

- Emenanjo, E.N. (2015). *A Grammar of Contemporary Igbo: Constituents, Features and Processes*. Port Harcourt: M and J Grand Orbit Ltd.
- Finch, G. (2000). *Linguistic Terms and Concepts*. New York: Palgrave Macmillan.
- Fromkin, V.A. (2000). *Linguistics: An Introduction to Linguistic Theory*. Massachusetts: Blackwell Publishers Inc.
- Gleason, H.A. (1961). *An Introduction to Descriptive Linguistics*. Revised Edition. London: Holt.
- Kager, R. (1999). *Optimality Theory*. Cambridge: Cambridge University Press.
- Katamba, F. (1989). *An Introduction to Phonology*. London and New York: Longman.
- Kenstowicz, M. (1994). *Phonology in Generative Grammar*. Oxford: Basil Blackwell.
- O'Grady, W., J. Archibald and F. Katamba (2011). *Contemporary Linguistics: An Introduction*. Harlow: Longman.
- Q̄sisanwó, A. (2012). *Fundamentals of English Phonetics and Phonology*. 2nd ed. Lagos: Femolus-Fetop Publishers.
- Roach, P. (1997). *English Phonetics and Phonology*. 2nd edition. Cambridge: University press.
- Roca, I. and W. Johnson. (1999). *A Course in Phonology*. Oxford: Blackwell Publishers Ltd.
- Urua, E.-A. E (2007). *Ibibio Phonetics and Phonology*. 2nd edition. Port Harcourt: M&J Grand Orbit Communications Ltd. and Emahai Press.
- Yul-Ifode, S. (2003). The Basics of Agoi consonants. In *Four Decades in the Study of Languages and Linguistics in Nigeria: A Festschrift for Kay Williamson*, edited by Ozo-Mekuri Ndimele, 579-591. Abuja: National Institute for Nigerian languages.
- Yul-Ifode, S. (2014). *A Course in Phonology*. Port Harcourt: University of Port Harcourt Press.
- Yul-Ifode, S and R.I.C. Alerechi (2016). Variation in the Tone Classes of Ikwerre Nouns. *The International Journal of Communication and Linguistic Studies* 14 (3), 1 – 11.
- Williamson, K. (1988). "Linguistic Evidence for Prehistory of the Niger-Delta." In *The Early History of the Niger-Delta*, edited by E. Alagoa, F. N. Anozie and N. Nzewunwa, 65-119. Hamburg: Burske.
- Williamson, K and R. Blench (2000). "Niger-Congo." In *African languages: An Introduction*, edited by B. Heine and D. Nurse, 11-42. Cambridge: Cambridge University Press.
- Worukwo, G. (1983). *The Verbal System of Ikwerre (Based on the Ogbakiri Dialect)*. Unpublished B.A. long essay, University of Port Harcourt.

Babanki Verbal Extensions

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Abstract
Verbal extensions occur in Grassfields Bantu languages and their presence and identity have been established in a good number of the languages including Babanki (Akumbu & Chibaka 2012), a central Ring Grassfields Bantu language of Northwest Cameroon. Hyman (2013) contains a presentation and reconstruction of Proto-Bantoid verbal extensions with a significant reference to Babanki. However, there has been no focus on the morphophonological processes (vowel deletion and fricative strengthening and weakening) caused by the addition of extensions in this language. The extensions themselves are toneless and only receive tone from the verb root. This paper accounts for the changes using classical Generative Phonology and concludes that true word final consonants in this language are only nasals and the voiceless velar stop, and that the voiceless fricatives [f] and [s] are exceptional cases that verbal extensions seek to regulate.

1. Introduction

The aim of this paper is to discuss the morphophonological processes that the addition of verbal extensions causes on Babanki verb roots¹. Verbal extensions occur in Grassfields Bantu languages and their presence and identity have been established in a number of the languages including Kom (Hyman 2013), Bafut (Mfonyam 1982, Tamanji & Mba 2003, Tamanji 2009), Mankon (Leroy 1982), Limbum (Fransen 1995), Isu (Kiessling 2004), Meta? (Ngum 2004), and Babanki (Akumbu and Chibaka 2012). Hyman (2013) contains an extensive discussion of Babanki as well as a presentation and reconstruction of Proto-Bantoid verbal extensions. In Babanki, adding extensions to verb roots can cause several morphophonological changes on the verb, namely, vowel deletion, [f] strengthening and [s] weakening. While vowel deletion occurs after the glottal stop, root-final [f] strengthening, and [s] weakening occur when a CV extension is added. The extensions themselves are toneless and only receive tone from the verb root. This paper accounts for the changes using classical Generative Phonology and concludes that true word final consonants in Babanki are only nasals and the glottal

¹Babanki (Kejom, as the native speakers call their language and villages), is spoken in BabankiTungo (KejomKetinguh) and Big Babanki (KejomKeku) in the North West Region of Cameroon by approximately 39,000 people (Simons and Fennig 2018). As a Babanki native speaker I have provided the data used in this paper from my own speech, but also checked with four other native speakers, namely, Vivian Ba'ah (female, aged 35), Mbigehtigweh (male, aged 24) VecheseDieudonne (Male, aged 23), and TitaSherra (female, aged 21). I wish to sincerely thank all of them for making their knowledge on the language available and useful for the work done in this paper.

stop, and that [f] and [s] are exceptional cases that verbal extensions seek to regulate. In the second section, I provide an overview of the phonology and morphology of Babanki, indicating the sounds that can occupy the final position of roots in the language, the verb roots and extensions they can take as well as the two-tone groups of the language. In §3, I discuss the effects that extensions can have on the verb roots and then provide a conclusion to the study in §4.

2. Overview of Babanki morphophonology

2.1 Phonology

As analyzed in Akumbu (2016), Babanki uses 25 phonemic consonants (Table 1)², 8 vowel phonemes (Table 2) and two level tones: H(igh) and L(ow).

Table 1: Consonant Phonemes

	Bilabial	Labiodental	Alveolar	Postalveolar	Palatal	Velar
Stops	b		t, d			k, g
Nasals	m		n		ny	ŋ
Fricatives		f, v	s, z	sh, zh		gh
Affricates		pf, bv	ts, dz	ch, j		
Liquids			l			
Approximants	w			y		

Table 2: Vowel Phonemes

	Front	Central	Back
Close	i	iu	u
Close-Mid	E		o
Open-Mid		ə	
Open		a	

The segments combine into the CV, CGV, CVC and CGVC syllable structures, where G stands for glide.

2.2 Root-final Sounds

Vowels and consonants can occupy the final position of Babanki verb roots. Of the eight phonemic vowels of the language, only /a/ does not occur in a CV root (1a). The six consonants that occur at the end of verb roots in the

² The IPA counterparts for the following orthographic symbols used in this paper are given in square brackets: ny[n], sh[ʃ], zh[ʒ], gh[ɣ], ch[tʃ], j[dʒ], y[j].

language are three nasals /m, n, ŋ/, two voiceless fricatives /f, s/, and the voiceless velar stop /k/ realized as [ʔ].

- (1) a. shí 'take'
 nú 'defecate'
 fɪ 'exit'
 chù 'soak'
 shá 'slice'
 chò 'pass'
- b. zím 'wither'
 tén 'push'
 kán 'fry'
 chɪf 'advise'
 bis 'scatter'
 kúʔ 'rise'

3. The Verb

3.1 Verb Roots

Only one-syllable roots are attested in Babanki except when there is verbal reduplication (Akumbu & Chibaka 2012, Akumbu 2015). The verb roots that appear to have two syllables always have a CV ending, which can be interpreted as an extension. Nevertheless, there are formal extensions that occur with roots that otherwise do not occur alone. Examples of the one-syllable roots and the lexicalized CV(C)-CV are given below.

One-syllable	Two-syllable (with formal extensions)
(2) san 'dry'	gitə 'add'
Chò 'pass'	bàŋlə 'dodge'
Vì 'come'	shisə 'remove'
búm 'hunt'	tóŋtə 'sift'
fəŋ 'fall'	fáʔtə 'hurry up'
kwen 'enter'	bɪʔsə 'ignore'

The one-syllable roots can either have a CV or CVC structure whereas those with two syllables have a CV(C)CV structure. The first consonant can either be palatalized or labialized. It can also be seen in the data in (2) that the second of the two-syllable roots is always of the CV type, and that the V is always schwa. There are a good number of such roots that

cannot stand alone without the second CV syllable also called 'formal extension'.

3.2 Extensions

The majority of what looks like two-syllable verbs results from the addition of a verbal suffix or extension³ to the root. At least five kinds of extensions are commonly found on verb roots, as illustrated below (cf. Hyman 2013 for additional discussion):

(3) -sə	-kə	-tə	-lə	-mə
vī-sə 'bring near'	bvikə 'fail repeatedly'	myə-tə 'complete'	kə-lə 'scrape many times'	kwə-mə 'think together'
kum-sə 'touch'	tən-kə 'fly'	bə-tə 'scrape'	dən-lə 'spread'	sū-mə 'insist continually'
shisə 'remove'	chə-kə 'pass repeatedly'	bum-tə 'meet someone'	sī-lə 'caress many times'	chə-mə 'pass many times'
kwən-sə 'send inside'	fən-kə 'fall repeatedly'	bə-tə 'arrange'	kən-lə 'fry in part'	pfo-mə 'return'
bən-sə 'make dance'	kə-kə 'turn around'	tə-tə 'select'	tə-lə 'insult many times'	fən-mə 'gather lots of things'
bwom-sə 'praise'	bwi-kə 'give birth a lot'	nyit-tə 'run hurriedly'	fə-lə 'pin many times'	sə-mə 'melt'

The extensions appear in (3) with the same tones as the preceding verb roots and the most straightforward analysis is that extensions are toneless and only receive tone from the verb root and the inflectional morphology. Thus, in the progressive aspect, the extensions bear the progressive low tone while in the imperative mood, they bear the imperative high tone (see §4.4 for the imperative).

3.3 Lexical tones

As seen in the following minimal pairs, verb roots fall into two tone classes, L and H (Akumbu 2015).

³Verbal extensions in Babanki fall short of what is typical of Narrow Bantu in that some of the extensions in the latter have no correspondences in Babanki, e.g. 'applicative', 'passive', 'middle' (impositive). Most of these functions, where present at all, are based on combinations of autonomous lexical items. The common extensions are morphemes for 'attenuative', 'intensity', and 'repetitive', with different forms for the latter based on whether the verb is transitive or not.

L tone verbs	H tone verbs
(4)fu? 'bubble'	fú? 'tune'
dəm 'grunt'	dám 'play'
fəs 'break'	fás 'threaten'
zhwi 'pant'	zhwí 'kill'
mò 'narrate'	mó 'deny'
shisə 'remove'	bósə 'melt'
myətə 'complete'	bínsə 'lure to sleep'

As already mentioned, if the verb is bisyllabic, both syllables will be LL or HH.

4. Extensions and Verb Phonology

Adding a CV extension to a verb root can cause several morphophonological changes on the verb, namely vowel deletion after the glottal stop (CV?V→CV?), strengthening of /f/ (CVf→CVb) and weakening of /s/ (CVs→CVy).

4.1 Vowel Deletion

As stated earlier, there are two-syllable stems in the language whose second syllable begins with a glottal stop, followed by a vowel identical to that of the first syllable. When extensions are added to such roots, the vowel of the second syllable is deleted consistently:⁴

(5) mǎ?ǎ 'throw'	mǎ?-lǎ 'throw repeatedly'
tǎ?ǎ 'become stiff'	tǎ?-lǎ 'become stiff in parts/bits'
byè?è 'carry'	byè?-tǎ 'carry in bits/carry lots of things'
shǐ?ǐ 'descend'	shǐ?-tǎ 'descend a bit'
myǎ?ǎ 'blink'	myǎ?-mǎ 'blink repeatedly'
byǐ?ǐ 'fold'	byǐ?-tǎ 'fold several times'

One may argue that the glottal stop is not allowed verb finally and that it requires the echo-vowel, that is, that the vowel is inserted after a glottal stop if it is final. However, there are numerous instances where the glottal stop occurs in final position but does not require the insertion of an echo-vowel:⁵

⁴In a Babanki Filemaker Pro™ database of 2,005 lexical entries (Akumbu 2008), 14 verbs have been found with an echo-vowel after the glottal stop.

⁵There are 86 CV? roots in the database of 2,005 lexical entries.

(6) sɛʔ	'provoke'	sɛʔ-lə	'provoke several times'
gháʔ	'hold'	gháʔ-tə	'hold repeatedly'
bèʔ	'snatch'	bèʔ-lə	'snatch repeatedly'
kúʔ	'climb'	kúʔ-sə	'raise'
kwaʔ	'break'	kwaʔ-mə	'break'
bùʔ	'pour'	bùʔ-tə	'pour a bit'

The data in (6) show that the glottal stop is capable of occupying final position and that the process in (5) is actually that of deletion of the echo-vowel when extensions are added. The echo vowel might be a reduced extension and cannot co-occur with another extension. Forms in the imperative further confirm the claim and illustrate instances of vowel insertion:

(7) a. Infinitive	Imperative	Imperative with Extension
əkù'm 'to touch	'kù'mə 'touch	kù'mlə 'touch many times'
ədzaŋ 'to call	dzaŋə 'call	dzaŋtə 'call repeatedly'
əbwin 'to return	bwinə 'return	'bwinsə 'send back'

b. əbèʔ 'to snatch	bèʔ	é'snatch 'bèʔlə	snatch many times'
əkwaʔ 'to break		kwaʔə 'break	kwaʔmə 'get broken'
əbùʔ 'to pour		bùʔú 'pour	bùʔtə 'pour a bit'

c. əmàʔə 'to throw	'màʔə 'throw	màʔlə 'throw in bits'
əbyèʔə 'to carry	byèʔə 'carry	byèʔtə 'carry a bit'
əmyəʔə 'to blink	myəʔə 'blink	myəʔmə 'blink many times'

The forms in (7a) have a nasal coda and a schwa is inserted in the imperative to bear the high imperative tone (see §4.4). In (7b) where the roots end in the glottal stop, the root vowel spreads to the final position to bear the imperative tone. However, in (7c) which contains the echo-vowel (underlyingly), that vowel bears the imperative tone, confirming that the echo-vowel is actually deleted when an extension is attached. The deletion process in (5) can therefore be captured by the following rule:

(8) Vowel Deletion

$V \rightarrow \emptyset / VC_ + CV$

According to the rule, a vowel is deleted when preceded by a VC and followed by a CV at a morpheme boundary as illustrated in the following derivation.

(9)	UR/ məʔə-lə	byíʔí-tə	shíʔí/
Tone assignment	məʔə-lə	byíʔí-tə	—
Vowel Deletion	məʔ-lə	byíʔ-tə	—
	PR[məʔlə	byíʔtə	shíʔí]

4.2[f] Strengthening

When extensions are added to verb roots that end in [f], the voiceless labiodental fricative changes to [b]:

(10)	kaf 'beckon'	kəb-tə	'beckon several times'
	fəf 'reduce'	fəb-tə	'reduce a bit'
	byɪf 'get bad'	byɪb-sə	'destroy'
	laf 'dress up'	lab-sə	'dress someone up'
	tsɪf 'push'	tsɪb-lə	'push someone around'
	lɪf 'hurry'	lɪb-lə	'hurry'
	zaf 'ache'	zəb-kə	'feel pain'
	chɔf 'shout'	chɔb-kə	'pick a quarrel'
	guf 'pull'	gub-mə	'argue'
	kwɔf 'snatch'	kwɔb-mə	'snatch several times or by several people'

The data show that the change in the root consonant is caused by the addition of the extensions. It can be argued, though, that the change is rather from [b] to [f] in final position. However, several other contexts show the occurrence of the fricative providing evidence that /b/ occurs at the end of a syllable when an extension is added:

(11) Infinitive	Imperative.	Progressive	Derived Noun
əfəf 'to reduce'	fəfə 'reduce'	fəfə 'reducing'	kəŋfəf 'reduction'
əʔchɔf 'to shout'	chɔf 'quarrel'	chɔfə 'quarreling'	kəŋchɔf 'quarreling'

The occurrence of [f] is widespread and that of [b] is limited to the context where a consonant cluster results from the addition of an extension. It is seen that [f] occurs initially, intervocalically, finally, but not pre-consonantly. The same is found with formal extensions where [b] is required instead of [f]:

(12)	lobtə	'deceive'
	təbtə	'solidify'
	təbkə	'struggle'
	nyəblə	'maltreat'

The change from [f] to [b] can be captured by the following rule.

(13) [f] strengthening

/f/ → [b] / __+C

The rule states that the voiceless labiodental fricative becomes the voiced bilabial plosive when followed by a consonant at morpheme boundary. The data in (10) are therefore derived as follows:

(14)	UR/	láf-sə	gùf-mə	lɪf/
Tone assignment		láf-sə	gùf-mə	—
f strengthening		láb-sə	gùb-mə	—
	PR [láb-sə	gùbmə	lɪf]

It happens that [f] strengthening does not apply across words. If the C is in the next word, then the fricative survives:

(15)	égufwì?	'to pull someone'
	əkáf-wúndŋ	'beckon a friend'
	əbyɪfnántŋ	'become too bad'

The data in (15) indicate that the process occurs only within stems specifically due to the addition of an extension.

4.3[s] Weakening

If the verb root final consonant is [s], it changes to [y] when an extension is added to the verb:

(16) a.	kás	'twist (face)'	káy-tə	'twist (face) again and again'
	bis	'scatter'	biy-tə	'scatter several times'
	bàs	'cut open'	bay-lə	'cut open in several places'
	zàs	'loosen'	zay-lə	'loosen several times'
	sàs	'scatter'	say-kə	'scatter into several pieces'
	fwos	'fart'	fwoykə	'fart repeatedly'
b.	tàs	'surround'	tásə	'surround'
	kàs	'twist (face)'	kásə	'twist one's face again and again'
	bis	'scatter'	bisə	'collapse'
	bàs	'break'	bàsə	'break up'

The data in (16a) illustrate that when extensions that begin with [m, l, k] are combined with roots that end in [s], it changes to [y]. The forms in (16b) show that if the [-sə] extension is added to such roots, [s] weakening does not apply but one of the alveolar fricatives is deleted, that is, deletion by

identity takes place: ss → s. It must be the case that the deletion precedes [s] weakening. Again, it can be argued that the change is rather from [y] to [s] in final position but this is dismissed by the fact that [y] occurs only before a consonant whereas [s] occurs in several other contexts:

(17) Infinitive	Imperative	Progressive	Derived Noun
əbìs 'to scatter'	bìsə 'scatter'	bìsə 'scattering'	kəmbìs 'scattering'
əkàs 'to twist'	kàs 'twist'	kàsə 'twisting'	kəŋkàs 'twisting'

The rule in (19) captures the change from [s] to [y].

(18) [s] Weakening

/s/ → [y] / __+C

According to the rule, the voiceless alveolar fricative becomes the palatal glide when followed by a consonant at morpheme boundary. If C occurs in the next word then [s] Weakening does not apply:

(19)	əbàskəmbò	'to tear a bag'
	əkàs təkə?	'to twist only the face'
	əfwosnántŋ	'fart too much'

This means that the process takes place only within a stem that results from the addition of an extension as illustrated in the following derivation.

(20)	UR /	tàs-mə	bis-tə	sàs-kə	tàs-sə/
Tone assignment		tàs-mə	bis-tə	sàs-kə	tàs-sə
s deletion or fusion		tay-mə	biy-tə	say-kə	tà-sə
s weakening		tay-mə	biy-tə	say-kə	tà-sə]

It should be mentioned that the tendency is for [s] to assimilate the features of the following extension consonant and result to consonant gemination. Consider the alternative way of producing the forms in (16a) shown in (21a).

(21)a.	kàs	'twist (face)'	kàttə	'twist (face) again and again'
	bis	'scatter'	bittə	'scatter several times'
	bàs	'cut open'	ballə	'cut open in several places'
	zàs	'loosen'	zallə	'loosen several times'
	sàs	'scatter'	sakkə	'scatter into several pieces'
	fwos	'fart'	fwökkə	'fart repeatedly'
b.	tàs	'surround'	taymə	'mix up'
	bis	'scatter'	biymə	'collapse'
	bàs	'break'	baymə	'break up'

The data in (21b) show that the only context where [y] alone can occur is when the following consonant is [m] (*támmá, etc.). Elsewhere, [s] is capable of assimilating the features of the following consonants resulting to consonant gemination. Therefore, [s] assimilates to a lingual consonant, not a labial one.

4.4 Imperative Tone and Extensions

The imperative is marked in Babanki by a floating high tone. When the root of one-syllable verbs has a low tone, a schwa is inserted (i.e. suffixed) as in (22a) to bear the imperative tone (Akumbu 2015). This might happen in order to avoid a rise on a single vowel because contour tones are rare in Babanki:

- | | | | | | |
|------|----|------|-------------|------|---------------------|
| (22) | a. | bàs | 'cut!' | bàsə | 'cut up!' |
| | | guf | 'pull!' | gufə | 'argue!' |
| | b. | byɪf | 'get bad!' | byɪf | 'destroy!' |
| | | laf | 'dress up!' | laf | 'dress someone up!' |
| | | fwós | 'stir!' | fwós | 'stir continually!' |

When extensions are added to imperative constructions, they consistently take a high tone irrespective of whether the verb root is L (23a) or H (23b).

- | | | | | | |
|------|----|------|-------------|---------|--------------------------------|
| (23) | a. | káf | 'beckon!' | kàb-tə | 'beckon several times!' |
| | | fáf | 'reduce!' | fàb-tə | 'reduce a bit!' |
| | | sàs | 'scatter!' | sày-kə | 'scatter into several pieces!' |
| | | fwós | 'fart!' | fwòy-kə | 'fart repeatedly!' |
| | | bis | 'scatter!' | bìy-mə | 'collapse!' |
| | b. | byɪf | 'get bad!' | byɪb-sə | 'destroy!' |
| | | laf | 'dress up!' | lab-sə | 'dress someone up!' |
| | | tsɪf | 'push!' | tsɪb-lə | 'push someone around!' |
| | | lɪf | 'hurry!' | lɪb-lə | 'hurry!' |
| | | tás | 'surround!' | táy-mə | 'mix up!' |

It has been noted earlier that extensions are toneless in the language and receive a tone by spreading from the verb root as soon as they are attached. If, however, the construction is in the imperative mood, the floating high imperative tone is introduced as shown in the following derivation.

- | | | | |
|----------------------------|------------|---------|---------|
| (24) | UR /káf-tə | fwós-kə | tás-mə/ |
| Imperative tone assignment | káf-tə | fwós-kə | tás-mə |
| f strengthening | kàb-tə | — | — |
| s weakening | — | fwòy-kə | táy-mə |
| | PR [kàbtə | fwòykə | táymə] |

5. Conclusion

The discussion in this paper has centered around the morphonological processes that the addition of verbal extensions cause on Babanki verb roots. It has been demonstrated that adding extensions to verb roots can lead to either post-glottal vowel deletion, [f] strengthening, or [s] weakening. [f] strengthening and [s] weakening occur in similar contexts and in each case a fricative is realized as a more or less homorganic stop or approximant. There is therefore a constraint in Babanki that prohibits the occurrence of fricatives before consonants in a cluster. It has been shown that the process occurs only within stems, specifically due to the addition of an extension. It remains unclear, though, why the change from [s] rather goes to the approximant whereas the alveolar stop is available in the language. This irregularity explains, in part, the tendency by some speakers to move towards consonant gemination when [s] assimilates to lingual consonants. In addition, it has been explained in this paper that the extensions are toneless and only receive tone by rightward spread from the verb root.

References

- Akumbu, P. W. (2008). *Kejom (Babanki)-English lexicon*. Bamenda: Ga'aKejom Development Committee.
- Akumbu, P. W. (2015). Babanki verb tone. *Studies in African Linguistics*, 44(1):1-26.
- Akumbu, Pius W. (2016). Babanki coda consonant deletion and vowel raising: A case of allomorphy. *Proceedings of the 42nd annual meeting of the Berkeley Linguistics Society*, 3-20.
- Akumbu, P. W. & E. F. Chibaka. (2012). *A pedagogic grammar of Babanki*. Köln: Rüdiger Köppe Verlag.
- Fransen, M. A. E. (1995). *A grammar of Limbum: a Grassfields Bantu language spoken in Northwest Cameroon*. PhD thesis, Amsterdam: Free University of Amsterdam.
- Hyman, L. M. (2013). Proto-Bantoid verb extensions. Paper presented at the Workshop on Bantu and its Closest Relatives, Berlin Bantu Conference (B4ntu), April 6-9, 2011.
- Kiessling, R. (2004). Kausation, Wille und Wiederholung in der verbalen Derivation der westlichen Ring-Sprachen (Weh, Isu). In Raimund Kastenholz & Anne Storch (eds), *Sprache und Wissen in Afrika*, 159-181. Köln: Rüdiger Köppe Verlag.
- Simons, F. G. & C. D. Fennig (eds). (2018). *Ethnologue: Languages of the World, Twentieth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>.
- Mfonyam, J. N. (1982). *Tone in the orthography of Bafut*. PhD thesis, University of Yaounde.

- Ngum, C. (2004). Verbal extensions in Meta'. Maîtrise Dissertation, University of Yaounde 1.
- Tamanji, P. (2009). *A descriptive grammar of Bafut*. Cologne: Rüdiger Köppe Verlag.
- Tamanji, P. & G. Mba (2003). A morphological study of verbal extensions in Bafut. in Idiata, Daniel Franck & Gabriel Mba (eds). *Studies on voice through verbal extensions in nine Bantu languages spoken in Cameroon, Gabon, DRC, and Rwanda*. Munich: Lincom Europa.

Phonological Explication of Anaañ Tongue Twisters¹

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Abstract
Tongue twisters is a type of spoken (or sung) word game that can be used for entertainment. It is an aspect of Anaañ verbal art that had been neglected completely by researchers. This research paper centres on the analysis of Anaañ tongue twisters, with the aim of showing the various neighbourhood effects of sounds when produced repeatedly and in fast speech. Data for analysis was culled from an on-going research work on Anaañ folklore. In other words, this paper applied data from folklore (an aspect of verbal art), for phonological description of speech performance in Anaañ. From the phonological point of view, tongue twisters is said to be a phrase that is difficult to articulate properly. This research work adopted Cascading Activation and Discrete Activation theories for analysis. Cascading Activation theory views tongue twisters as errors that arise at the level of phonological planning, while Discrete Activation theory claims that tongue twisters is triggered at the articulatory implementation level. Analysis shows that tongue twisters could induce different kinds of alternate segments in fast and repeated speech. In this case, vowels could be replaced with consonants and vice versa. This alternation could occur as a result of the interaction between segments that occur at word boundary. Switching from one segment to the other across word boundary therefore triggered segment deletion, segment shortening, metathesis, assimilation, segment replacement, and a restructuring of the syllable structure. Segment alternation can also result in moving from meaningful to meaningless words/phrases or sentences. This paper is therefore, a building block for the understanding of the use of speech slips in Anaañ as well as African folklore.

1. Introduction

Anaañ refers to a linguistic group of settlers in the South-Eastern region of Nigeria. The language had existed in its oral form for centuries. The approval of the Anaañ orthography (Michael & Obot, 2007) is quite recent. Based on this, Anaañ has a wider range of oral records than the written one, especially on the aspects of indigenous literature, culture and tradition. The dominance of the oral version of the language and culture therefore gives prominence to oral literature and oration. This makes the Anaañ people to have a high sense of value to oral tradition and oration. As observed by Messenger (1962), the name 'Anaañ', means those who can speak well. This is why the Anaañs are known as great orators (Michael, 2014). Eloquence in speech is measured by the ability to use words wisely and clearly to convince the listeners. This involves the application of proverbs, wise sayings and various other rhetorical devices. Sometimes a speaker may have a rich set of vocabulary in