

The Phonology of Loanwords in the Ejagham Language

Magdaline Bakume Nkongho¹

Abstract

A general observation of the lexical stock in the Ejagham language shows that the language has a panoply of borrowed words which originate from Indo-European languages such as English, French and German as well as some local languages. The presence of loanwords in this language to a large extent can be explained by Cameroon's earlier colonization by the said countries, resulting to language contact. Schneider (2007), Melchers and Shaw (2011). Interestingly, loanwords in Ejagham have undergone some phonological and morphological restructuring thereby making them conform to the phonetic and syllable structure of the said language. This paper is an analysis of the phonological processes that loanwords undergo to suit the word structure of the recipient language. The work has been divided in two main parts. The first part is a presentation of the syllable structure of the Ejagham language. The second part is a presentation of data and analysis of the loan items from the donor to the recipient language

Key words: Phonology, loan words, syllable structure, donor, recipient

Introduction

Linguistic borrowing is a phenomenon that is generally caused by language contact. In Cameroon, language contact situation can partly be explained by the fact that historically, the country had been colonised by the British, German and French. The country is marked by the linguistic heritage of the colonizers which are English, French and Pidgin languages. Apart from colonialism, the linguistic situation of the country (more than 265 languages) and the geographical location of the speakers of Ejagham give room for linguistic contact.

The Ejagham language is one of the languages spoken in Manyu division South West region of Cameroon. It is classified under zone 800.(Breton and Fohtung 1991) . Many terms have been used to refer to the dialects or sub-dialects: Ekwe, Eyafin, Keaka, Obang, Etung, Kwa. However the most widespread term of self reference is "Ejagham" (with its variant "Ejagha"). Ejagham speakers are found in Cameroon and Nigeria.

In Cameroon, the Ejaghams are found in the Eyumojock sub-division, South West Region. They are bounded in the North by the Boki people, In the south by the Balundu and Mbo people of Ndian Division and Nguti sub-division respectively, in the East by the bayangs, and in the West by the ikom division of the Cross river state of Nigeria. This is a pointer to the fact that they have had contacts with speakers of other languages. Linguistic contact entails contact between distinct languages either through written form or through direct social contact between speakers. But the more common one is that involving direct social contact between speakers since languages and their speakers do not exist in isolation but in social settings. Contact situation can be described in terms of their influence on the linguistic system (i.e. grammars, morphology, syntax, etc) the social relationship of the speakers in contact, and the linguistic outcome of the contact. In language contact situations, the linguistic systems involved are often influenced by borrowing also referred to as loans. According to Chumbow and Tamanji (1994), Loanwords occur in a situation where 'the receiving language borrows the form as well as the meaning associated with this form.' However, within the framework of this paper, the words 'loanword' and 'borrowing' are technical terms used to describe the process whereby a linguistic unit, usually a lexical item, has come to be used in a language other than the one it originated from. (Crystal, 1985: 36) .

¹ The University of Maroua, E-mail: madonkongho@yahoo.com

An overview of Ejagham sounds

Prior to this write up, some linguistic studies had been carried out on this language. Watters, (1981, 1994, 1997, 1990, 2000) Bakume (2002). A majority of these studies are in the domain of phonology and have proven that this language has on a whole 7 vowels and 23 distinctive consonants. This number increases if pre-nasalised consonants such as mb, nd, ng etc., which exist in the language, are included. Watters (1981). Despite this wide range, the occurrence of sounds is highly restricted. A case in point is the glottalic fricative / h/ which never occurs at the onset

(1) Sounds in onset (C₁) and coda (C₂) position :

C₁	P	t	k	kp	C₂	p	t	k
	b	d	g	gb		b		
	m	n	ŋ			m		ŋ
		s						
		z						
		l						
	w							

These sounds combine in different ways to form syllables and words. Syllables in this language consist of an onset (O) and a rhyme (R). Hence the canonical shape CV. However, there are different types of syllables that could be found in roots:

- (2) V: à “ he/she”
- CV: kô “take”
- CVC: lãŋ “touch”
- CGV: ŋ-kwì “maize”
- CCV: m-blí “leaf”

Words are made up of syllables which vary between one and three. The structure of words and syllables are often modified as a result of the introduction of strange sounds from donor languages. There are some sounds and segments from English which do not exist in the recipient language as indicated below:

- (3) ʃ, ʒ, v, h, θ, ð

Some sounds occur with restriction to the environment: ts, ʒ , l ,dʒ

Some vowels do not occur at all:

- a) Monophthong: æ, ʌ, ɒ,
- b) Diphthong: ai, au, ei, ɔi
- c) Triphthongs : aiə auə ɔiə

Given that the above sounds are not attested in Ejagham language, whenever the native speakers have to use words containing sounds such as in (3) above, there is bound to be modification or what Chumbow and Tamanji (1994) refer to as phonetic approximation. For example:

(4)	English	Ejagham	Gloss
	kætɪkɪst	kàtəkís	“catechist”
	peɪpə	pípà	“paper”
	kɒlɪdʒ	kɔlɛʃ	“college”
	təʊəl	é-táwèl	“towel”
	laɪm	lámɪs	“lime”

Sonority Sequencing

The sounds of every language that permits consonant clusters has the following distribution of segments in syllables

	Consonants	Syllable	Highest sonority
Vowels	+	+	

Glides	+	-	 Least sonority
Liquids	+	-	
Nasals	+	-	
Voiced	+	-	
VL Obstruents	+	-	

The above classification means that vowels have the highest sonority strength, while obstruents have the least. In other words, the order of sonority sequencing is ONLG at word initial position and GLNO at word final position. Katamba(1989), Kenmogne and Chumbow (2000). The Ejagham language obeys this principle but with modification and has a bearing on the loan words as will be noticed later.

With respect to the word structure, discussions will be limited to nouns and verbs because these are the lexical categories that are prone to borrowing. Monosyllabic, disyllabic and trisyllabic words in Ejagham present a simple structure: Prefix+Root. Consider the following examples:

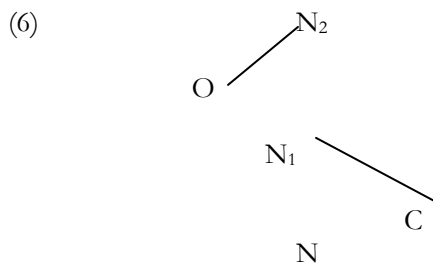
- (5) ε-nɔŋ “bed”
 η-kù “dress”

Verbs have only monosyllabic and disyllabic forms with the shape
 Prefix +Root+Final vowel (infinitive)

Pr.	Rt.	Fv	
ε -	lãŋ	é	“to touch”
ε -	kwén	é	“to carry”

Theoretical considerations

Apart from the descriptive method, two main approaches have been used in this paper to account for change in segments in loanwords. To begin with, there is the Syllabification approach which was used by Levin (1985) and was later adopted by Kenmogne and Chumbow (2000). In this approach, the basis of analysis is the syllable. In a syllable, the constituents are labeled as N₂, N₁ and N here represented as:



In this representation, N₂ = initial consonant (C1) or onset
 N₁ = Final consonant (C2) or coda
 N = Vowel (V) or nucleus

This approach to syllabification based on sonority sequencing principle has proven to be very useful in accounting for the change in segments of loan words. Elsewhere, the Standard Generative Theory as elaborated by Kenstowicz and Kisseberth (1979) is used to account for change in segments and to show how underlying forms of loanwords are derived from the surface structures in a more convincing manner. Meanwhile, it is important to note that data was collected through naturally occurring speeches of native speakers.

2) Data Presentation and Analysis

Consonants at word Initial position

On the basis of data collected, all the consonants that occur at word initial position in loanwords, are equally attested in the Ejagham language, but for the glottalic fricative /h/ which is not attested at all in the language. This sound is automatically rejected in any loanword that begins by it.

(7) Examples:

N₂

$\left[\begin{array}{l} +\text{cont} \\ -\text{std} \\ -\text{ant} \\ +\text{spread} \\ -\text{constr} \end{array} \right]$	*he	* ha	* he
--	-----	------	------

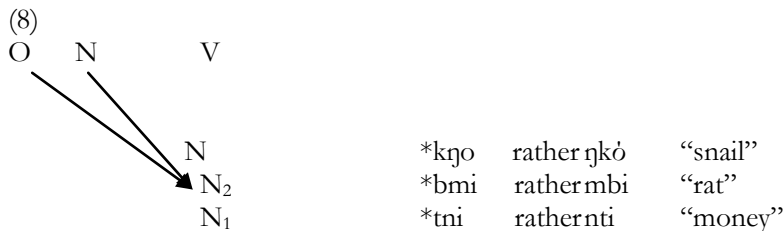
Ejagham	English
áwà	“hour”
áɲkàʃif	“handkerchief”
àβúsá	“hausa”
ámà	“hammer”
ɔndrer	“hundred” (francs)

The above examples give room for the formulation of the following rule
h-deletion : h → Ø / #-

The glottalic fricative is deleted at word initial position

Complex consonants at word initial position

An inventory of sounds in this language shows that it permits consonant clusters. Every language that permits consonant clusters follows a pattern in the distribution of segments. Katamba(Ibid).The Ejagham language obeys this principle but with modification. Bakume (2002) holds that in this language, nasals are +Syllabic. Consequently, with their high sonority strength, they can only precede obstruents as in the examples below



This ordering is respected in loanwords which have nasal sounds inserted where they did not previously exist in the source language. Examples:

(9) Borrowed form	Ejagham	Gloss
gari	ɲ-gàlí	“gari”
səʋp	ń-sôp ^h	“soap”
kʌp	ɲ-kəp ^h	“cup”
kək	ɲ-kək	“cock”
mʌg	m-még	“mug”
gwa:və	ɲ-gwáβa	“guava”
kæn	ɲ-kén	“jerry can”
taim	n-tâm	“time”

The above data reveals two phonological processes which can be captured through the rules:

Rule (2) Ø → N / #- C Nasal insertion
[obstr/son]

This rule states that a nasal is inserted before an obstruent or a sonorant at word initial position.

Rule (2) N → ɲ / - $\left\{ \begin{matrix} g \\ k \end{matrix} \right\}$
N → m / -m
N → n / -s

These rules can be summarised as:

N → $\left[\begin{matrix} \alpha \text{ cor} \\ \alpha \text{ ant} \end{matrix} \right] / - \left[\begin{matrix} \alpha \text{ cor} \\ \alpha \text{ ant} \end{matrix} \right]$

This implies that a nasal takes the place of articulation of the consonant it precedes.

Prothesis

A significant number of lexical items from English and other local languages get into the recipient language through prefixation, technically referred to as prothesis. This process does not only help to ease pronunciation for the native speaker, it also enable loanwords to fit into specific noun classes. Consider the following:

(10)	Borrowed form	Ejagham	Gloss	Source language
	kàbà	ε-kàbà	“traditional gown”	duala
	sanja	ε-sànjà	“loincloth”	duala
	jìgida	a-jìgijá	“waist chain”	hausa
	kanda	ε-kàndá	“belt”	pidgin
	kitʃin	ε-kítʃin	“kitchen”	English

Vowel Insertion rule

Rule (3) Ø → V / #-C

A vowel is inserted before a consonant at word initial position

The above explanations can be further summarized in a derivation

(10) Derivation of nsəp, ɲkʰəp, mmɛg

	UR /	-səʋp		-kʌp		-mʌg /
Nas. Insert		N		N		N
Nas. Assim		n səʋp		ɲkʌp		mmʌg
Phonetic appr		ɔ		ɔ		ɔ
Aspiration		-		ɲkʰəp		-
PR		[nsəp		ɲkʰəp		mmɛg]

Consonants at word final position

At word final position, only plosives such as p, b, t, d, g, and nasals do occur in this language. A sound such as the lateral /l/ does not.

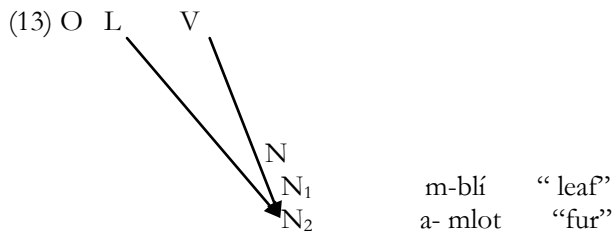
(11) N₁

+cont +ant -lab +cor	*kel	*nal	*bil
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Given that the /l/ sound does not occur in Ejagham in this position, one expects to see it rejected as well in loanwords just like the glottalic fricative /h/ at word final position. Curiously, this is not the case. Consider the following loans:

(12)	Borrowed form	Ejagham	Gloss
	teibl	é-tébl	“table”
	ketl	é-kétl	“kettle”
	təʋəl	é-təwel	“towel”
	kændl	é-kandl	“candle”

The question that arises here is why this sound is accepted in this position which originally did not exist. The response to this could be in what Bakume (2002) holds, notably that lateralization is a common phenomenon in this language. It occurs at word initial and medial position. Hence we have a sequence such as:



It has been observed that all instances where obstruents precede liquids are permissible in this language. Consequently, speakers tend to adopt the lateral sound in this position more easily than they would reject it. (This is so as long as these sounds respect the sequence Obstruent-Liquid). The adoption of this sound is also evidenced in the following loanwords

(14) Borrowed form	Ejagham	Gloss
flavə	flawa	"flower"
tafel	taflɛ	"arm board" (Dutch)
ɲkaniŋka	ɲklaŋka	"bell" (Efik)

On the contrary, Complex consonant never occur at word final position in this language. A sequence such as the one in (15) is rejected.



Loanwords with consonants of this nature are adapted in to the recipient language in the following manner:



Other examples of loans with consonant clusters at word final position include

(17) Borrowed form	Ejagham	Gloss
kaind	kân	"kind"
kætikist	kâtâkis	"catechist"
plæŋk	plâŋ	"plank"
ziŋk	zîŋ	"zink"
θaʊznd	tɔsin	"thousand"
pəʊnd	pâŋ	"pound" (currency)

The above data can be captured in a consonant deletion rule:

() Rule: C → Ø / --- #

This means that a consonant is deleted after a consonant at word final position

Restriction on vowels

The vowels of Ejagham are very much restricted compared to those of Indo-European languages. The speakers 'nativise' loanwords with strange vowels. One way this is done is through glide formation. This is a process whereby a vowel devocalizes into a semi-vowel or semi-consonant.

When a lexical item having diphthong or triphthong is borrowed, the diphthong or triphthong is simplified through this process. In other words, a glide is inserted to break up diphthongs. That is, CV1V2(V3) becomes CVGV where G stands for a glide.

The word automatically resyllabifies as follows:

(18) English				Ejagham
Wire	σ	----->	waya	σ σ
	/ \			/ \ / \
	CVVV			CV CV
	w a I ə			w a y a

Other examples of glide formation include:

(19) borrowed form	Ejagham	Gloss
kwaɪə	kwáyà	“choir”
aiən	áyân	“iron”
peə	pyâ	“pear”
flavə	fláwâ	“flour/flower”
ʌniən	ónyɔs	“onion”
biə	byâ	“beer”

- i → y / -ə
- u → w / -ə
- e → y / -ə

The preceding data exposes us to a glide formation rule which states:

$$\text{Rule: } \begin{bmatrix} -\text{cons} \\ +\text{syll} \\ +\text{hi} \end{bmatrix} \text{-----} \rightarrow [-\text{syll}] / - \begin{bmatrix} -\text{cons} \\ +\text{syll} \end{bmatrix}$$

These rules state that the high vowels /i/, /e/ and /u/, become semi-consonants /y/ and /w/ respectively before a vowel.

Another phonological process that occurs in loanwords is Vowel Lowering. It could be noticed that words which end with the lax central vowel (schwa) in the donor language are pronounced with the low back vowel [a]. On the other hand, final vowels of CVCV roots are limited to -ɛ in Ejagham. This consistent vowel modification is probably due to the fact that in terms of place of articulation, [ə] is nearer to [a] than [ɛ]. Below are some examples:

(20) Borrowed form	Ejagham	gloss
sʊgə	sùkà	“suger”
peipə	pípà	‘paper’
leibrə	lébrà	‘labourer’
səuldʒə	sójà	‘soldier’
endʒiniə	njíníyà	‘engineer’
traʊzə	tɔrɔsa	“trouser”

This phonological process can be captured in the following manner”

$$\begin{bmatrix} -\text{high} \\ -\text{low} \end{bmatrix} \rightarrow [-\text{high}] / - \# \quad \text{or simply } \text{ə} \rightarrow \text{a} / - \# \quad \text{Vowel lowering}$$

It states: a schwa becomes [a] at word final position

Derivation of	fláwà,	ámà,	kwáyà	pípà
UR/	flavə	hæmə	kwaiə	peipə /
Glide format	 w	 -	y	 -
Vowel Lowering	 a	 a	 a	 a
Phonetic approx	---	 a		 i
h-deletion		 Ø		
PR	[flawa 'Flour'	ama 'hammer'	kwaya 'choir'	pipa] 'paper'

Reduplication in loan verbs

Though fewer comparatively and are mostly from the English language, verbs display interesting phonological patterns when they are adapted into the recipient language. Looking at the syllable structure of loan verbs, they are in the main monosyllabic and disyllabic with varied shapes as below:

Original form	Ejagham	Gloss
(I) Monosyllabic		
a) CVV pei	CV pí	'pay'
b) CVVC sain	CVC sán	'sign'
e) CCVV trai	CCV trá	'try'
(II) Disyllabic		
f) CVCVC sʌmən	CVCVC sóməs	'summon'
g) CVCVC pʌnɪʃ	CVCV pónɛ́	'punish'

The infinitive form of loan verbs is made up of a prefix, a root and a suffix

(21) e- béɲ-é	"to bend"
e- pón-é	"to punish"
e- fóm-é	"to form"
e- pí-í	"to pay"

Loan verbs can be either mono or disyllabic. They can be reduplicated to give different meanings. In this case, the reduplicated form conveys the meaning of what may roughly be translated as *just* + action

Basic form	reduplicated form	
(22) pôm	pôm é pôm	"just pump"
pí	pí é pī	"just pay"
sán	sán é sán	"just sign"
béné	béné é bééné	"just bend"
pónɛ́	póné é póné	'just punish'

It is worth noting that in the above form, the verb root is reduplicated while an -e- separates the reduplicant from the base. The base stands for the unit to which the template is affixed, whereas the reduplicate is the material under the template. Marantz (1982), Vernyuy (1997). The template on the other hand refers to the reduplicative affix. McCarthy and Prince, (1995).

At this point it is interesting to know which segment stands for the reduplicant, which is for the base, as well as the direction of the reduplicative affix, whether its melody associates from left to right or vice versa. To ascertain this, it is necessary to posit that the base is made up of a stem i.e pfx+ rt. The entire stem is reduplicated and affixed to the base from left to right. Meanwhile, CV is posited as the reduplicated template.

In this case, reduplication will be considered as a normal affixation process and would be analysed here as the addition of a phonemically bare affix to a base morpheme or word, which triggers the mapping of the base's melody to the affix (Marantz, 1982). A derivation is done to show how this takes place in pí é pī 'just pay' and sán é sán 'just sign'

- a) There is a base which is the stem

σ	σ	σ	σ
	/ \		/ \
e	pɔm	e	san
- b) The reduplicative stem is prefixed to the base

σ	σ	σ	σ	σ	σ	σ	σ
			/ \				/ \
		e	pɔm			e	san
- c) The segmental melody of the whole stem is copied to the right

e	pɔm	e	san
σ	σ	σ	σ
			/ \
	e		san
- d) The syllable note is then mapped to the segment from left to right; meanwhile automatic syllabification takes place and the segment which does not meet the condition for syllabification is stray erased.

e	pɔm	e	san
	\ /		\ /
σ	σ	σ	σ
			/ \
		e	san
Ø		Ø	
pɔmepɔm		sanesan	

Conclusion

Irrespective of the motivation for borrowing, one thing stands out clear; loanwords constitute part of the lexical stock of the Ejagham language. The words come from varied sources with a majority from English. The main thrust of this paper has been to show that change in segments of loanwords can be accounted for phonologically.

The words are generally and regularly subjected to phonological and morphological restructuring designed to make them conform to the phonetic and syllable structures of the Ejagham language. This is seen through the formulation of rules and the derivation of some loanwords to account for the phonological processes that lead to such restructuring. One major innovation brought about by loanwords in Ejagham is the occurrence of the /l/ sound in a particular word position not normally found in the target language . Such is the case for words like *é-tébl* 'table' and *é-kéil* 'kettle'.

References

Bakume, N. M. (2002) The Phonology of Loanwords in Ejagham Maitrise Dissertation, University of Yaounde 1.
 Breton, R. and B. Fohtung (1991). *Atlas Administratif des Langues National du Cameroun ALCAM*, CERDOTOLA, CREA, ISH MESIRES, Yaounde
 Chumbow, B.S and Tamanji, P. N. (1994) "Development of Terminology in African Languages: Mechanism of Lexical Expansion" Ms. University of Yaounde 1.
 Crystal, D.(1985). A dictionary of Linguistics and phonetics. Oxford: Basil Blackwell
 Katamba, Francis(1989). An introduction to Phonology. London: Longmans
 Kenmogne, M. and B. S. Chumbow (2000) " Structures Syllabiques et Phonologie des Emprunts en Ghomala"
 Kenstowicz, M. and Kisseberth, C. (1979). *Generative Phonology*: New York: Academic Press
 Knapert, Jan (1976) 'The Study of Loanwords in African Languages'. Berlin: Afrika and Ubersee.
 Levin, J. (1985). A Mercial Theory of Syllabicity. Cambridge. Mass. M.I.T.

- McCarthy, J. and A. Prince. (1995). Faithfulness and Reduplicative identity. In J. N. Beckam, L.W. Dickey and S. Urbanczyk (eds.), *Papers in Optimality Theory*. Amherst, MA: Graduate Linguistics Students Association, University of Massachusetts, PP.249-384.
- Mutaka, N, and Tamanji, P.(2000) *An introduction to African Linguistics*. Munich: LINCOM EUROPA.
- Marantz, A. (1982). "Re-reduplication" in *Linguistic Inquiry* 13:83-145
- Vernyuy, F. (1997) Reduplication in Lamso. Maitrise Dissertation, University of Yaounde 1
- Watters, R. (1981) A Phonology and Morphology of Ejagham with notes on dialect Variation. Ph.D Dissertation, University of Carlifornia, Los Angeles.
- Watters, R. (1994). "Some Phonological Characteristics of Ejagham (Etung)" *Research Mate in African Linguistics: Focus on Cameroon. A fieldworker's tool for deciphering the stories Cameroonians languages have to tell*. Cologne: Rudiger Koppe Verlag, p.55-77
- Watters, R. (1997) "Ejǎǵhá Ejeré 1" *Translated as Eastern Ejagham Primer 1*. SIL Cameroon
- Watters, R. (1990) "Reduplication and the origin of High Tone on Noun Prefixes in Ejagham", *Journal of West African Languages* 20: 105-117.