
Quran	
Neighbour	
Mosque	
Prayer	
To break	
Friend	
Beans	
Dry	
Egg	
Begging	
Thirst	

To hide away	
To forget	
Beard	
Room	
To decay	
Shame	
Writing	
Gathering	
Box	
Ear	
Doubt	
Bone	
Eye	
Hand	
Mouth	
Tears	
Funeral	
arm	
Finger	
Cheeks	
Leg	
Buttocks	
one	
Two	
Three	
four	
Five	
Ten	
Twenty	
twenty one	
twenty two	
twenty three	
twenty four	
twenty five	
Thirty	
Forty	
Fifty	
Sixty	
Seventy	
Eighty	
Ninety	
Hundred	

Father		
Mother		
Grandparents		
Son		
Daughter		
Stomach		
Heart		
Lungs		
Eye Blood		
Urine		
Drum		
Smithing		
Blacksmith		
Water		
Dew		
Smoke		
Harmattan		
Wind		
Dust		
Moon		
Star		
Fire		
Charcoal		
Ashes		
baobab tree		
Tamarind		
Farm		
Lion		
Monkey		
Baboon		
Rabbit		
Snake		
Bat		
Chameleon		
Spider		
Cow		
Bull		
Cat		
Sword		
Mat		
Knife		
	1	<u>. </u>

Calabash water pot Load Sickness Fever Shadow Truth Time Market White Green Yellow Correct Money New
Load Sickness Fever Shadow Truth Time Market White Green Yellow Correct Money
Sickness Fever Shadow Truth Time Market White Green Yellow Correct Money
Fever Shadow Truth Time Market White Green Yellow Correct Money
Shadow Truth Time Market White Green Yellow Correct Money
Truth Time Market White Green Yellow Correct Money
Time Market White Green Yellow Correct Money
Market White Green Yellow Correct Money
White Green Yellow Correct Money
Green Yellow Correct Money
Yellow Correct Money
Correct Money
Money
Old
Expensive
Cheap
Strength
North
South
East
West
See
Smell
Kill
Answer
Cold
Big
Animal
Dog
Breast
Sleep
Night
Fog
Week
Year
Star
Tongue
expert in study
Fasting
Fence

Welcome	
ward head	
king's wife	
Commandexr	
Princess	
Prince	
Farming	
last born	
woven basket	
Salt	
latrine/toilet	
Suffering	
Travelling	
red sorrel	
soar milk	
divorced woman	
Tuesday	
Saturday	
Friday	