# COMPARATIVE ASPECTS OF THE TONAL SYSTEMS OF KÓRÒ-LÍJÍLI AND KÓRÒ-RÍJÍLI

Rose-Juliet ANYANWU Nasarawa State University, Keffi/Goethe-University, Frankfurt am Main rose-julietanyanwu-wenzel@nsuk.edu.ng/rose-juliet.anyanwu@gmx.de

and
Kenneth Kunza AGWADU
Nasarawa State University, Keffi
kennethkunza@gmail.com

#### Abstract

The aim of this study is to compare aspects of the tonal systems of the two most closely related variants of Koro- Kórò-Líjíli and Kórò-Ríjíli, which were earlier established by Agwadu (forthcoming) as dialects of the same language. It compares the tonal patterns on monosyllabic, and disyllabic words. It also compares tonal functions in these dialects of Koro. Data were elicited from competent native speakers by organising interviews and Focus Group Discussion (henceforth, FGD). The Professional ZOOM H1N Handy Recorder was used to record the interview and FGD. Among other things, it was discovered that Líjíli and Ríjíli attest three level tones- high, mid and low. It was also discovered that Líjíli and Ríjíli are similar in all tonal patterns but one -L-M. It was further discovered that tone functions lexically and grammatically, but the lexical function is more productive, i.e., it can be more easily generated by a native speaker than the grammatical function of tone. On level of the grammatical function of tone, it was discovered that it can serve to distinguish simple past tense, simple future tense, causative clauses, modal verb constructions, prepositional phrases, and associative constructions in Líjíli, but only serves to distinguish simple past tense, prepositional phrases, associative constructions and modal verb constructions in Rijíli. This study contributes to the hitherto scanty literature on the Kórò variants as well as general linguistic scholarship.

**Keywords:** Kórò-Líjíli, Kórò-Ríjíli, grammatical function of tone, lexical function of tone and tone

#### 1.0 Introduction

As already stated in Anyanwu and Agwadu (forthcoming), ethnic and linguistic identity of the people that are collectively known as Kórò has over the years generated a great deal of debate. The ethnonymKórò is claimed by each of the seven linguistic forms that are spoken in Northern Nigeria, with each of the variants having a distinct name among its native speakers. Without any linguistic or genetic considerations, the majority of the speakers of the Kórò variants claim the same ethnicity, as well as linguistic affinity despite the high mutual unintelligibility index between the variants. This has led linguists and anthropologists to confusion over the years. Linguistic and anthropological inquiries that aim at solving this confusion of linguistic and cultural identity have been inadequate.

Obviously, Anyanwu and Agwadu's (forthcoming) lexical comparison of the Kórò variants is an attempt towards solving the confusion. It was established in Agwadu's work that although there appears to be a very strong cultural cohesion among the Kórò people; only Kórò-Líjíli and Kórò-Ríjíli, who scored 85.29% cognate similarities qualify as dialects of the same language. This was proven using Morris Swadesh's Lexicostatistics. A further comparative study on the phonological features of these variants will further affirm this claim. In that regard, the present study is set to investigate the tonal features of the two most closely related variants of Kórò-Líjíli and Kórò-Ríjíli. Research such as the present one may not include several linguistic features. That is why the scope of the present study is restricted to two variants only. Tone, which is a pivotal component of every tone language, is described here. To the best of the researcher's knowledge, no study has ever compared the tonal features of the Kórò variants, let alone streamlining to the variants that are most closely related, such as Kórò-Líjíli and Kórò-Ríjíli. The present work, therefore, compares the tonal features

of Kórò-Líjíli and Kórò-Ríjíli, with a view to establishing areas of tonal similarities, and possibly, areas of differences.

#### 2.1 Conceptual Explication

Tone is an indispensable and crucial segmental feature that is of paramount linguistic interest, especially with regard to tonal languages. This is because tone is considered by scholars to play significant semantic and grammatical roles in that it helps to change or affect meanings in tonal languages. This was what Pike (1948) had in mind when he defined a tone language as a language having lexically significant, contrastive, but relative pitch on each syllable. Put differently, each syllabic segment ought to have its own particular tone. Welmers (1973: 22) argues that "a tone language is a language which both pitch phonemes and segmental phonemes enter the composition of at least some morphemes." It is necessary to mention that for there to be a certain tone, there must be a syllable. Anyanwu (1998:2) also argues that tone is used '...to refer to the distinctive pitch level of a syllable." She explains this further by stating that tone is a property of the syllable, not of the vowel alone. Recognising the suprasegmental nature of tone, Anyanwu (2008:245) maintains that "tones constitute a suprasegmental feature superimposed on a segmental entity, e.g., syllable, morpheme, or word, so that such an entity comes out with two, three, four, or more different meanings." On the issue of tone types (register or level vs. contour), Anyanwu (2008:250) argues that "the two types of tone languages (register and contour) are not quite as distinct as they seem to be." She states further that although there have been controversies, there is a growing consensus that contour tones are seen and analysed as sequences of level tones with regard to African tone languages. In that regard, a register tone language may tend to show evidence of pitch glide or contour. In such a case, it is assumed that a neighbouring TBU gets elided and its tone ducks on to the neighbouring TBU thereby giving it a false impression of a contour tone in a register tone language. In a similar light, contour tones, according Anyanwu are fixed sizes with magnitude and direction. She maintains that one of the important characteristics of a true contour tone system is the vector quality, i.e., the movement of tone (pitch movement or glide). With respect to the types or levels of tone, we have high tone ('), low tone ('), rising tone (') and falling tone ('). Anyanwu (2008) emphasises that the mid tone (') and the downstepped high (1H) are acoustically and perceptually similar. The majority of the world's languages are tonal. Yip (2002:3) recognises this by positing that "by some estimates, as many as 70% of world's languages are tonal. There are certain areas of the world where almost all the languages are tonal, such as sub-Saharan Africa, China and Central America."

She suggests that "a language is a tone language if the pitch of the word can change the meaning of the word." Yip (2002:4) stresses further that "a language with a tone is one in which an indication of pitch enters into the lexical realization of at least some morphemes." In recognition of this, Abiodun (2007:66) posits that "pitch level is very important in a tone language; different pitch levels determine the meaning of words."

In contour tone languages, such as Mandarin, Shanghai, Cantonese, Changa, Thai, Tamang, Burmese, and so on, tone marking is often indicated by numbers and pitch range is divided into five levels: 1-5 (1 being the lowest, and 5, the highest) (Abiodun 2007). For example, in Cantonese (the numbers signify pitch range in Chinese), we have:

```
(1) si: <sup>55</sup> 'poem'
si: <sup>53</sup> 'silk'
si: <sup>44</sup> 'to try, taste'
si: <sup>33</sup> 'affairs, undertaking'
si: <sup>24</sup> 'market, city'
```

Source: Yip cited in Abiodun (2007:67).

As stated earlier, tone languages could either operate register or contour system. In register tone languages, according to Hyman (1975:214), "tonal contrasts consist of different levels of steady pitch heights, that is, perceptually, such tones neither rise nor fall in their production." African tone languages fall into this category, and in marking tone in register tone languages, High is marked ('),

mid is in most cases unmarked but in some cases marked by a macron (\*), low is marked (\*) (Yusuf 2007:66).

#### 2.1.1 Tone Distribution and Patterns

Distribution refers to the frequency of occurrence or extent of existence of something (in this case, tone) while pattern means the normative example of something (in this case, tone patterns). The data below represents the distribution and pattern of Ibibio tones in noun phrase structures. Ekere (1996: 3) provides the following examples to buttress these tonal patterns:

	_		<u>*</u>	
(2)	Underlying form (UF)		Surface form	n (SF)
a.	àfíá	àfòŋ	àfí	áfòη
	L-H-H	L-L	L-H	H-L
	white	cloth		
b.	ètək	ùsàn	ètək	úsàn
	L-L	L-L	L-L	H-L
	small	plate		
c.	ndék	íyák	ndék	íyàk
	L-H	H-H	L-H	H-L
	fresh	fish		

The data shows the distribution and pattern of tone on Ibibio noun phrases. It shows that in noun phrases if the first tone bearing unit of a head in an underlying NP is L (low), the tone changes to high in the surface form but if it is H (high), the tone changes to low.

#### 2.1.2 Functions of Tone

Tone is generally seen by linguists to refer to pitch variation that affects meaning. In tone language, we have "... lexically significant contrastive but relative pitch on each syllable" (Pike 1957: 3). These tone languages are so called because "Pitch phonemes and segmental phonemes enter into the composition of at least some morphemes" (Welmers, 1973: 3). Thus, it can be said that the meaning of words in tone languages are largely dependent on which tone(s) a word takes. Tone performs lexical and grammatical function (Urua, 2007). In recognition of the importance of tone in a language, Urua (2007: 53) states "tone is an important element in African and Asian languages. It is a common fact that tone is used to make lexical as well as grammatical distinctions in these languages, some of which include tense and aspectual distinctions."

These functions are demonstrated below in Etulo (Benue-Congo, Nigeria) as contained in Anyanwu (2003):

(3)

#### a. Lexical Function of Tone

```
L-HL
                 ùtɔ̂
                           '(wood) ash'
i.
                           'lake'
ii.
         M-M
                  ūtɔ
        L-L
                  ùtò
                           'chief'
iii.
                  àŋgwò
iv.
        L-L
                           'sugar cane'
                           'yam'
        Н-Н
                  á<sup>ŋ</sup>g<sup>w</sup>Ś
v.
        H-HL áŋgwɔ̂
                          'spittle'
vi.
         Source: Anyanwu (2003)
```

# **b.** Grammatical Function of Tone

Snider (2018:82) provides the following examples to show how tone functions grammatically in Kenyang language, spoken in Cameroon:

```
i. bă-tè 'you (pl.) are standing'
ii. bă-tê 'you (pl.) stood'
iii. bă-tê 'you (pl.) have stood'
```

iv. bă-pá 'you (pl.) spat' v. bá-pá 'they spat' Source: Snider (2018:82)

Tone also functions grammatically in Ìgbò as can be found in Anyanwu (2003:40):

- (5) i. H-L-L ɔ́-gàrà 'S/hewent'
  - ii. L-L-L ɔ̂-gàrà 'Did S/he go?' Source: Anyanwu (2003:40)

Summarily, tone serves two major functions: lexically, to distinguish the meaning of identical segmental words as shown in (15i) above, and grammatically, to show tense for example, as evident in (5ii) above.

# 2.2 Empirical Review

Theil (1990) explores Koorete (an Ometo language of the Omotic language family) tonology. The researcher collates data from competent native speakers of the language, who live in Addis Abba and Amaaro in Ethiopia. His method of collating data aligns with the data collation method of the present study. Theil adopts the Autosegmental Theory, and also uses acoustic methods to analyse the tonal features of the language. The use of the Autosegmental Theory and acoustic methods make Theil's work differ from the present study, since the present research neither uses the Autosegmental Theory nor acoustics in the analysis of the data. Among other things, the Theil discovers that Koorete has two distinctive tonal levels- H and L. There are, however, examples showing rising tones assigned to TBUs. No reason is given in the work to explain the use of the rising tone on certain TBUs. The following example shows the use of low and rising tones functioning to distinguish meaning in Koorete:

(7)Bòllà 'kind of tree' vs. bŏllà 'in-laws'

Theil (1990: 169)

Theil further notes that in Koorete, inflectional suffixes may be divided into those that do and those that do not influence the tonal melody. There are, however, no examples to prove this argument. Theil also establishes typological comparisons between the tonal system of Koorete and other Ta-Ne languages of the Omotic branch, such as Gonga and Kafa, but fails to give examples to prove this point.

Kügler (2016) discusses tone and intonation in Akan. Although the methodology is not clearly stated, instrumental analysis of the tonal and intonational systems of Akan are evident. Among other things, Kügler discovers that tonal processes, such as downstep, tonal spreading and tonal replacement influence the surface tone pattern of a sentence in Akan. According to him, Akan employs a simple post-lexical tonal grammar that accounts for the shapes of an intonation contour. Citing Dolphyne (1988:52, 67), Kügler maintains that Akan attests both lexical and grammatical function of tone. This is shown in the data below:

#### a. Lexical Function of Tone

- i. pápá 'good'
- ii. pàpà 'fan'
- iii. pàpá 'father'

#### b. Grammatical Function of Tone

- i. Kòfí dìná hóKòfí stand.HAB there 'Kòfí stands there.'
- ii. Kòfí dìnà hó
  Kòfí stand.STAT there
  'Kòfí is standing there.'
  Kügler (2016:7), with modifications.

Kügler's work is comprehensive and related to the present study from the perspective of its focus on tonal function. The work, however, differs from the present study in that it pays more attention to intonation than tone. The major preoccupation of the present study is on tone.

### 3.1 Methodology

The Ibadan 400 wordlist of basic items was used to collate the lexicon for tonal analysis, since each word is appropriately tone-marked. This was done by partially integrating in the study areas (Kaffin Kórò and Obi in Niger and Nasarawa states, respectively), and by organising interviews and FGD with competent native speakers of Kórò-Líjíli and Kórò-Ríjíli. Each of the sessions had three native speakers. To ensure the validity and reliability of the data collated, the data were later confirmed at the palaces of the paramount rulers (also native speakers) of Mìgili (for Líjíli) in Nasarawa state, and Kaffin Kórò (for Ríjíli) in Niger state. Three different native speakers, including the paramount ruler, confirmed the data in each area visited. The Professional ZOOM H1N Handy Recorder, which has auto-save recording ability when its power is low, has repeat function and high-power loudspeaker, was used to record the interviews.

# 4.1 Data Presentation and Analysis

In this sub-section, the data collated are presented and analysed. Aspects of Líjíli tonal system are presented and analysed first before the presentation and analysis of aspects of the tonal system of Ríjíli.

#### 4.1.1 Tone Levels and Tonal Pattern of Líjíli

In Líjíli, the three tonal levels- high, mid and low can occur on both monosyllabic (on CV and CCV (the CC refers to the liquids- l and r) words only) and bi-syllabic words, (especially on CVCV words). For example:

# 4.1.1.1 Monosyllabic words of CV structure

(8) H: bé 'come', ké 'follow', lí 'sell'

M: gbe 'buy', le 'leave, stop', fa 'fetch'

L: bè 'choose', gò 'catch', jè 'put'

# **4.1.1.2** Monosylabic words of CCV structure:

(9) H: tró 'cook, to plant' sró 'be by fire side', flá 'press'

M: dro 'bathe', fro 'peel', fli 'fold'

L: drò 'say', brì 'brew' mlò 'swallow'

As regards disyllabic words, tone patterns, such as H-H, L-L, M-M, H-M, H-L, M-H, M-L, L-H, and L-M are permissible in Líjíli. The data below demonstrate these patterns:

#### (10) Examples of Líjíli Tone Patterns

- H-H kúchó 'head', kíyé 'liver', kúyí 'intestine'
- L-L kộchộ 'grasshopper', màlệ 'a personal name', kàlệ 'baboon'
- M-M kaba 'gorilla', nara 'early morning sun', saro 'look for'
- H-M lúme 'wisdom, treachery', lúgbã 'anthill', rúzỗ 'holiness'
- H-L kónù/ kúnù 'monitor lizard', ńnyè 'yesterday', kérì 'whirlwind'
- M-H kolí '', gbelé 'a personal name', nyetró 'foot rot'
- M-L chenè 'there', swenyè 'very old, wrinkly, not easy to cut', tenyè 'very old (person)'
- L-M jère 'plant' gène 'cross, pass' dòro 'to fit' zòro 'do'

# 4.1.2 Functions of Tone in Líjíli

In tone languages, tone performs two major functions: lexical or grammatical functions. What follow in 4.1.2.1 and 4.1.2.2 are the functions of tone in Líjíli, and in each of the Kórò dialects, the tonal levels, tonal patterns, and tonal functions are presented and discussed.

#### 4.1.2.1 Lexical Function

In Líjíli, words that are spelt the same segmentally may be differentiated solely on the basis of their tonal patterns. Let us consider the following examples:

(i)	k <del>í</del> yé	'liver'
	kíye	'termite'
	k <del>ì</del> ye	'in the termite'
	k <del>ì</del> yé	'in the liver'
	(i)	kiye kiye

- (ii) ní 'see' ni 'be' 'bury'
- (iii) kábá 'a personal name' kába 'name of a place' kàba 'a personal name' kaba 'gorrilla'
- (iv) kử 'dig hole' kữ 'guard' kử 'cease, stop, leave'
- (v) lúnwó 'dry season' lúnwo 'voice' lùnwó 'during/in the dry season' lùnwo 'in the voice'

In the existing literature of Kórò, mid tones are generally unmarked in the orthography. The TBU, without a tone mark could either be a vowel or a syllabic nasal. This is the choice of tone marking convention in the orthography of Líjíli. It is also obvious from examples (11) that words, which are spelt the same carry different tones. The tone is always what leads to a change in pronunciation, as well as a change in the meaning of the words.

#### 4.1.2.2 Grammatical Function of Tone in Líjíli

Apart from the fact that tone can affect the meaning of words that are spelt alike, it can equally serve to distinguish identical syntactic structures. Examples are demonstrated below: (12)

Simple Past Tense vis-à-vis Modal Verb Constructions (i-iv) and Simple Past Tense vis-à-vis Simple Future Tense (v)

(i) (a) A + 
$$dri \rightarrow Adri$$
  
3SG try  
'He/she/it tried.'  
(b) À +  $dri \rightarrow Adri$   
3SG try  
'He/she/it should try.'

(ii) (a) n + ní 
$$\rightarrow$$
 Nní   
1SG see   
'I saw'

- (b)  $\dot{n} + ni \rightarrow \dot{N}ni$ 1SG see
  'I will see.'
- (iii) (a) N + nì  $\rightarrow$  Nnì 1SG bury 'I should bury.'

'I will bury.'

- (iv) (a) ba + bé sisà → ba bé sisà 3PL come morning 'They came in the morning.'
  - (b) bà + bésisà → bà bé sisà

    3PL come morning

    'They should come in the morning.'
- (v) (a) N + zweitsi→ n zwe itsi 1SG build house 'I built (a) house.'
  - (b) N + zweitsi → N zwe itsi
    1SG build house
    'I will build (a) house.'

From example (12) above, tone plays an important grammatical role in that a change in the tone of the subject pronoun automatically changes the meaning of the sentence. It is also evident in the data that the tone of the subject pronoun determines the grammatical meaning of the sentence. Thus, when the tone of the subject pronoun is mid, the grammatical meaning is in the *simple past tense*, but the grammatical meaning changes to a *modal verb construction* when the tone of the subject pronoun is low. It is relevant to note thatat the grammatical level, tone in Líjíli has more functional load than in Ríjíli with respect to the simple future tense. It is also important to note that to determine the functional load of tone in Líjíli, only the first person singular, second person singular, and the third person plural represented by n, a and ba, respectively are used in a such a sentence (the subject pronouns are toneless here since it is the context of a sentence that determines their tone patterns). A look at example (12ii and v) reveals that a change in the tone of the subject pronoun n indicates a change in tense from simple past tense to future tense, but this does not apply to other subject pronouns.

The following data further account for the grammatical function of tone in Líjíli:

# (13) Associative Constructions vis-à-vis Prepositional Phrases and Causative Clauses

		Input	Output
(i)	(a)	lúkpę +	òvõ → lúkpévõ 'goat's stomach'
		stomach	goat
	(b)	lúkpę +	òvo → lùkpévo 'in (the) goat's stomach'
		Stomach	goat
(ii)	(a)	kúva +	òyi → kúváyi 'thief's hand'
		hand	thief
	(b)	kúva +	òyi → kùváyi 'in a thief's hand'
		hand	thief
(iii)	(a)	kúchó +	òkpấ → kúchọkpấ 'rat's head'
		head	rat
	(b)	kúchó +	òkpí → kùchókpí 'in/on rat's head, because of rat'
		head	rat

From the above data, tone functions grammatically in this dialect to distinguish between an associative construction and a prepositional phrase. An interesting phonological operation in example (10) above is the vowel elision. In the examples, the direction of assimilation is progressive. It is also interesting to note that example (13iii) and (13iv)above illustrate that apart from functioning grammatically to distinguish associative constructions and prepositional phrases, tone also

distinguishes subordinate clauses from prepositional phrases and associative constructions. This is, however, not very productive, as it is limited to just  $k\acute{u}ch\acute{o}$  'head'.

#### 4.2 Rijíli Tonal System

# **4.2.1 Tonal Levels and Tonal Patterns**

It was discovered that Kórò-Ríjíli attests three level tones just as Lijili. The following tonal patterns were discovered:

(14)

H-H: ítá 'eating', íshá 'climbing'.

L-L: kale 'baboon', Gbàlè 'personal name'

M-M: sare 'look for', kane 'fry'

H-L: ínyè 'yesterday', ívò 'tomorrow' M-H: ochó 'head', nyetéré 'foot root'

L-M: zàrę 'select', jèrę 'plant' L-H: òtré black', zé 'king'

From example (14) above, it can be seen that Ríiili has all tone patterns that are found in Lijíli except M-L.

# 4.2.1.1 Monosyllabic words of CV structure:

(15)

H: chí 'shoot', tró 'cook', ló'tie'M: gbo 'grind', sho 'ask', zhwe 'build'L: jì 'burn', nù bury', zhù 'build'

# **4.2.1.2** Monosylabic words of CCV structure:

(16)

H: tró 'cook',

M: tre 'touch', kple'turn'

L: Does not exist

li

#### 4.2.2 Functions of Tone in Ríjíli

# 4.2.2.1 Lexical Function

(17)

(i)	íbéne	'monkeys'	
	íbène	'pulling'	

- (ii) bé 'come' bè 'choose'
- (iii) kpó 'borrow' kpo 'cultivate' Kpò 'elder' (iv) lí 'sell',
- (v) pà 'beat' pá 'pay debt'
- (vi) chí 'shoot' chi 'climb down'

Just as in Líjíli, Ríjíli words with similar spelling differ in meaning with respect to the tones they bear.

# 4.2.2.2 Grammatical Function of Tone in Ríjíli

'enter'

Tone functions grammatically in different ways in Rijíli. The examples below illustrate the grammatical function:

# (18) Simple Past Tense vis-à-vis Modal Verb Constructions

```
Input
                                                               Output
(i)
                                                      ìísisà → Ba bé ìísisà
         (a)
                 Ba
                                    +
                                             bé
                  3<sub>PL</sub>
                                             come
                                                      morning
                  'They came in the morning.'
                 Bà
                                                      ìísɨsà → Ba bé ìísɨsà
         (b)
                                             hé
                                             come morning
                  3<sub>PL</sub>
                  'They should come in the morning.'
(ii)
         (a)
                  Á
                                    +
                                             dírí → Á dírí
                  3sg
                                             shake
                  'He shook (it).'
                  À
                                             dírí → À dírí
         (b)
                                    +
                  3SG
                                             shake
                  'He/she/it should shake (it).'
                                             sé →
                                                      Á sé
                  Á
(iii)
         (a)
                  3SG
                                             lead (song)
                  'He/she led (a song).'
                  À
                                             s\acute{e} \rightarrow \grave{A} s\acute{e}
         (b)
                                             lead (song)
                  3SG
                  'He/she should lead (a song).'
```

It was demonstrated under Líjíli that tone functions grammatically to distinguish sentences in the simple past tense from modal verb constructions. As can be seen in example (18i-iii), the first examples are in the simple past tense, while the second examples are modal verb constructions.

Still on the issue of the grammatical function of tone, let us consider the following examples:

# (19) Associative Constructions vis-à-vis Prepositional Phrases

ınpuı			Ծաւթա	ι	
(i) (a) ọchọ		+	òvọ	$\rightarrow$	ochóvo 'goat's head'
head			goat		
(b) ọchộ		+	òvọ	$\rightarrow$	òchóvo 'in/on the goat's head'
(ii) (a) osí	+	òdèrè	$\rightarrow$	osídèrè	'rabbit's eye'
eye			rabbit		
(b) osí		+	òdèrè	$\rightarrow$	òsídèrè 'in the eye of (a) rabbit'
eye			rabbit		
(iii) (a) ochó		+	òkúlú	$\rightarrow$	ochókúlú 'tortoise's head'
head			tortoise	•	
(b) ochó		+	òkúlú	$\rightarrow$	òchókúlú 'in/on tortoise's head'

From the examples above, it can be seen that the vowel elision pattern in Rijíli is the same as it is in Líjíli, and the elision type is called *aepharesis*. Furthermore, in the associative constructions, the tone of the first syllable is actually what serves to distinguish them (i.e., associative constructions) from prepositional phrases.

# 4.3 Discussion of Findings

In this subsection, the data that were presented and analysed above are discussed, reflecting the salient findings. The discussion is arranged logically. The discussion of findings on Líjíli comes first, followed by the discussion of findings on Ríjíli. What follows is the discussion on the areas of tonal similarities between Líjíli and Ríjíli, and then the discussion on the differences.

It was discovered that there are three tonal levels in Kórò-Líjíli and Kórò-Ríjíli- high, mid and low, and tone in these two dialects of Kórò function lexically and grammatically. It is important to note that the lexical function of tone in these dialects is far more productive than grammatical function.

Grammatical function of tone in Líjíli has more functional load than the grammatical function of tone in Ríjíli. The grammatical function of tone in Líjíli serves to distinguish the meaning of different structures. For example, when the tone of the subject pronoun is mid, the grammatical meaning is in the *simple past tense*, but the grammatical meaning changes to *modal verb construction*, when the tone of the subject pronoun is low. It is important to note that to determine the grammatical functional load of tone on sentences of Líjíli, only the first person singular, second person singular, and the third person plural, represented by n T, a 'he/she/it' and ba 'they', respectively, are used in such a sentence.

Very importantly, too, if the tone of the first syllable of the first word in an associative construction changes from, say high to low, the meaning of the structure (associative construction) changes to either a prepositional phrase or a causative clause (usually, *because of* (something)). Tone also functions grammatically to indicate tense in Líjíli, as it serves to distinguish simple past tense from future tense. The tone patterns that are attested in Líjíli are: H-H, L-L, M-M, H-M, H-L, M-H, M-L, L-H, and L-M.

In Rɨjíli, lexical function of tone is very productive, i.e., it is easy to generate than the grammatical function of tone. On the grammatical tone, identical structures vary in meaning due to tonal change. In Rɨjíli, the grammatical function of tone serves to distinguish simple past tense, prepositional phrases and associative constructions only. It means that the grammatical function of tone in Rɨjíli does not account for modal constructions as well as showing the distinction between simple past tense and future tense. The tone patterns: H-H, L-L, M-M, H-M, H-L, M-H, M-L and L-H are possible in Rɨjíli. This means that only L-M in the tonal pattern of Líjíli is not possible in Ríjíli.

From the above discussion, it can be said that the areas of similarities lie on the area of tonal levels, which are: high, mid, and low. A further area of similarity is that tone functions grammatically in both dialects to indicate simplepast tense, associative constructions, modal verb constructions and prepositional phrases (tonal change in both dialects is on the subject pronoun, and the tone on the subject pronoun is always the same).

On the area of differences, it was discovered that L-M tonal pattern which is found in Líjíli is absent in Rɨjíli. Another area of difference is that while the grammatical function of tone is restricted to showing the difference between simple past tense, prepositional phrases, associative constructions and modal verb constructions in Rɨjíli, grammatical function of tone in Líjíli goes as far as distinguishing between prepositional phrases, simple past tense, *simple future* tense, modal verb constructions and associative constructions.

#### 4.4 Conclusion

Based on the data analysed, this research concludes that Líjíli and Ríjíli attest three level tones- high, mid and low. It is concluded that they have similar tonal patterns but in one-L-M. On the grammatical function of tone, the researcher concludes that tone can serve to distinguish simple past tense, simple future tense, modal verb constructions, causative clauses, prepositional phrase, and associative constructions in Líjíli, but only serves to distinguish simple past tense, prepositional phrases, modal verb constructions and associative constructions in Ríjíli.

#### References

Abiodun, M. (2007). Phonology. In O. Yusuf (ed.) *Basic linguistics for Nigerian languages teachers*. Awka: M & J Grand Orbit Communications. 51-78.

Anyanwu, R-J. (1998). Aspects of Igbo grammar: Phonetics, phonology, morphology and the tonology of nouns. Beiträgezur Afrikanistik. Hamburg: LIT Publishers.

Anyanwu, R-J. (2003a). The phonology of Etulo: A first outline. Paper presented at the 33<sup>rd</sup> CALL, August 2003, Leiden.

Anyanwu, R-J. (2008). Fundamentals of phonetics, phonology, and tonology. Internationaler Verlag der Wissenschaften. Frankfurt: Peter Lang Publishers.

Anyanwu, R-J. & Agwadu, K.K. (forthcoming). Lexicostatistic analysis of body parts/body fluids in the Kórò variants.

- Ekere, M. E. (1996). Tone pattern in Ibibio noun phrase structures. *Journal of West African Languages XXV*.2.
- Hyman, L. (1975). *Phonology: theory and analysis*. New York: Holt, Rinehart and Winston.
- Kügler, F. (2016). Tone and Intonation in Akan. In L. J. Downing & A. Rialland (ed.). *Intonation in African tone languages*. De Gruyter: Mouton.
- Pike, K. (1948). Tone languages: A technique for determining the number and type of pitch contrasts in a language with studies in tonemic substitution and fushion. An Arbor, MI: University of Michigan Press.
- Theil, R. (1990). Koorete tonology. Oslo: JSTOR.
- Urua, E.E. (2007). *Ibibio phonetics and phonology* (2<sup>nd</sup> edition). Port Harcourt: M & J Grand Orbit Communications Ltd and Emhai Press.
- Welmers, W. (1973). African language structures. Berkeley: University of California Press.
- Yip, M. (2002). Tone. Cambridge: Cambridge University Press.