

THE MORPHOPHONOLOGY OF THE PAST TENSE IN CIYAAWO¹

by

Armindo Ngunga
Center for African Studies
Eduardo Mondlane University
Maputo, Mozambique

Abstract

While time is a philosophical category that humans use to partition the succession of units such as hours, days, weeks, years, centuries, etc., tense is the language resource that humans use to express time reference. According to their culture, humans interpret the time phenomenon in a diversity of ways which are reflected in linguistic expression of time. This diversity explains why, according to Comrie (1985) there are languages which have three basic tenses (past, present and future), other languages have one tense (past) and the other tenses are said to be not tense (non-past). Still other languages distinguish different types of past and future in such a way that, having the tense corresponding to the present time, or the time of speech, as the reference tense, and the other tenses as those expressing events which happen before the present (past) or happen after the present (future), may distinguish recent past from remote past, or near future from distant future. In agglutinative languages, all these tense distinctions are marked in different ways in the verb structure be it segmentally or suprasegmentally.

Based on Lexical Phonology and Morphology (Kiparsky 1982, 1985, Mohanan 1982, and others), the present paper aims at describing the morphophonology of the past tense in Ciyaawo, a Bantu (P21 in Guthrie 1967-71's classification) language spoken mainly in Malawi, Mozambique and Tanzania.

The paper is organized as follows. After the introduction, it presents the literature review on the topic including the theoretical frameworks adopted; then it describes the past tense markers and the ways they are affixed to the verbs of different root structures. Lastly, it presents the final remarks.

Key-words: Bantu languages, morpheme, past tense, morphophonology.

1. Introduction

Time is a philosophical category humans use to partition the succession of units such as hours, days, weeks, years, centuries, etc., tense is the language

¹ Paper first presented at XIV LASU Conference at Chancellor College, University of Malawi. September 14, 2017. I thank all participants who attended the presentation for their valuable contributions many of which were incorporated in this version.

resource humans use to express time reference. According to their culture, humans interpret the natural phenomena regarding time in a diversity of ways which are reflected in linguistic expression of time called tense. This diversity explains why, according to Comrie (1985), there are languages which have three basic tenses (past, present and future), others have one tense (past) and the other tenses are said to be not tense (non-past). Still other languages distinguish different types of past and future in such a way that, having the tense corresponding to the present time, or the time of speech, as the reference tense, and the other tenses as those expressing events which happen before the present (past) or happen after the present (future), may distinguish recent past from remote past, or near future from distant future. In agglutinative languages, such as Bantu languages to which Ciyaawo belongs, all these tense distinctions are marked in different ways in the verb structure be it segmentally or suprasegmentally.

Based on the Lexical Phonology and Morphology (MOHANAN 1982; KIPARSKY 1982, 1985; and others), the present paper aims at describing the morphophonology of the past tense in Ciyaawo, a Bantu language (P21 in GUTHRIE's 1967-71 classification) spoken mainly in Malawi, Mozambique, Tanzania.

The paper is organized as follows. After this brief introduction, it presents the literature review on the topic including the theoretical frameworks adopted; then it describes the past tense markers and the ways they are affixed to the verbs of different root structures. Lastly, it presents the final remarks.

2. A short literature review

The study of tense is part of the study of the verb, a grammatical category whose studies, in Bantu languages, involve all areas of linguistics form both formal and non-formal. In Bantu languages, verb is regarded as the most variable of the variable words in Bantu (NGUNGA 2004, 2014). In these languages, all other grammatical information such as tense, aspect, polarity, subject marker, object marker, is expressed through what is known as bound morphemes which are attached to verb root. The study of these morphemes is called inflectional morphology (SPENCER 1991). Apart from these inflectional morphemes which express grammatical information, new verbs can derive from existing verbs adding derivational morphemes called verb extensions (GUTHRIE 1967, LANGA 2007, SCHADEBERG 2003, LODHI 2002, just to mention a few) or simply extensions. In Ciyaawo, verb tense has been studied by different authors (SANDERSON 1922, 1954; WHITELY 1966; NGUNGA 1997, 1998, 2000, 2014a, 2014b) as part of grammatical studies of the language.

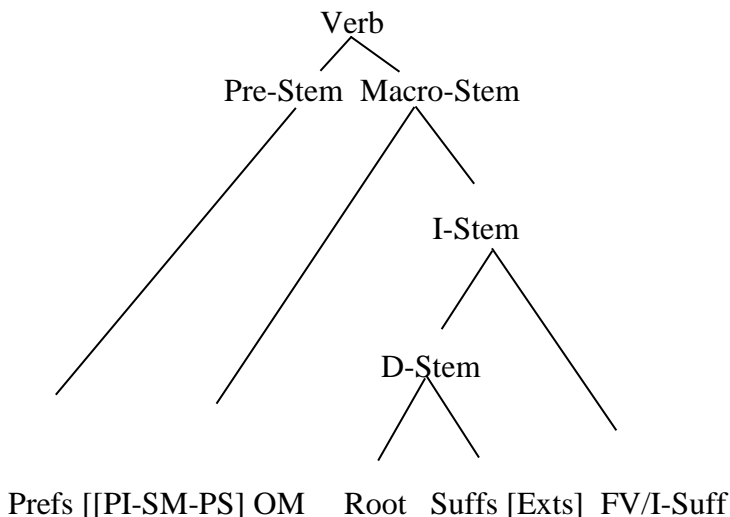
3. Theoretical frameworks

To analyze the data, in this study, we will resort to the Lexical Phonology and Morphology (KIPARSKY 1982, 1985, MOHANAN 1982, ODDEN 1993) a theory of interaction between Phonology and Morphology. Hyman (1995a, 1995b) and Ngunga (1997, 2000, 2014b) applied this theory the study of the Cibemba verb morphology and morphology and phonology of Ciyaawo, respectively.

4. Ciyaawo Verb structure

Ciyaawo verb structure is typically Bantu (BLEEK 1962, MEINHOF 1932, GUTHRIE 1970, 1967-70, MEEUSSEN 1967). The basic structure of the infinitive form of the Ciyaawo verb comprises a class 15 prefix (**ku-**), a verb root typically -CVC-, with some possibility of occurrence of shorter or longer roots due to a variety of reasons. It is around the root or within it where the inflectional and or derivational materials are attached to. In the far end of the structure, a suffix, usually known as a final vowel (**-a**), occurs. Thus, considering all situations, the verb structure can be represented as follows:

1. The verb structure in Bantu (NGUNGA 2000:87)



Where: I-Stem: Inflectional Stem; D-Stema: Derivational Stem; SM: Subject Marker; PS: *Post-Subject*; PI: *Pre-Initial*; OM: Object Marker; Exts: (Verbal) Extensions; FV: Final Vowel: I-Suff: Inflectional Suffix.

As is seen, the verb structure comprises a pre-stem and a macro-stem. The macro-stem comprises the OM and an I-Stem which in turn comprises the derived stem and the final vowel or final suffix. It is important to note that the derived stem comprises a root and derivational suffixes which do not occur in underived verb forms. The root is the lexical morpheme which is the core of the verb form. The structure of the root varies from simple single segment roots to the more complex ones, as illustrated below:

- 2.a) -V-
- b) -C-
- c) -VC-
- d) -CV-
- e) -VCV-
- f) -CVC-
- g) -VCVC-
- h) -VCVCV-
- i) -CVCVC-
- j) -VCVCVC-
- k) -VCVCVV-
- l) -CVCVCVCVC-

Where: V = V or VV; C = C, ^NC, C^G, ^NC^G.

See some examples illustrating the different types of the structure of the root:

- | | | | |
|---------------|------------------|------------------------------------------|------------------------------------------|
| 3.a) -V- | -u- (kuwa) | ‘die’ | |
| b) -C- | -c- (kuca) | ‘dawn; end (raining)’ | |
| | -j- (kuja) | ‘go’ | |
| | -ny- [ɲ] (kunya) | ‘defecate’ | |
| | -p- (kupa) | ‘give’ | |
| | -t- (kuta) | ‘name’ | |
| | -v- (kuva) | ‘be’ | |
| | c) -VC- | -al- (kwaala) | ‘lay in order, side by side’ |
| | | -as- (kwaasa) | ‘lose; throw away; bury (a dead person)’ |
| | | -eng- (kweenga) | ‘make oil’ (esp. castor oil) |
| -is- (kwiisa) | | ‘come’ | |
| -it- (kwiita) | | ‘pour out; throw out (liquid)’ | |
| -og- (kooga) | | ‘bathe; have a bath’ | |
| d) -CV- | -uv- (kuuva) | ‘hide oneself; shelter from (e.g. rain)’ | |
| | -di- (kudya) | ‘eat’ | |
| | -gu- (kugwa) | ‘fall’ | |

	-mu-	(mwa ²)	‘drink’
	-pi-	(kupyá)	‘burn’
	-su-	(kuswa)	‘begin to grow dark’
	-tu-	(kutwa)	‘pound in a mortar’
e)	-VCV-	-esi- (kweesya)	‘trade’
f)	-CVC-	-lam- (kulama)	‘survive; revive; recover; live; prosper’
		-pat- (kupata)	‘get; obtain’
g)	-VCVC-	-anik- (kwaanika)	‘put to dry’
		-egam- (kweegama)	‘lean on’
		-ipip- (kwiipipa)	‘be or become short’
h)	-VCVCV-	-asasi- (kwaasasya)	‘spread (of flour) to dry’
	-CVCVC-	-tawun- (kutawuna)	‘chew’
i)	-VCVCVC-	-osopal- (koosopala)	‘be worried or afraid; be preoccupied’
j)	-CVCVCVC-	-gwiindimal- (kugwiindimala)	‘be short and stout’
k)	-VCVCVV-	-embecei- (kweembeceya)	‘await; have patience’
l)	-CVCVCVCVC-	-tuunguluvil- (kutuunguluvila)	‘be about to ripe’

As is seen in parenthesis, the vowels in both root initial and root final positions may participate in phonological processes such as glide formation, vowel deletion, vowel lengthening, depending on quality of the vowel preceding or following it. Consider the following examples:

4.a)	-V-	/-u-/	kuwa	‘die’
b)	-VC-	/-as-/	kwaasa	‘lose; throw away; bury (a dead person)’
		/-eng-/	kweenga	‘make oil’ (esp. castor oil)
		/-is-/	kwiisa	‘come’
c)		/-og-/	kooga	‘bathe; have a bath’
		/-uv-/	kuuva	‘hide oneself; shelter from (e.g. rain)’
d)	-CV-	/-di-/	kudya	‘eat’
		/-gu-/	kugwa	‘fall’

As is seen in (4), the final vowel turns the root vowel (/i/ or /u/) into a glide (4a, d) while the unrounded ([-round]) root initial vowel turns the vowel of the infinitive marker **ku-** into a glide (4b) or, if the initial root vowel is rounded ([+round]) it deletes the preceding prefix vowel (4c). It is important to note that vowel gliding, in non-final position (4b), and vowel deletion (4c) may be followed by vowel lengthening.

² Also **-ng’wa** (Mozambican dialect).

The degree of complexity of the root structure dictates the way how the different verb affixes are attached to the root, as we will show later.

5. The morphophonology of the past tense in Ciyaawo

As we talk about verb conjugation, it is important to bring the polarity issue, that is, we have to decide whether we are going to talk about the affirmative or negative forms since the two have different morphologies. In this case, we are going to talk about both. Affirmative and negative forms. Another thing we need to say in advance is whether we are going to talk about basic underived verb forms only or if we are going to include the derived verb forms. Again we are going to talk about both, underived and derived forms.

5.1. Underived affirmative past tense verb forms

In Ciyaawo, the underived affirmative past tense is morphologically expressed by adding a morpheme to the verb structure, usually a reflex of the Proto-Bantu past tense suffix is **-id-e* (BASTIN 1986). In Ciyaawo, this suffix which we refer to as TM (tense marker) is *-il-e*, as illustrated in the following examples:

5.	/-lum-/ ‘bite’ cf.	tulumíle tu-lum- il-e SM-bite-TM	‘we bit’
	/-pat-/ ‘get, obtain’ cf.	tupatíle tu-pat- il-e SM-get-TM	‘we got; we obtained’
	/-suum-/ ‘buy’ cf.	tusuumíle tu-suum- il-e SM-buy-TM	‘we bought’
	/-tem-/ ‘break’ cf.	tutemíle tu-tem- il-e SM-break-TM	‘we broke’

Where: SM = subject marker; TM = tense marker.

As is seen above, the affixation of the *-il-e* indicates that the verb is in past tense. However, it should be added that the situation is not always as straightforward as it may seem. This simple affixation of past tense morpheme to the verb root has to do with the nature of the verb root, on the one hand and, on the other hand, it has to do with whether we are referring to recent or remote past or, still, if we are referring to negative or affirmative forms. That is, when it is the remote past, there is an additional element to the verb form as in the following examples:

6. /-lum-/ ‘bite’ cf. twaalúmilé ‘we bit’
 tu-a-lum-**il-e**
 SM-TM-bite-TM
- /-pat-/ ‘get, obtain’ cf. twaapátílé ‘we got; obtained’
 tu-a-pat-**il-e**
 SM-TM-bite-TM
- /-suum-/ ‘buy’ cf. twaasúúmilé ‘we bought’
 tu-a-suum-**il-e**
 SM-TM-buy-TM
- /-tem-/ ‘break’ cf. twaatémilé ‘we broke’
 tu-a-tem-**il-e**
 SM-TM-buy-TM

The addition of the prefix **-a-** to the verb form in the past tense turns the verb into remote past form. In other words, in Ciyaawo, **-il-e** is the recent past tense marker, while the remote past is a discontinuous morpheme **-a- -il-e**. So far, with **-CVC-** roots, this is what we get and this what is true. Let us look at what happens with different types of root structure, considering the following examples:

7. Recent past

- a) -V- /-u-/ ‘die’ cf. mitéélá jíwiíle ‘the trees died’
 miteela ji-w-**il-e**
 trees SM-die-TM
- b) -VC- /-it-/ ‘pour out’ cf. vaanaáce ajiitíle ‘the children poured out’
 vaanace a-jiit-**il-e**
 children SM-pour out-TM
- c) -CV- /-di-/ ‘eat’ cf. ngúkú jidiíle ‘the chicken ate’
 nguku ji-di-**il-e**
 chicken SM-eat-TM

8. Remote past

- a) -V- /-u-/ ‘die’ cf. mitéélá jááwiíle ‘the trees died’
 miteela ji-a-w-**il-e**
 trees SM-TM-die-TM
- b) -VC- /-it-/ ‘pour out’ cf. vaanáce vaajíitíle ‘the children poured out’
 vaanace v-a-jiit-**il-e**
 children SM-TM-pour out-TM
- c) -CV- /-di-/ ‘eat’ cf. nguku jáádiíle ‘the chicken ate’
 nguku ji-a-di-**il-e**
 chicken SM-TM-eat-TM

The examples in (7) and (8) show the same pattern as seen when we had the -CVC- root, also known as the canonical form of the verb root in Bantu, where the past tense marker (-il-e) is added to the verb root to express the recent past, while the discontinuous morpheme (-a- -il-e) is affixed to the root to express the remote past. In Ciyawo, the recent past refers to events which take place the day and time of speech. Therefore, it can be termed as the “past of today” anytime or recent past. Remote past refers to events which take place the day previous to the one of speech or any time before the day of speech. In this case, remote past is said to be the “past of before today” any time, day, week, month, year, etc. Let us now move on the more complex verb roots.

9. Recent past

- a) -VCVC-/-anik-/ cf. tujaaníce mbwáanda ‘we put beans to dry’
 tu-jaan-iic-e mbwaanda
 SM-dry-TM beans
 /-egam-/ cf. tujeegéeme mwiipúpa ‘we leaned on the wall’
 tu-jeeg-eem-e mwiipupa
 SM-lean on-TM on wall
 /-ipip-/ cf. n’naási wujiipíipe ‘the bamboo shortened’
 n’naasi wu-jiip-iip-e
 bamboo SM-shorten-TM
 /-ongol-/ cf. tujoongwééle cisyáánó ‘we straightened the
 iron’
 tu-joongw-eel-e cisyaaano
 SM-straighten-TM iron
 /-umul-/ cf. n’naási wujuumwíile ‘the bamboo dried’
 n’naasi wu-juumw-iil-e
 bamboo SM-dry-TM
- b) -VCVCV- /-asasi-/ cf. tujaaséésye wutaáandi ‘we spread the flour’
 tu-jaas-éésy-e wutaáandi
 SM-spread-TM flour
- c) -CVCVC- /-tawun-/ cf. tutawíine dinaangwá ‘we chewed cassava’
 tu-taw-iin-e dinaangwá
 SM-chew-TM cassava
- d) -VCVCVC- /-osopal-/ cf. jujoosópeelee n’tímá ‘he became
 preoccupied’
 ju-joosop-eel-e n’timá
 SM-preoccupy-TM heart
- e) -CVCVCVC- /-gwiindimal-/ cf. jugwiindímeele ‘he became short
 and stout’
 ju-gwiindim-eel-e
 SM-short and stout-TM
- f) -VCVCVV- /-embecei-/ cf. jujeembéceeye ‘s/he awaited’

ju-jeembec-eeeye
SM-await-TM

- g) -CVCVCVCVC- /-tuunguluvil-/ cf. nguju sítuungúluviile ‘figs are
about to ripe’

nguju si-tuunguluv-iil-e
figs SM-about to ripe-TM

10. Remote past

- a) -VCVC- /-anik-/ cf. twaajáániicé mbwáanda ‘we put beans to dry’
tu-a-jaan-iic-e mbwaanda
SM-TM-dry-TM beans

/-egam-/ cf. twaajéégeéme mwiipúpa ‘we leaned on’
tu-a-jeeg-eem-e mwiipupa
SM-TM-lean on-TM on wall

/-ipip-/ cf. n’naasí waajípiipe ‘the bamboo shortened’
n’naasi wu-a-jiip-iip-e
bamboo SM-TM-shorten-TM

/-ongol-/ cf. twaajóongweelé cisyáánó ‘we straightened the
iron’

tu-a-joongw-eel-e cisyano
SM-TM- straighten-TM iron

/-umul-/ cf. n’naasí waajúumwiile ‘the bamboo dried’
n’naasi wu-a-juumw-iil-e
bamboo SM-TM-dry-TM

- b) -VCVCV- /-asasi-/ cf. twaajááseeeye wutáandi ‘we spread the flour’
tu-a-jaas-eesy-e wutaandi
SM-TM-spread-TM flour

- c) -CVCVC- /-tawun-/ cf. twaatáwiiné dinaangwá ‘we chewed cassava’
tu-a-taw-iin-e
SM-TM-chew-TM

- d) -VCVCVC- /-osopal-/ cf. jwaajóosopeelé n’tímá ‘he became
preoccupied’

ju-a-joosop-eel-e
SM-TM-preoccupy-TM

- e) -CVCVCVC- /-gwiindimal-/ cf. jwaagwíindimeéle ‘he became
short and stout’

ju-a-gwiindim-eel-e
SM-TM-short and stout-TM

- f) -VCVCVV- /-embecei-/ cf. jwaajéémbecéeye ‘s/he awaited’
ju-a-jeembec-eeeye
SM-TM-await-TM

- g) -CVCVCVCVC- /-tuunguluvil-/ cf. nguju syáátúunguluviiile ‘figs were
about to ripe’

nguju si-a-tuunguluv-iil-e
figs SM-TM-dry-TM

This reading is basically repeated below, where we have consonant initial roots and the morphological behavior of the material is the same as that found in stems of vowel initial roots. Thus,

b)	Consonant initial long roots: -CVCVC- or longer		
Input:	/-tawun-/	/-gwiindimal-/	/-tuunguluvil-/
Morphology:	-tawunil-e	-gwiindimalil-	/-tuunguluvilil-
Phonology 1:	-tawuiln-e	-gwiindimaill-e	-tuunguluviill-e
Phonology 2:	-tawuin-e	-gwiindimail-e	-tuunguluviil-e
Phonology 3:	-tawwin-e	-gwiindimel-e	-tuunguluviil-e
Phonology 4:	-tawin-e	NA	NA
Phonology 5:	-tawiin-e	-gwiindimeel-e	NA
Output:	-tawín-e	-gwiindímeel-e	-tuungúluviil-e

As is seen, since the major morphological phenomena take place on the right side of the verb root, everything that we saw in (9a) repeats here except that, in (9b), Phonology 4 introduces degemination of /ww/ created by hiatus resolution which makes us postpone the output after Phonology 5.

What (10) and (11) suggest is that long roots, those which are at least two syllables long, allow imbrication instead of linear affixation of the past tense suffix. After looking at the short root where we found the linear affixation of the past tense morpheme, and the longer roots, regardless of whether there is a vowel or a consonant in the root-initial position where the past tense morpheme is imbricated, it is time to see if there are no exceptions to this grouping. Consider the following examples:

12.	/-ng'-/	'drink'	cf.	tung'weéle	'we drank'
				tu-ng'w-a-il-e	
				SM-drink-FV-TM	
	/-ny-/	'defecate	cf.	sinyeéle	'they defecated'
				tu-ny-a-il-e	
				SM-drink-FV-TM	
	/-p-/	'give'	cf.	atupéele	'they gave us'
				tu-pa-a-il-e	
				SM-drink-FV-TM	
	/-t-/	'name'	cf.	an'téele	'they named him/her'
				tu-t-a-il-e	

/-tw-/	‘pound’	cf.	SM-drink-FV-TM tutweéle	‘we pounded’
			tu-tw-a-il-e	
			SM-drink-TM	
/-v-/	‘be, become’	cf.	aveéle cisiilu	‘s/he became stupid’
			tu-v-a-il-e	stupid
			SM-drink-FV-TM	

These examples show that although they belong to the short roots group, they do not behave like short roots. Ngunga (2000) suggests that probably these roots are not -C- roots. They are probably -CV- roots where V equals /a/ and the addition of the past tense marker **-il-e** triggers coalescence (a+i=e). Just like these exceptional short roots which behave as long roots, there are long roots where imbrication is applied to. Consider the following examples:

13. /-wuluwuumb-/	‘roll on the ground’	cf.	tuwulúwúumbile	‘we rolled on’
/-amiil-/	‘shout; scream’	cf.	tujaamísile	‘we shouted’
/-soongoon-/	‘whisper’	cf.	soongóónile	‘whispered’
/-teeteeka-/	‘appease, quieten’	cf.	tuteetéécile	‘we appeased’
/-pulupuut-/	‘wriggle about’	cf.	jipulupúútile	‘wriggled about’

The data in (13) show long roots which behave morphologically like regular short (-CVC-) roots. That is, in the past tense, the TM is linearly affixed to the verb root the same way as it does when the roots are short. As we observe them closely, we discover that they have in common the fact the root last vowel is long. Therefore, it can be inferred that the imbrication is blocked by the presence of long vowel in the place where a short vowel would “meet” with the /i/ of the past tense marker **-il-e**. Let us look at what happens with the long verb root when derivational suffixes are attached to them next.

5.2. Derived affirmative past tense verb forms

When derivational suffixes are added to the long verb root which behave like the short canonical -CVC- the last long vowel of the root becomes penultimate vowel of the root, since the short vowel of the suffix become the last vowel of the extended stem, as illustrated in the following examples:

14. /-wuluwuumb-il-/ ‘roll on towards for’ cf. *tuwulúwúumbiile* ‘we rolled on for’
 /-amiil-an-/ ‘shout at each other’ cf. *tujaamíleene* ‘we shouted e.o.’
 /-soongoon-el-/ ‘whisper at’ cf. *tusóóngóneelee* ‘whispered at’
 /-teeteek-an-/ ‘appease each other’ cf. *tuteetéékeene* ‘we appeased at e.o.’
 /-pulu puut-is-/ ‘be able to wriggle a lot’ cf. *sipulúpuútiisye* ‘wriggled about a lot’

As is seen above, after the removal of the long vowel from the last vowel of the root to preceding position, the formerly forbidden form can now accept imbrication of the past tense marker, since the imbrication local is now monomoraic. The phonological consequences of the application of the imbrication apply also here.

Before we move into another topic, let us go back and pay attention to what appear here as an epenthetic /j/ (7b, d; 8b, d; 9a, b, d, f; 10a, b, d, f;) that is inserted to the verbs with vowel initial roots at the same time that the remote past tense marker is affixed. Therefore, this /j/ should not be confused with that which is part of the lexicon, that is, the lexical /j/ is never deleted, it appears both in the infinitive and whenever the verb is conjugated, as is shown in the following examples:

- 15.a) /-jajaval-/ ‘float’ cf. *tujajávéele* ‘we floated’
 /-jejem-/ ‘strain at a stool’ cf. *tujejéeme* ‘we strained at stool’
 /-jidima ‘trickle; flow’ cf. *meesí gájidíime* ‘the water trickled’
 /-jogoj-/ ‘talk noisily’ cf. *tujogwéeje* ‘we talked noisily’
 /-jiim-³ ‘to not give’ cf. *twaajíimile* ‘we did not give to them’
 /-jub-/ ‘sign up (daily job)’ cf. *tujubile* ‘we signed up’

The example in (15) intend to illustrate the difference between the epenthetic /j/, mophophonologically inserted, and the lexical /j/ which is always present in all verb forms. That is why we suggest the epenthetic /j/ be called

³ Cf. /-im-/ ‘stop; stand up’ cf. *tujiími* ‘we stopped’
 Future: *caacíima* ‘they will give’
 ci-a-ci-im-a
 TM-SM-stop-FV

Cf. /-jim-/
 Future: *caacjjiima* cf. *tujiimíle* ‘we did not give’
 ci-a-ci-jiim-a
 TM-SM-TM-not to give-FV

grammatical /j/ which is different from the constant /j/ which we suggest it to be called lexical /j/. The former occurs only in past tenses and never occurs in non-past tenses. It is important to recall that this distinction refers to vowel initial roots only. In verbs with consonant initial roots there is no space for grammatical /j/.

5.3. Negative past tense forms

So far we have seen that being an agglutinative language, Ciyaawo affirmative past tense verb forms are constructed by linearly affixing the morphological tense markers to the verb structure as has been found in many studies (MEEUSSEN 1967, SCHADEBERG 2003). The negative past tense forms, are constructed in a different ways as illustrated below:

- 16.a) nganiindyá ‘I did not eat’ (remote past)
 ngani-n-dy-a
 NM-SM-eat-FV
- b) nganitúdyá ‘we did not eat’ (remote past)
 ngani-tu-dya
 NM-SM-eat-FV
- 17.a) nganíindyá ‘I did not eat’ (recent past)
 ngani-n-dy-a
 NM-SM-eat-FV
- b) nganíúdyá ‘we did not eat’ (recent past)
 ngani-tu-dya
 NM-SM-eat-FV
- 18.a) nganíindyá ‘I will not eat’ (future)
 ngani-n-dy-a
 NM-SM-eat-FV
- b) nganíúdyá ‘we will not eat’ (future)
 ngani-tu-dya
 NM-SM-eat-FV
- 19.a) nganíindyá ‘(so that) I won’t eat’ (subjunctive future)
 ngani-n-dy-a
 NM-SM-eat-FV
- b) nganíúdyá ‘(so that) we won’t eat’ (subjunctive future)
 ngani-tu-dya
 NM-SM-eat-FV

In the examples (16-21), it is possible to see that in the past form, the first person (singular and plural) negative marker (NM) is segmentally **ngani-** which occurs in all verb forms. However, as we look at the two past tense forms, we realize that while segmentally the examples are all equal, tonally they are different. That is, in (16), all morae in the remote past forms are toneless, while the recent past forms (17) bear high tone on the second mora in the first person singular and on the second and third morae in the first person plural. These past tense forms contrast with future (18) and subjunctive (19) forms, which were brought here to show the role of the tone in Ciyaawo grammar, only because of the position of the morae that bear tones. That is, we want to show that in this language, tone is used not only to express past tense forms, but it also distinguishes recent from remote past as well the two past tense forms from future and subjunctive forms. Because tense and mood are grammatical categories, the which expresses tense, mood and other grammatical categories is said to perform grammatical function. Thus, such a tone is called grammatical tone itself.

6. Final remarks

The present paper has described the past tense in Ciyaawo. In so doing, it has demonstrated that this language distinguishes recent from remote past both segmentally, in affirmative constructions, and suprasegmentally (through tone) in negative constructions. It has also noted that in the affirmative form, the affixation of the segmental past tense marker can be linear, whereby the past tense morpheme is attached to the verb root as a suffix (**-il-e**) in the recent past, and as a circumfix (**-a- -il-e**) in the remote past. In the negative form, the past tense is marked by tone whereby the remote past forms are toneless while the recent past forms bear high tone on second mora in first person singular or on second and third morae in first person plural. Finally, it has also been shown that in this language, tone plays an important grammatical role.

References

- Bastin, Y. (1986). *La finale verbale *-ide et l'imbrication en bantou*. Tervuren: Musée Royal de l'Afrique Centrale.
- Bleek W. H. I. (1862-69). *A Comparative Grammar of South African Languages*. Cape Town and London: J. C. Juta and Trübner & Co.
- Comrie, B. (1985). *Tense*. Cambridge: Cambridge University Press
- Guthrie, M. (1970). The Stratus of Radical Extensions in Bantu. *Collected Papers on Bantu Linguistics*. London: Gregg International Publishers, Limited. Pgs: 91-110

- Guthrie, M. (1967-71). *Comparative Bantu: An Introduction to Comparative Linguistics and Prehistory of the Bantu Languages*. 4 vols. Farnborough: Gregg International Publishers.
- Hyman, L. (1995a). Cyclic phonology and morphology in Cibemba. In J. Cole and C. Kisseberth (eds.). *Perspectives in Phonology*, 81-112. Stanford: CSLI.
- Hyman, L. (1995b). Minimality and prosodic morphology in Cibemba imbrication. *Journal of African Languages and Linguistics*, 24:5-50.
- Kiparsky, P. (1982). Lexical Phonology and Morphology. *Linguistics in the Morning Calm*. The Linguistic Society of Korea. Soul: Hanshin Publishing Co.
- Kiparsky, P. (1985). Some consequences of Lexical Phonology. *Phonology Yearbook 2*, 83-136.
- Langa, D. (2007). Verbal Extensions in Changana: A Re-statement. In. Akindele et al. 2007 (eds). *LASU: Journal of the Linguistics Association of Southern African Development Community [SADC] Universities*. Vol 3. Linguistics Association of SADC Universities. Pp 51-60.
- Lodhi, A. Y. (2002). Verb Extensions in Bantu (the case of Kiswahili and Nyamwezi). *Africa & Asia*. No. 2, pp 4-26. Dept. of Oriental and African Languages, Goteborg University
- Meeussen, A. E. (1967). Bantu grammatical reconstructions. *Africana Linguistica III*: 79-121. Tervuren, Musée Royal de l'Afrique Centrale Annales n° 61.
- Meinhof, K. (1932). *Introduction to the Phonology of Bantu Languages*. (Translated by N. J. van Warmelo). Berlin: Dietrich Reimer Verlag.
- Mohanan, K. P. (1982). Lexical Phonology. PhD Dissertation. MIT.
- Mohanan, K. P. (1982). Lexical Phonology. PhD Dissertation. MIT.
- Ngunga, A. (1997). *Phonology and Morphology of the Ciyao Verb*. PhD. Dissertation. University of California. Berkeley.
- Ngunga, A. (1998). Imbrication in Ciyao. In Ian Maddieson and Thomas J. Hinnebusch (eds.). *Language History and Linguistic Description*. Trenton, NJ: Pp. 167-176
- Ngunga, A. (2000). *Lexical Phonology and Morphology*. Stanford: CSLI. Publications.
- Ngunga, A. (2004). *Introdução à Linguística Bantu*. Maputo: Imprensa Universitária
- Ngunga, A. (2014a). *Introdução à Linguística Bantu*. (2ª edição). Maputo: Imprensa Universitária.
- Ngunga, A. (2014b). One language, two phonologies: the case of moraic nasals in Ciyao. In Iwona Kraska-Szlenk e Beata Wójtowicz (editors). *Current research in African Studies* (Papers in Honour of Mwalimu Dr Eugeniusz Rzewuski). Warsaw. Dom Wydawniczy ELIPSA.

- Odden, D. (1993). Interaction between Modules in Lexical Phonology. *Studies in Lexical Phonology*. Vol.4. Pp111-144. Academic Press.
- Sanderson, M. (1922). *A Yao Grammar*. (2nd edition). London.
- Sanderson, M. (1954). *A Yao Dictionary*. Zomba: Government Print.
- Schadeberg, T. (2003). Historical Linguistics. In Derek Nurse and Gérard Philippson. (Eds). *The Bantu Languages*. London and New York: Routledge, Tailor & Francis Group. Pp: 143-163.
- Spencer, A. (1991). *Morphology*. UK: Blackwell publications
- Whiteley, W. H. (1966). *A Study of Yao Sentences*. Oxford University Press.

