

# A Morpho-Phonological Survey of Borrowing into Hausa Language

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## Abstract

Although people create or acquire words in several ways, borrowing is the most fecund source or pattern of increasing vocabulary in Hausa. This paper examines the phenomenon of borrowing into Hausa from the English language. The researcher examined written texts and listened extensively to native speakers' speeches, among others, as a methodology of obtaining data in order to explain vividly the morphological processes involved in borrowing words from English into Hausa. The speeches were recorded and transcribed in order to obtain the natural phonological effects as delivered. The findings of this study reveal that borrowing is a very productive resource of vocabulary building in Hausa. Its productivity is as a result of the abundant strategies it employs in naturalizing English words into Hausa. The study concludes that Hausa continually invents new processes of naturalizing new words as they come from different human endeavors on almost daily basis.

## 1. Introduction

The global community has over the years experienced rapid changes in various aspects of human endeavors. In Europe, these changes became more pronounced during the industrial revolution. There were developments of new concepts or terminologies everywhere in the globe relating to administration, government, science, technology, health, commerce, education, medicine, economics, politics, information and communications technology, etc. When the British colonialists annexed Hausaland, there were tremendous changes and increase in the vocabulary of Hausa Language. Since then till date, the language continues to borrow new words from the English language to meet new demands. Uncountable terminologies are emerging almost on daily basis, especially in the popular field of information and communication technology which Hausa borrows from the English Language. The objective of this paper is to show the productivity of borrowing as a source of vocabulary expansion in Hausa by examining the various fields the language benefits with respect to enriching its store of words. In the same vein, a morphophonological analysis of borrowed words is made by way of exposing what Hausa

does in the process of incorporating borrowed words from the English Language so that they fit into its morphophonological rules.

Morphophonology, sometimes called lexical phonology, is an aspect of linguistic study which focuses on interaction between morphology and phonology. In other words, it is an aspect of grammar with special focus on interaction between some components of grammar. There are several expectations from a morphophonologist as he is set to do his job. In his work, he is expected, as Katamba (1989) points out, to bring out the lexical representation to contain a distinctive feature matrix showing the representation of the 'segments' which make up a word. That is, the root and the stem of a word need to be made distinct. In the same vein, this sort of study must contain idiosyncratic information concerning the association of phonological elements at different phonological tiers. He further argues that in a tone language, like Hausa, for instance, syllables which are underlyingly linked with tone in the lexicon and which do not get assigned tone by regular association principles must be shown. In stress language, like the English language, the lexicon may have to show the special effects which a particular suffix has on the stress pattern of the base to which it is attached.

In addition the list of forms which are exceptions to particular rules as well as statement of sub-regularities in the language as contained in the lexicon must be shown in morphophonological analysis. The lexicon also has to show the various subclasses to which words belong because some morphological and phonological rules only apply to certain subclasses of words. This becomes more necessary in the treatment of loan words. Word-formation rules in some languages are sensitive to the distinction between native or indigenous forms and forms borrowed from other languages. This, for example, is more on use of prefixes and so on. Some phonemes, at phonological level, are associated, for instance in English, with loan words. Further researches may investigate this aspect with a view to ascertaining its applicability to Hausa language.

The lexicon in lexical phonological study must be shown to include grammatical properties of which words like [+adjective] or [+verb]. This is because they are important for certain word-formation and phonological rules. The English language demonstrates this phenomenon where *-ly* can only be attached to adjective bases to form adverbs. */f/* can be realized in some instances as */v/* when an *-s* suffix is added after it only where the *-s* in question represents the noun plural ending (as in *wife*, singular; *wives*, plural).

Finally in this aspect of study, lexical representation is expected to include semantic information because it can have a role in morphological and phonological processes. In Hausa, for instance, the multifunctional morphemes such as *ba-* and *-ma* which are attached to some nouns to form nouns of different categories are not freely attached to all sorts of names. You can say *bakatsine* (katsina man) and *matalauci* (indigent), but you can't say *\*bayaro* or *\*mayarinya*.

In the same vein, the basic applications in this study include indication of tone pattern, vowel length and syllable structures. List of forms which are exceptions to particular rules are expatiated in this paper. The borrowed words are from a single grammatical category, noun. No attempts are made to consider the possibility of

borrowing words from other subclasses such as adjectives and adverbs. This is because the borrowed words naturally become adjectives and adverbs when indigenous adverbial and adjectival morphemes are attached to them in accordance with the morphophonological rules of Hausa.

## **2. Literature Review**

Pioneer researchers in the study of Hausa language have carried out various studies on borrowing from other languages into Hausa. One prominent study is that of Newman (2000). In his encyclopedic grammar of the Hausa language, he treated 'loanwords' in Hausa. He addressed two major issues in his study. Firstly, he discussed sources of loanwords in Hausa. He stated that Hausa lexicon contains a large number of loanwords of which something over a half comes from English and just under a half comes from Arabic. Other languages, according to him, probably make up no more than five percent of identifiable loanwords. He mentioned that Hausa loanwords come from English, Arabic, French, Kanuri, Tuareg, and others like Yorùbá and Nupe. He cited examples of loanwords from these languages. Secondly, Newman discussed the incorporation of loanwords which he pointed out is done through their phonological adjustments. On this note, he shows segmental replacement of consonant phonemes, avoidance of word final consonant, elimination of consonant clusters and tone assignment as the means of achieving the adjustment. Newman goes further to discuss phonological impact of loanwords on Hausa. Here he opined that the introduction of Arabic loanwords was responsible for the phonemicization of /ʔ/ and /h/, phonemicization of /r/ which resulted in a clear contrast between the two rhotics (/r/ and /r/) and strengthened the incipient phonemicization of /r/ as opposed to /r/, the undermining of the originally allophonic relation between coronals and their corresponding palatals as a result of introduction of Arabic loanwords with /s/ and /z/ before front vowel. In the same vein, he says, English coronals (fricatives and stops) characteristically have not undergone palatalization before front vowels. English has also impacted on Hausa phonological system by introducing large numbers of words with final consonants. Vowel system of Hausa was also affected with the introduction of numerous words with syllable-final codas. English has also, through its loanwords, increase the number of common nouns with short final vowels. There are also a number of tone changes which has resulted in an increase in the number of nouns with final L-L tone, previously atypical class.

Newman finally discussed gender of loanwords which he says some of them follow natural Hausa gender system. Others are analogically allocated in consonance with Hausa patterns. Last is a default assignment of gender which is on the basis of phonological shape. This he calls phonological patterning.

Newman's study is indeed a great masterpiece in the study of Hausa loanwords especially from English. Our study is influenced by this study to, this time around, look at the measures being taken by Hausa to meet modern technological challenges being driven by information and communication technology and other areas of human endeavors since after

his study. Added to the strategies of incorporating new words as pointed by Newman are some others observed by this study to add to the resources in this context.

One other study worth mentioning as far as the study of borrowing from the English into Hausa is concerned is that of Sani (2008). He studied political language and Hausa lexical expansion. Appraising the language of the politicians, he shows how existing lexicon is being given new meanings to achieve certain political ambition. This as a result leads to semantic expansion of the vocabularies. As old or existing words are used to serve new purposes, Hausa store of words is directly being increased. Our present study is having some relationships with Sani's study because some of the words whose meanings are expanded are originally borrowed words. While his study is largely a semantic one, concerned chiefly with meaning expansion, ours is on morphophonology, examining the processes involved in incorporating borrowed words from the English into Hausa.

Bagari (1987) also carried out a study on phonological adaptation of borrowed words in Hausa. He made mention of pronunciation hypothesis and phonetic approximation. The former looks at process of borrowing from the point of view of pronunciation of words, while the latter is the equivalent of what Newman calls segmental replacement of consonant phonemes. Since it's of significance to the study of borrowing processes, the study is here reviewed. Some of the weaknesses of the hypothesis have been pointed out. Many questions which remained unanswered associated with it are also raised for future researchers to take up. The study, however, remains an interesting one given the lights it shed on a number of morphophonological issues.

From the historical perspectives, as far as borrowing from English into Hausa is concerned, contacts between Hausa Language and English Language manifested as a result of colonization of Hausaland by the British. Due to the massive influx of new concepts from the colonizers, Hausa was faced with no alternative but to develop vocabularies to meet these needs. As stated by Rufai (2003), "The attempts to face the challenges brought about by colonization can be categorized into two types: involuntary and voluntary. By involuntary is meant such efforts made by the general public on their own to express the alien concepts in Hausa. Voluntary means all efforts made along these lines as a result of government encouragement or agencies". Rufai pointed out that the involuntary attempt were undocumented while the voluntary ones were documented.

At the early stage of terminological development in Hausa, using borrowing and translation as chief means, the words developed were largely in the field of governance resulting from contacts with colonial rulers and business through interpreters. Translations were applied to concepts in which Hausa has equivalent words. Borrowing on the other hand was used to apply to concepts in which Hausa has no lexical equivalent. The effort of the government and its agencies was quite commendable in vocabulary development of the Hausa Language. One of the earliest attempts by government in promoting vocabulary development in Hausa is the setting up of Institute of Administration in Zaria in 1959, which had existed since 1947 with the name Clerical Training Centre. Kirk-Greene pointed out that the staff members of the institute were lecturing in Hausa on administration. This led to the development of "effective working vocabulary over a period of nine years".

Other agencies established to increase the level of literacy among the Hausa which eventually helped in new words development include the Northern Regional Literacy Agency (NORLA) set up in 1953, Hausa Language Board (1955) and a number of workshops on translation of terms. Various Centres and Boards carried out a number of workshops on translating English terms into Hausa Language. This led to the emergence of many documents where English-Hausa terms were recorded. At this juncture, efforts of Centre for the Study of Nigerian Languages (CSNL), Bayero University, Kano, now renamed Centre for Research in Nigerian Languages, Translation and Folklore need to be commended. Others in like manner include UNICEF, UNESCO, BBC Hausa Service and countless number of individuals who made giant strides and noteworthy contributions towards development of terms in Hausa from English. Such famous individuals include Professor Muhammad Hambali Jinju, Joseph A. McIntyre and Hilke Meyer-Baliburg, both of them Germans, Professor Dauda Muhammad Bagari, Isa Musa, Dr. Abba Rufai, Shehu Malami, Professor Sammani Sani and a host of others too numerous to mention. Currently, some centres are engaging into running translation courses which serve as a good avenue for enriching the language through translations and borrowing. As at 2003, the total number of terms estimated to be translated from the English to Hausa reached a whopping total of 38,659 (Rufai: 2003). Out of these terms, many are borrowed while greater parts are translations.

This paper is interested mainly in the borrowed words used to increase the store of vocabulary of the Hausa Language. From 2003 till date, there is tremendous vocabulary development especially in the field of Information and Communication Technology. Greater part of these vocabularies is borrowed words from the English Language. What then is borrowing different from translation? This question is answered below:

### **3. What is Borrowing?**

Borrowing has been defined by Crystal (2008) as “A term used in comparative and historical linguistics to refer to a linguistic form taken over by one language or dialect from another; such borrowing are usually known as ‘Loan Words’..... less commonly, sounds and grammatical structures may be borrowed”. On the justification for the need for borrowing in a language, Rufai: (200) opines that “The terminological development becomes imperative in a language when it is faced with the problem of new and alien concepts for which it has no expressions. It may struggle to find their equivalents, or failing that it may resort to other means including borrowing”. Hangen, on the other hand, aptly defines borrowing as “the attempted reproduction in one language of patterns previously found in another”. Borrowing is sometimes referred to as linguistic acculturation. Fishman (1954) explains it to consist of three-stage cycle which Hangen characterized as code-switching, interference and integration.

Hausa Language, like any other language, employs the use of many patterns to enrich its store words. Among them are derivation, compounding, functional shifting, translation and borrowing. Apart from compounding and perhaps derivation, borrowing is found to be fecund and prolific in terms of productivity.

In fact, from research being carried out, borrowing is the most reliable source of word formation in the current era of information technology. Names of gadgets, tools, equipment, and processes are easily adopted as borrowed words. Any attempt to translate most of this equipment is normally met with stiff resistance because of constraints associated with it. And, naturally, a language is not, to a large extent, supposed to be prescribed. On the contrary, it should be described. Before a translated term travels one kilometer, an adopted or adapted term travels one hundred kilometres, reaching out to people including those in remote areas with an unimaginable effect. Vocabulary development is more of a work of collective society than the monopoly of a few individuals or self-acclaimed linguistic experts.

#### **4. Modern Borrowed Terminologies from the English Language**

As it has been pointed out earlier, borrowing from English to Hausa could be traced as far back as the colonial period when the first contact between the Hausa and the English people happened. Since then there have been series of borrowings to meet new needs. This study would, however, like to concentrate on examining the most recent borrowed vocabularies. The reason is this; language is about functionality. Most borrowed words are right now in operation and are 'living'. One other reason is that borrowing is taking place every now and then like never before because of several reasons. Among these reasons are the ever growing influx of technologically invented materials and concepts arising from advancement in science, technology and arts. The study also discovers that young people, especially those with western education, prefer borrowing the English terms rather than the use of native equivalents even if they are within reach; for one reason of display of "enlightenment" and in another for choice between what is convenient in speech and so on. In fact, urban migrants from the rural areas are fundamentally reliable courier and giant agents of spread of borrowed words when they go back to their rural areas. To them, speaking with lots of borrowed words in a speech increases their social status as the 'enlightened from the cities'. This is a display of colonial mentality that still lingers among people in which inferiority complex is depicting itself languagewise. Colonial language is believed to be superior and sophisticated compared to local indigenous languages. Even the educated elites display this, unfortunately. When considering examples of borrowed words, we shall limit ourselves to those words as recent as those that started coming up within the last two or three decades or so.

#### **5. Analytical Models**

Since this paper intends to look at the morphophonological aspects of borrowed words, certain models of analysis have to be employed. Hijazi's (1981) method of analyzing data on borrowed words from Arabic into Hausa language involves indicating the vowel length of the loan words. This model is useful in the sense that some borrowed words experience changes in their form relating to vowel length. In other words, some words have to experience changes in vowel length during the process of adapting them so

as to conform to phonological rules of Hausa. Therefore, when accounting for what happens during the process of adaptation, Hijazi's model is useful.

Another important model used in this present analysis of data is Bagari's (1987) model. Although Bagari believes that 'phonetic approximation' is important but it cannot be the sole determining factor in explaining borrowed word adaptation. He considers it to be a necessary first stage in the process of borrowed word adaptation. He believes strongly that "the phonological properties of a language determines the phonological shape and the phonetic representation of borrowed words after the hypothesis of phonetic approximation has applied to the raw data as a first stage in the process of adaptation. Borrowing from English to Hausa he therefore stated, 'is based on the pronunciation of English, and not on the spelling'. This helps explain in great deal the phonological adaptation. This model is used in this analysis so that words written differently from the way they are pronounced are explained. It should however be noted that phonetic approximation hypothesis equally helps in explaining certain phonologically constrained terms. Phonetic approximation means that speakers of a language, on hearing a foreign or alien sound, replaced that sound with the most closely related phonetic unit in its inventory. This, according to Bagari, means that the adaptation of foreign sound which the speaker encounters in the borrowed items could, and should be explained in terms of physical phonetics, and, accordingly, "the manner of nativization (adaptation) should be reflected in (and predictable from) the distinctive features and scalar values that make up the phonetic quality of the individual segments". Therefore, contrasting analysis, he further stated of the occurring phones of the borrowing languages and the borrowed language should suffice in such a 'theory 'to explain how (and demonstrate why) the phones of the borrowed languages will be realized by the speaker of the borrowing languages, and vice versa. In short, indication of tone pattern, vowel length and syllable structure are necessary tools of explaining lexical properties of the Hausa language as emphasized by Bagari's study which we adopt in this study as well.

## **6. Data on Borrowing in Some Productive Fields**

The data presented here are on recent borrowings in some prominent fields of human endeavours from English to Hausa. This will bring home the claim that Hausa swiftly adapt words to suit the daily lexical needs of its speakers. As pointed out in the abstract, data were collected from text materials, published and unpublished, in order to provide evidence on certain assertions. Speeches of native speakers are here also used as earlier stated. Vowels lengths and tone pattern of the borrowed words will be indicated to help reader to see the morphophonological process of adapting the words from the English language. This becomes imperative given the fact that Hausa is a tone language where word meaning or grammatical categories (such as tense) are dependent on pitch level. Tone languages, according to Katamba (1989), "have morphemes which are at least in part realized by pitch modulation." It's also worth mentioning here that while indicating tone patterns of the words, only low and fallen tones are marked. Unmarked tones signify high

tone and for neatness of the work, when tone mark falls on *i* vowel it's left out to avoid interfering with the dot on it.

### 6.1. Science and Technology Borrowed Words

<b>English</b>	<b>Borrowed into Hausa</b>	<b>Vowel</b>
aerial	eriya	( eéríyaaà)
coal tar	kwalta	(kwàltaá)
axle	agzil	(ágzìl)
compass	kampa	(kámfàs)
magnetic	maganadiso	(màgànaáadísoò)
uranium	yuraniyam	(yùraaniyàm)
throttle	totur	(toótòr)
airconditioner	iyakwandidishina	(iyaàkwaàndíshinaàà)
bonnet	bonet	(bonèt)
boot	but	(bût)
bumper	bamba	(bambaà)
cable	kyabir	(kyabîr)
carburrator	kafereta	(kaàfireetaà)
connecting rod	kwanakiran	(kwanakîrân)
crankshaft	karanshaf	(karanshâf)
gear	giya	(giyaà)
gasket	gasket	(gasket)
gearbox	giyabos	(giyaàbôs)
machine	mashin	(maàshîn)
mechanic	makanike	(màkaanikeè)
loudspeaker	lasifika	(laasifiikaà)
puncture	fanca	(fancaà)
patch	faci	(faacii)
radiator	lagireto	(laàgireetoò)
silencer	salansa	(salansaà)
reverse	ribas	(ribâs)
spring	sifirin	(sifîrîn)
valve	bawul	(baawùl)
wheel	wili	(wiili)
wheel spanner	wulsufana	(wulsùfaanaà)
transformer	tiransifoma	(tìrànsifoomaà)
vulcanizer	makaneza	(màkàneezaà)

### 6.2 Information and Communication Technology Borrowed Words

<b>English</b>	<b>Borrowed into Hausa</b>	
computer	kwamfyuta	(kwànfyuutaà)
keyboard	kibodi	(kiboodi)



modem	modem	(mòdem)
data	data	(daataà)
credit	kiredit/kudi	(kireedit)
file/folder	fayil/folda	(faayìl)
change	canji	(canji)
internet	intanèt	(intanèt)
paint	fenti	(fenti)
envelope	ambulan	(ambùlân)
field	fili	(fiili)
online	kanlayi	(kan-laayii)
screen	sikirin	(sikirin)
battery	batir	(baatìr)
memory card	memorikad	(memoriikàd)
sim	sim	(sim)
whatsapp	wasaf	(waasaf)
bluetooth	bulutus	(buluutus)
booting	butin	(buutin)
cinema	sinima/silma	(sinimaà)
clicking	kilikin	(kilikin)
swapping	suwafin	(suwaafin)
text	tes	(tes)
telegraph	tangaraho	(tangàraahò)
alert	alat	(àlat)
email	imel	(iimel)
website	websayit	(websaayit)

### 6.3 Sports and Entertainment

<b>English</b>	<b>Borrowed words</b>	
coach	koc	(kôc)
refree	rafari	(ràfàrii)
team	tîm	(tîm)
linesman	lasman	(làsman)
champion	camfiyon	(camfiyòn)
goal	gol	(gol)
field	fili	(fiili)
jersey	jesi	(jeesi)
cup	kofi	(koofi)
off-side	ofsaye	(ofsaaỳ)
producer	furodusa	(fùròduusaà)
engineer	injiniya	(injinniyaà)
director	darakta	(daàraktaà)
script	sikirif	(sikirif)

editor	edita	(eeditaà)
manager	manaja	(manajà)
penalty kick	fanareti	(fànaareetii)
captain	kyaftin	(kyaftin)

#### 6.4 Building and Construction

English	Hausa	
bricklayer	birkila	(birkilà)
bungalow	bungalo	(bungaloò)
carpenter	kafinta	(kaafintà)
ceiling	sili	(siilii)
cement	siminti	(simintii)
concrete	kankare	(kankare)
dam	dam	(dâm)
foundation	fandisho	(fândashoò)
block	bulo	(bùloo)
plaster	filasta	(filastaà)
interlock	intalok	(intalòk)
rod	rodi	(roodi)
elbow	elbo	(elboò)
parlour	falo	(faaloò)
paint	fenti	(fentii)
plumber	fulamba	(fulambaà)
roof	rufi	(rufii)
range	ranji	(ranjii)
tile	tayil	(taayil)
store	suto	(sùtoô)

### 7. Morphophonological Processes Involved in Borrowing Words from English into Hausa

Here we shall examine the processes of incorporating borrowed words from English into Hausa. Are the words from the English simply adopted or do they undergo certain process and, therefore, are adapted? This study, in contrast with related studies before it, wishes to point out the many process involved; not normally just the few identified by other linguists.

#### 7.1 Replacement of Missing Items in Hausa Phonemic Inventory

This is the analysis of data (borrowed words) based on constituents of a word. When Hausa language wants to borrow a word from the English, or any other language, and it happens that the word contains certain consonant which it doesn't have, it looks for a consonant in its inventory which is closely related to the foreign consonant and replaces it with that closely related one. In other words, it replaces it with a closely approximated one.

This is what is referred to by some linguists as phonetic approximation. Other linguists refer to it as segmental replacement of consonant phonemes. For example, English has certain sound or consonants which Hausa does not have. These consonants are /f/ as in fan, /p/ as in pan, /th/ as in *this*, /θ/ as in *third*, and /v/ as in valve. At the written level we do not use /q/ and /x/. Hausa approximates these foreign consonants with what it has as follows:

English	Approximants in borrowed words
/f/	/f/p/ (police - folis)
/p/	/f/ (pillow - fulo)
/th/	/z/ (Elizabeth - Elizabez)
/θ/	/s/ (maths - mas)
/v/	/b/ (valve - bawul)

Consider these two examples below for the purpose of analysis:

English	Hausa
lever	liba
machine	mashin

When you look at the two examples above in the word *lever*, the two basic consonants are l and v. l appears in the two words but v was approximated with b, since Hausa has no consonant *v*. Note that the word *machine*, is completely different. /ch/ is pronounced as /sh/ in this peculiar word.

## 7.2 Velars and Round Vowel Combination Conversion

In English, some words contain syllable at the initial stage that consist of velars /k/ and /g/ conjoined with round back vowel /o/. Such syllable structure includes *go* as in *government*, *gutter* and *co* as in *college*, *coal tar*. Hausa syllable structure does not accept the combination of velar consonants /g/ and /k/ with round back vowel o in its phonetic inventory especially when it borrows word with this syllable structure. Therefore, when a borrowed word begins with a syllable with *go* or *co*, Hausa converts such structure to *gwa* and *kwa* respectively. Consider the following examples:

English	Borrowed
gold	gwal
committee	kwamiti
goal	gol
governor	gwamna
government	gwamnati

As if this is a regular pattern, but one is baffled when one sees what happens to borrowed words as these:

**English**

gutter  
anchor

**Hausa**

kwata  
ankwa

Here *gu* as in *gutter* which appears with an approximation *go*, changes to *kwa* as opposed to the earlier assertion that *go* changes to *gwa*. See what happens to *chor* syllable in *anchor*, it changes to *kwa* upon adaptation. As stated elsewhere in this presentation, Hausa language doesn't recognize *kwo* as a syllable of the CV structure. It only recognizes *kw*, *kwi* and *kwe*. It rejects *kwo* and *kwu*. Some Nigerian languages have this syllable combinations. Igbò language, for example, has names like Okonkwo and Iwuchukwu. Hence all borrowed words beginning with *co* (pronounced as *ko*) syllable are approximated to *kwa*. Below are some convincing examples:

**English**

commissioner  
constitution  
college  
culbet

**Borrowed into Hausa**

kwamishina  
kwansitushin  
kwaleji  
kwalbati

You may wonder why the Hausa man refuses to say *kwala* when he borrowed the word colour from the English. Instead he says *kala*. The reason is this in the word colour in English, the first syllable *co* is pronounced by the English as /ka/. So since it is not pronounced as /ko/, the Hausa man retains it since he has it in his syllable structure. Theory of phonological adaptation applies here. One interesting thing is that when *co(r)* comes in the middle of a word it is pronounced as /ko/ not *kwa*. See the following examples:

**English**

recorder  
decoder  
scholar

**Borrowed words**

rikoda  
dikoda  
sukola (dan sukola)

An inference could, therefore be drawn that when a word begins or ends with *co(r)* (pronounced as /ko/) and is borrowed into Hausa language it changes to /kwa/.

In a nutshell, pronunciation theory should see words beyond the way they are written. Written English is sometimes different from spoken English. Native speakers of English have to be listened to carefully to be able to understand the reason why there are certain irregularities in what is supposed to be regular (?) during process of borrowing. Question mark is put in the last sentence because language can decide to be irregular if it so wishes. Hausa lays emphasis on what is said by the borrowed language before arriving at what to do in the process of incorporation of words to be borrowed from it.

**7.3 Dismemberment of Consonant Clusters**

In the analysis of connected speech, a cluster “refers to any sequence of adjacent consonants, especially those occurring initially or finally in a syllable such as the initial [br-] of *bread* or the final [-st] of *best*” Crystal (2008). At the initial position of a word, up to three consonants can occur in English. For example [spr-], [spl-] and up to four consonants at the final position as in *glimpsed* [-mpst] and *twelfths* [-lfths]. Traditional

Hausa linguists believe that Hausa do not have consonant clusters. It is true that you hardly find an indigenous Hausa word with consonant clusters. But, to me it is possible to have some few indigenous words with consonant clusters. My belief is that those early linguists who made up their mind that Hausa do not accept consonant cluster did all they could to twist and wrench Hausa orthography to conform with this assumption. Here in this study we will attempt to argue that there are some words with consonant clusters especially borrowed words.

Given that there are few words with consonant clusters, it shows that Hausa is not married to the idea of having consonant clusters. So, in almost all the borrowed words with consonant clusters borrowed from the English into Hausa, the clusters are normally dismembered. Consider these examples:

<b>English</b>	<b>Borrowed</b>
throttle	totur
crankshaft	karanshaf
gold	gwal
brother	buroza
script	sikirif

If you look carefully, the borrowed words do not contain clusters. Do not confuse gw for a cluster; in Hausa it is a single consonant. Now back to our earlier assertion that it is possible to have Hausa words, indigenous for that matter, with clusters, consider these words:

buki	(bukii)	biri	(birii)
biki	(bikii)	<b>bri</b>	<b>(brii)</b>
<b>bki</b>	<b>(bkii)</b>	birai	(birai)

In spoken context when you try a native speaker to say *biri*, *biki* and *ungwaggo* as we used to write them, you will end up hearing him or her saying *bri*, *bki* and *ngwaggo*. In as much as we agree that when some words are borrowed from the English, their clusters are removed, as shown in the examples above, there are some words that are borrowed and pronounced with the clusters retained in them. Even the uneducated in the rural areas that are not used to words with clusters are now beginning to adapt. Borrowed words such as the following are actually pronounced with their clusters retained.

<b>English</b>	<b>Hausa</b>	
spanner	sfana	(sufana?)
spring	sfirin	(sifirin?)
premier	frimiya	(firimiya?)
screen	skirin	(sikirin?)
transformer	transfoma	(tiransifoma?)
scanner	skana	(sikaana?)
facebook	fesbuk	(fesubuk?)
website	websayit	(webisayit?)

Great majority of borrowed words of nowadays are pronounced almost similar to the way they are said in English. Research carried out even among the uneducated rural dwellers reveals this .Of course not all borrowed words with clusters such as:

<b>English</b>	<b>Hausa</b>
text	tes
swapping	suwafin
browsing	burauzin

In doing away with the clusters, sometimes it is not just the insertion of vowels. There is the removal of some consonants from among the clusters. Consider the following examples

<b>English</b>	<b>Hausa</b>
crankshaft	karanshaf
flask	filas
stamp	sitam
belt	bel
block	bulo

This phenomenon brings home the undeniable fact that Hausa now has words that end with consonants which used to be atypical. At least this is found among the borrowed words from the English.

#### **7.4 Insertion of Vowels in the Final Position of a Word that Ends with a Consonant**

Some words when borrowed undergo the process of insertion of vowels in certain positions. The common insertions are the ones done in between clusters, as we have seen above, and at the final position of a word that ends with a consonant. Consider the following examples:

<b>English</b>	<b>Borrowed Words</b>
bread	biredi
fridge	firji
table	teburi

As could be seen, in the examples above, two processes occur at the same time in some word. There is insertion of vowels to dismember clusters and the insertion of vowel at the final position of a word. In the case of *firji*, the first vowel *i* was transposed to come immediately after the first consonant *f*. For *table*, the consonant *l* was replaced with *r* to arrive at *teburi* as a borrowed word form *table*. Consider other examples below:

<b>English</b>	<b>Borrowed Words</b>	
wheel	wili	(wiilii)
cup	kofi	(koofii)
tank	tanki	(tankii)
glass	gilashi	(gilaashii)

bread	biredi	(bireedi)
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This general belief that Hausa words accept only words ending in a vowel is only applicable to indigenous words mostly. There are borrowed words which Hausa accepts with consonant endings. Consider the following examples:

<b>English</b>	<b>Borrowed Words</b>	
bicycle	basukur	(baasukùr)
throttle	totur	(tootùr)
pencil	fensir	(fensìr)
cable	kyabir	(kyabìr)
table	tebur	(teebùr)

### 7.5 Consonant Substitution

As opposed to phonetic approximation, in this case the consonants are substituted with others not so closely related in terms of place and manner of articulation. See the following examples:

<b>English</b>	<b>Borrowed Words</b>
off- <u>s</u> ide	ofsaye
car <u>d</u>	kati
cin <u>e</u> ma	silima
<u>v</u> ulcanizer	makaneza
re <u>c</u> eipt	rasixi
<u>g</u> utter	kwata
table	tebur
candle	kyandir
pin	fil

You will notice the consonants in English which are substituted with others in Hausa.

### 7.5 Complete Adoption

There are instances where Hausa adopts completely the morphological and phonological features of the borrowed words. Here we mean vowel length, tone pattern and consonant features are all adopted. Consider the following examples:

<b>English</b>	<b>Borrowed Words</b>
wire	waya
tire	taya
gear	giya
machine	mashin
carrier	kariya
danger	danja

It is hoped we remember what was said earlier that analysis of this nature does not consider spelling but pronunciation.

## 8. Conclusion

This paper has shown the productivity of borrowing as a word-making device and the relevance of interaction between the components of grammar; precisely, morphology and phonology. It points out how morphology interfaces with phonology in Hausa. As a result, distinctive feature matrix, elucidating the representation of the segments which make up a word in Hausa, is highlighted, though not in a detailed treatment such as segregating words into roots and bases. Idiosyncratic information concerning phonological elements at different phonological tiers is presented. Here, Hausa being a tone language, syllable structures which are linked with tone are explained. Some words which are exceptions to particular rules as well as instances of irregular patterns in respect of some lexical items are highlighted.

From the foregoing, it could be seen that Hausa language is quick in responding to lexical demands of all times, because it has a lot of methods of word formation, of which borrowing contributes in no small measure in this direction. In the process of incorporation of borrowed words, it employs replacement of missing items in Hausa phonemic inventory, velars and round vowels combination conversion, dismemberment of consonant clusters, insertion of vowels in the final position of a word that ends with a consonant, consonant substitution and complete adaptation. This gives borrowing the richness it is known for. Borrowing also has shown that some theories in the language have to be revisited. For example, the belief that Hausa words end only in vowels not consonants, and that there are no words with consonant clusters in Hausa. Proofs advanced forward above have disproved these assertions. This will eventually call for revisiting some aspect of Hausa orthography with a view to conforming to the reality currently on ground. Globalization is impacting on all human endeavours. Advancement in information and communications technology is flooding the whole globe with new names of inventions in foreign languages. Hausa must move with time and requisitions of contemporary trends to fit in well as a modern African language.

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