WHAT CAN A SINGLE LUBUKUSU VERB FORM CONTAIN?

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This paper is a brief description and illustration of all that a single verb form can contain in Lubukusu as an agglutinating Bantu language (of Kenya). From left to right, the most complex verb form will have the following ten morphemes: preroot negation marker, subject marker, tense marker, object marker, root, applicative marker, aspect marker, mood marker, aspect emphasizer¹, and postroot negation marker. Here is an example, in its orthographic form: *se-ba-kha-mu-lom-el-eng-e-kho-ta* 'they will not be speaking for him repeatedly', in which the root is *lom* 'speak'. Since negation in Lubukusu is double-marked, the English *not* is represented by two separate morphemes, *se-* and *-ta*. The paper describes each one of the ten morphemes above, with the lion's share of space being accorded to the categories of tense and aspect, as these are divided into many sub-categories: past, present, and future tenses, on the one hand, and progressive, habitual, perfective, sequential, and iterative aspects, on the other hand.

Key words: Lubukusu, tense, aspect, negation, verb form

1. INTRODUCTION

This paper aims to describe all the possible morphemes that can be contained in a verb form in Lubukusu, a Bantu language spoken especially in Bungoma County in western Kenya. As an agglutinating language, Lubukusu allows a number of

'He jumped on it

¹ Previous studies like Kraal (2005) and Sikuku (2011: 10) have referred to the morpheme - kho- as a locative marker. However, this paper does not treat it as such since no idea of location transpires in the translation of the illustrative verb form. For the present author - kho- is an aspect emphasizer, with the meaning of 'being done repeatedly'. It should be noted that there is a -kho, which occurs word-finally (except before the negative morpheme -ta), that is indeed a locative pronoun replacing prepositional phrases such as khumesa, 'on the table', as in the following example:

a) Ka- sun- a- khu- mesa (kasuna khumesa)
 He jump ind. mood on the table
 'He jumped on the table'

b) Ka- sun- a- kho (kasunakho) He jump ind. mood -on it.

morphemes to be attached before and after the root. Consider Example (1), in its orthographic form:

(1) se-ba-kha-mu-sab-il-eng-e-kho-ta

aspect

-khose -ba-: -kha-: -mu--sab--il--eng--е--ta Not ind. thev will him pray for be mood

'They will not be praying for him repeatedly'

not

In this example, from left to right we have the following morphemes: pre-root negation marker² (*se*-), subject marker (-*ba*-), tense marker (-*kha*-), object marker (-*mu*-), root (-*sab*-), applicative marker (-*il*-), aspect marker (-*eng*-), mood marker (-*e*-), aspect emphasizer (-*kho*-), and post-root negation marker (-*ta*). The ten possible morphemes in the Lubukusu verb form above translate to seven words in English, with eight morphemes if *praying* is decomposed into two. This is because negation is double-marked in Lubukusu and the aspect emphasizer is an optional element in a verb form. More illustration on negation markers is given later in Section 2.

Two previous studies have already looked at aspects of the verbal morphology of Lubukusu. Sikuku (2011) gives a rather broad description of the Lubukusu verbal morphology. He notes that the many morphemes attached to the root are "well known among Bantuists as verb extensions" (2011: 10). He adds that "[s]everal linguists working on the nature of affixes in Bantu [...]argue that such affixes optionally or obligatorily occur in certain fixed slots in the verb (phrase)". Sikuku's (2011) focus was not the verb morphology of Lubukusu, though; it was on syntactic patterns of anaphoric relations in Lubukusu. A more recent study, Watulo (2018), did focus on Lubukusu morphology, on the specific aspect of the inflectional rules affecting the components of a verb form in

² Notice that the grammatical elements in Column 2 of Table 1 are referred to as *pre-root* negation marker, post-root negation marker, post-root aspect marker, and mood marker. This is contrary to previous studies (see Sikuku 2011: 10 and Watulo 2018: 43) on Lubukusu morphology which refer to them as pre-initial negation, post-initial negation, pre-final markers, and final vowel, respectively. For the present author it does not seem to make much sense to call something "initial" when there is another thing preceding it, or "final" when another thing follows it.

Lubukusu. Those are rules that govern tense inflection, those that introduce prefixes, those that carry the negation markers, and those that mark object agreement (Watulo 2018: 86). The present study will not discuss any rule; it will simply describe all the possible morphemes that can be agglutinated into a Lubukusu verb form like that in Example (1) above.

2. THE POSSIBLE COMPONENTS OF AN AGGLUTINATED VERB FORM IN LUBUKUSU

Table 1 is a template structure of Lubukusu verbs. It has nine slots each of which corresponds to the place of a given grammatical meaning, except for the root morpheme, which has a lexical meaning.

Table 1: Template structure of Lubukusu verbs

Slot	Grammatical or lexical meaning	The relevant
		morpheme(s)
1	Pre-root negation marker (Pre NM)	se-, so-, sa-
2	Initial subject marker (SM)	a-, mu-, kha-, o-, e-, ba-
3	Aspect Emphasizer (AE)	-kho-
4	Tense/Aspect marker (T/A)	-kha-, -kho-
5	Object marker (OM)	-chi-, -mu-
6	Verbal base/root (VR)	-tekh-
7	Post-root aspect marker (PAM)	-ang-, -eng-
8	Mood marker/applicative marker (MM/APPL)	-a-, -e-, -il-, -e-
9	Post-root negation marker (Post NM)	-ta

2.1 The negation marker

As indicated in Table 1, negation in Lubukusu is marked twice: first, marked by any of the morphemes in slot 1; second, by the invariable morpheme -ta in slot 9, at the very end of the verb form. The two markers are necessary. It is because of this that negation in Lubukusu is better explained together with other inflectional markers. And since the two negation markers appear in different positions in a verb form they depend on other inflectional markers, specifically those of tense,

aspect, person, and number, for them to make sense. This is why in the following sub-sections negation is discussed in connection with tense and aspect.³

2.1.1 Marking both negation and tense in Lubukusu

Lubukusu has three morphemes, namely $\langle se-\rangle$, $\langle so-\rangle$, and $\langle sa-\rangle$ (see slot 1 in Table 1) that combine with the invariable morpheme $\langle -ta \rangle$ (slot 9) to express negation in verbs.

Table 2: How both negation and tense are marked in Lubukusu

Tense	SG	NEG	Example in SG	PL	NEG	Examples in PL
Present	1 st pers.	Se	Se-e-ndim-a-ta	1 st pers.	Se	Se-khu-tim-a-ta
			(I do not run)			(We do not run)
	2 nd pers.	So	So-o-tim-a-ta	2 nd pers.	So	So-mu-tim-a-ta
			(You do not run)			(You do not run)
	3 rd pers.	Sa	Sa-a-tim-a-ta	3 rd pers.	Sa	Sa-ba-tim-a-ta
			(She does not run)			(They do not run)
Remote past	1 st pers.	Se	Se-na-tim-il-e-ta	1st pers.	Se	Se-khwa-tim-il-e-ta
			(I did not run)			(We did not run)
	2 nd pers.	So	So-wa-tim-il-e-ta	2 nd pers.	Se	Se-mwa-tim-il-e-ta
			(You did not run)			(You did not run)
	3 rd pers.	Sa	Sa-ka-tim-il-e-ta	3 rd pers.	Se	Se-ba-tim-il-e-ta
			(She did not run)			(They did not run)
Immediate past	1 st pers.	Se	Se-e-ndim-il-e-ta	1 st pers.	Se	Se-khu-tim-il-e-ta
			(I did not run)			(We did not run)
	2 nd pers.	So	So-o-tim-il-e-ta	2 nd pers.	Se	Se-mu-tim-il-e-ta
			(You did not run)			(You did not run)
	3 rd pers.	Sa	Sa-a-tim-il-e-ta	3 rd pers.	Se	Se-ba-tim-il-e-ta
			(She did not run)			(They did not run)

Remote future	1 st pers.	Se	Se-e-xaße-na-tim-il-e-ta	1 st pers.	Se	Se-khu-khabe-na-tim-il-e-ta
			(I will not have run)			(I will not have run)
	2 nd pers.	So	So-o-xaße-wa-tim-il-e-ta (You will not have run)	2 nd pers.	Se	Se-mu-khabe-mwa-tim-il-e-ta (You will not have run)
		Sa-a-xaße-ka-tim-il-e-ta (She will not un)	3 rd pers.	Se	Se-ba-khabe-ba-tim-il-e-ta (They will not have run)	
Immediate future	1 st pers.	Se	Se-e-ndaßa-na-tim-il-e-ta (I will not have run)	1 st pers.	Se	Se-khu-laba-khwa-tim-il-e-ta (We will not have run)
	2 nd pers.	So	So-o-laBa-wa-tim-il-e-ta (You will not have run)	2 nd pers.	So	So-mu-laba-mwa-tim-il-e-ta (You will not have run)
	3 rd pers.	Sa	Sa-a-laBa-ka-tim-il-e-ta (She will not have run)	3 rd pers.	Sa	Sa-ba-laba-ba-tim-il-e-ta (They will not have run)

The examples given in the right most column explain the reason why slot-1 morphemes are called pre-root negation markers and slot-3 morpheme post-root negation markers. This is because they precede and follow the root, respectively. The table shows how negation is intertwined with tense, person, and number features.

2.1.2 Marking both negation and aspect in Lubukusu

The three morphemes *<se->*, *<so->*, and *<sa->*, together with the invariable morpheme *<-*ta*>*, express negation and aspect, as shown in Table 3.

Table 3: How both negation and aspect are marked in Lubukusu

Aspect	SG	NEG	Examples in the SG PL		NEG	Examples in the PL
Progressive	1 st pers.	Se	Se-e-ndixo-e-mbial-a-ta (I am not planting)	1 st pers.	Se	Se-khu-likho-khu-bial-a-ta (We are not planting)
	2 nd pers.	So	So-o-lixo-o-bial-a-ta (You are not planting)	2 nd pers.	So	So-mu-likho-mu-b-al-a-ta (You are not planting)
	3 rd pers.	Sa	Sa-a-lixo-a-bial-a-ta (She is not planting)	3 rd pers.	Sa	Sa-ba-likho-ba-bial-a-ta (They are not planting)
Habitual	1 st pers.	Se	Se-e-nyw-e-ch-a-ng-a-ta (I do not drink)	1 st pers.	Se	Se-khu-nyw-e-ch-a-ng-a-ta (We do not drink)
	2 nd pers.	So	So-o-nyw-e-ch-a-ng-a-ta (You do not drink)	2 nd pers.	Se	Se-mu-nyw-e-ch-a-ng-a-ta (You do not drink)
	3 rd pers.	Sa	Sa-a-nyw-e-ch-a-ng-a-ta (She does not drink)	3 rd pers.	Se	Se-ba-nyw-e-ch-a-ng-a-ta (They do not drink)
past	1 st	Se	Se-na-lum-a-ng-a-ta (I did not usually bite)	1 st	Se	Se-khwa-lum-a-ng-a-ta (We did not usually bite)
	2 nd	Se	Se-wa-lum-a-ng-a-ta (You did not usually bite)	2 nd	Se	Se-mwa-lum-a-ng-a-ta (You did not usually bite)
	3 rd	se	Se-ka-lum-a-ng-a-ta (She did not usually bite)	3 rd	Se	Se-ba-lum-a-ng-a-ta (They did not usually bite)
Future	1 st	Se	Se-e-xa-khomb-e-ng-e-ta	1 st	Se	Se-khu-kha-khomb-e-ng-e-ta

			(I will not be usually licking)			We will not be usually licking)
	2 nd	So	So-o-xa-khomb-e-ng-e-ta	2 nd	Se	Se-mu-kha-khomb-e-ng-e-ta
			(You will not be usually licking)			(You will not be usually licking)
	3 rd	sa	Sa-a-xa-khomb-e-ng-e-ta	3 rd	se	Sa-ba-kha-khomb-e-ng-e-ta
			(She will not be usually licking)			(They will not be usually licking)
Perfective aspect	1 st pers.	Se	Se-na-nyw-el-e-ta	1 st pers.	Se	Se-khwa-nyw-el-e-ta
			(I have not drunk)			(We have not drunk)
	2 nd pers.	So	So-wa-nyw-el-e-ta	2 nd pers.	Se	Se-mwa-nyw-e-el-e-ta
			(You have not drunk)			(You have not drunk)
	3 rd pers.	Sa	Sa-ka-nyw-el-e-ta	3 rd pers.	Se	Se-ba-nyw-el-e-ta
			(She has not drunk)			(They have not drunk)
Immediate future	1 st pers.	Se	Se-e-ndaßa-na-sok-il-e-ta	1 st pers.	Se	Se-khu-laba-khwa-nyw-el-e-ta
perf/Intermediate			(I will not have swim)			(We will not have drunk)
future perf						
	2 nd	So	So-o-laBa-wa-sok-il-e-ta	2 nd pers.	Se	Se-mu-laba-mwa-nyw-el-e-ta
	pers.		(You will not have swim)			(You will not have drunk)
	3 rd pers.	Sa	Sa-a-laBa-ka-sok-il-e-ta	3 rd pers.	Se	Se-ba-laba-ba-nyw-el-e-ta
			(She will not have swim)			(They will not have drunk)
Completive	1 st pers.	Se	Se-ne-khal-e-ta	1 st pers.	Se	Se-khwe-khal-e-ta
aspect			(I have not sat)			(We have not sat)
	2 nd pers.	So	So-we-khal-e-ta	2 nd pers.	Se	Se-mwe-khal-e-ta

			(You have not sat)			(You have not sat)
	3 rd pers.	Sa	Sa-ke-khal-e-ta	3 rd pers.	Se	Se-be-khal-e-ta
			(She has not sat)			(They have not sat)
Persistive aspect	1 st pers.	Se	Se-e-sii-sok-a-ta	1 st pers.	Se	Se-khu-sii-sok-a-ta
			(I do not still swim)			(We do not still swim)
	2 nd pers.	So	So-o-sii-sok-a-ta	2 nd pers.	Se	Se-mu-sii-sok-a-ta
			(You do not still swim)			(You do not still swim)
	3 rd pers.	Sa	Sa-a-sii-sok-a-ta	3 rd pers.	Se	Sa-ba-sii-sok-a-ta
			(She does not still swim)			(They do not still swim)

It emerges from the data given in tables 2 and 3 that the pre-root negation markers <*se*->, <-*so*->, and <-*sa*-> also double up as subject markers. The choice of the morpheme to be used as a subject marker depends on the tense, number and person features.

Another observation made by the paper is that the expression of negation in Lubukusu verbs involves a morphological process called circumfixation. This is based still on the data provided in the table where the two negation markers occupy the first and the last positions of the verb form. Payne (2006: 41) notes that it is "a rare morphological process in which one morpheme has two parts one that appears before the root and another after the root." He goes on to argue that "neither one occurs independently. Therefore, this must be considered one morpheme with two separate parts" Payne (2006: 42).

2.2 The subject marker

Sikuku (2011: 11) argues that "[b]ecause of the rich agreement system sometimes the subject/object positions are syntactically null, but the content can always be understood from the linguistic context mainly by means of agreement". This can be illustrated by the sentence *Wanyama kefumia omweene* in (2).

(2) Wanyama ke-e-fumi-a omweene
Wanyama SM- RFM-praise- fv Agr-own
Wanyama praises himself

The lexical subject *Wanyama* is again marked on the verb using the morpheme <- ke>. On the other hand, the reflexive *omweene* is realized by the affix marker <- e-> which is attached to the verb root. Khaemba (2016:1 43) summarizes by saying that "there is a proper null subject in Spec IP in finite null subject sentences in Lubukusu". Her conclusion is made after carrying out research on the morphosyntactic characteristics of Lubukusu null subject pronouns. What this means is that Lubukusu is so rich in agreement system that the verb phrase contains a subject marker. Lubukusu has markers for person, class and number as shown in the table below.

Table 4: Subject markers in Lubukusu

Class	SG	Examples in the SG	Class	PL	Examples in the PL
1	a-	a-likho-kenya-a	2	ba-	ba-li-kho-benya-a
		(s/he is playing)			(they are playing)
3	ku-	ku-likho-ku-chun-a	4	ki-	ki-likho-ki-chun-a
		(it is painful)			(they are painful)
5	li-	li-likho-li-kw-a	6	ka-	ka-likho-ka-kw-a
		(it is falling)			(they are falling)
7	e-	e-likho-e-sam-a	8	chi-	chi-likho-chi-sam-a
		(it is barking)			(they are barking)
9-10	e-	e-likho-e-yaay-a	9-10	chi-	chi-likho-chi-aay-a
		(it is grazing)			(they are grazing)
11	lu-	lu-likho-lu-bol-a	8	chi-	chi-likho-chi-bol-a
		(it is rotting)			(they are rotting)
12	kha-	kha-likho-kha-sun-a		bi-	bi-likho-bi-sun-a
		(it is jumping)			(they are jumping)
14	bu-	bu-a-mbaan-i		bu-	bu-a-mbaa-ani
		'togetherness'			'togetherness'
15	khu-	khu-a-mbaan-a		khu-	Khu-a-mbaa-n-a
		'to come together'			'to come together'
16	khu-	khu-mesa		khu-	khu-chimesa
		'on the table'			'on the table'
17	a-	a-sitanda	4	ki-	a-bitanda
		'on/by the bed'			'on/by the beds'
18	mu-	mu-chikoni		mu-	mu-chikoni
		'in the kitchen'			'in the kitchen'
20	ku-	ku-khono		ki-	ki-mi-khono
		'a big hand'			'many big hands'
23	e-	e-Kibabii		e-	e-Kibabii
		'at/in Kibabii'			'at/in Kibabii'
		'at/in Kibabii'			ʻat/in Kibabii'

The subjects without classes in the plural mean that they are uncountable nouns which require phrasal quantifiers to be pluralized.

In finite verbs, the markers (prefixes) are obligatory in the language. The realization of subject marking is through the subject elements that appear in word initials. However, infinitives and imperatives do not require subject marking. The following tables present data on obligatory and non-obligatory subject marking in Lubukusu.

Table 5: How obligatory subjects are marked in Lubukusu

Pers.	Number	SM	VR	MM	Gloss
1 st	SG	e-	-nom-	-а	l say
	PL	khu-	-lom-	-a	We say
2 nd	SG	0-	-lom-	-a	You say
	PL	mu-	-lom-	-a	You say
3 rd	SG	a-	-lom-	-a	He/she says
	PL	ba-	-lom-	-a	They say

Table 6: How non-obligatory subjects are marked in Lubukusu

SM	Sentence type	VR	MM	Gloss
khu-	Infinitive	-kend-	-а	to walk
	Imperative	-kend-	-a	walk
khu-	Infinitive	-khin-	-a	to dance
	Imperative	-khin-	-a	dance
khu-	Infinitive	-rusy-	-a	to vomit
	Imperative	-rusy-	-a	vomit
khu-	Infinitive	-rum-	-a	to send
	Imperative	-rum-	-a	send

Lubukusu infinitives are differentiated from the imperatives by the prefix <khu->.

The tense marker

Mutonyi (2000: 56-57) discusses the tense system in Lubukusu verbs and provides affixal markers for tense, aspect and negation in the language.

Table 7: How tense and aspect are marked in Lubukusu

Tense/Aspect	The relevant marker	Examples in the PL	Gloss
Present		khu-ser-a	We invade
Past			
 Immediate 	-il, -e	khu-ser-il-e	We have just invaded
 Intermediate 	-il, -e	khwa-a-ser-il-e	We invaded two days ago
• Remote	-a	khwa-ser-a	We invaded two months ago
Future tense			
 Immediate 	-la	khu-la-ser-a	We will invade
 Intermediate 	-kha	khu-kha-ser-e	We will invade in two days' time
• Remote	-li	khu-li-ser-a	We will invade in the next two months
Habitual aspect			
 Habitual 	-ang-, -a	khu-ser-ang-a	We are used to invading
Past	-ang-, -a	khwa-ser-ang-a	We were used to invading
• Future	-eng-, -e	khu-kha-ser-eng-e	We will be used to invading
Perfective aspect			
 Immediate 	-a, -il,-laba, -e	khu-laba-xwa-ser-il-e	We will have just invaded
• Intermediate	-a, -il, -khabe,-e	khu-khabe-xwa-ser-il-e	We will have invaded a day earlier
• Remote	-a, -il,-liba, -e	khu-liba-xwa-ser-il-e	We will have invaded two weeks earlier
Persistive aspect	-sii, -a	khu-sii-ser-a	We are still invade

Progressive aspect	-likho	khu-likho-xu-ser-a	We are invading
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The data presented in the table shows that tense morphemes in Lubukusu always precede the verb root while aspectual markers may precede or follow it. Tense and aspect can be marked by auxiliaries, for example the future tense is marked by <-la->, <-kha->, and <-li-> while <-laba->, <-khabe->, and <-liba-> marks for the perfective aspect.

The complexity of the Lubukusu tense system is a result of the many attachments that a verb attracts to its root. It can simply be categorized as past or non-past, where non-past refers to both the present and the future.

2.2.1 The present tense

Considering that it is not marked using either a prefix or suffix, the present tense can as well be referred to as the unmarked or zero marked tense.

Table 8: How the present tense is marked in Lubukusu

Pers.	Num.	SM	VR	MM	Gloss
1 st	SG	e-	-ngend-	-а	I walk
	PL	khu-	-kend-	-a	We walk
2 nd	SG	0-	-kend-	-а	You walk
	PL	mu-	-kend-	-a	You walk
3 rd	SG	a-	-kend-	-a	He/she walks
	PL	ba-	-kend-	а	They walk

2.2.2 The past tense

The immediate past

This refers to situations or events that happened a few minutes ago.

Table 9: How the immediate past tense is marked in Lubukusu

Pers.	Num.	SM	VR	APPL	MM	Gloss
1 st	SG	e-	-ngend-	-il-	-е	I walked
	PL	khu-	-kend-	-il-	-е	We walked
2 nd	SG	0-	-kend-	-il-	-e	You walked

	PL	mu-	-kend-	-il-	-е	You walked
3 rd	SG	a-	-kend-	-il-	-e	He/she walked
	PL	ba-	-kend-	-il-	-e	They walked

The examples presented above indicate that the immediate past is marked by three attachments on the verb root. The presence of the subject marker before the root is just an indication that the verbs are tensed.

The intermediate past

In Lubukusu, the prefix < a > before the root and the suffixes < -il >, and < -e > after the root form the intermediate past.

Table 10: How the intermediate past is marked in Lubukusu

Pers.	Num.	SM	Root	APPL	MM	Gloss
1 st	SG	na-	-kend-	-il-	-е	I walked
	PL	khwa-	-kend-	-il-	-е	We walked
2 nd	SG	wa-	-kend-	-il-	-е	You walked
	PL	mwa-	-kend-	-il-	-е	You walked
3 rd	SG	ka-	-kend-	-il-	-е	He/she walked
	PL	ba-	-kend-	-il-	-е	They walked

The remote past

This refers to events and situations that happened long time ago.

Table 11: How the remote past is marked in Lubukusu

Pers.	Num.	SM	VR	MM	Gloss
1 st	SG	na-	-kend-	-a	I walked
	PL	khwa-	-kend-	-a	We walked
2 nd	SG	wa-	-kend-	-a	You walked
	PL	mwa-	-kend-	-a	You walked
3 rd	SG	ka-	-kend-	-a	He/she walked
	PL	ba-	-kend-	-a	They walked

Note that the vowel $\langle a-\rangle$ in the SMs receives a high tone in the remote past.

2.2.3 The future tense

The immediate future

This refers to events and situations that will happen very soon or (same day).

Table 12: How the immediate future is marked in Lubukusu

Pers.	Num.	SM	Tense/Aspect	VR	MM	Gloss
1 st	SG	e-	-nda-	-kend-	-а	I will walk
	PL	khu-	-la-	-kend-	а	We will walk
2 nd	SG	0-	-la-	-kend-	-a	You will walk
	PL	mu-	-la-	-kend-	а	You will walk
3 rd	SG	a-	-la-	-kend-	-a	He/she will walk
	PL	ba-	-la-	-kend-	а	They will walk
	1 -	bu	tu	Kena	u	They will walk

As Table 12 shows, the immediate future is marked by the prefix <-la-> which precedes the root except for the first person singular where it is marked by <-nda->. The prefix <-nda-> can double up as a subject marker (SM), as a result of which the subject marker <e-> can be deleted so that instead of saying e-nda-kend-a, one can simply say nda-kend-a. The first person singular is marked with a different morpheme for semantic purposes: if it is marked with the prefix <-la->, like the others, the final expression will be e-la-kend-a, which means 'an animal will walk'. The SM <e-> will be pluralized to <chi> instead of <khu->.

The intermediate future

This refers to events and situations that will take place a few days after the moment of speaking.

Table 13: How the intermediate future is marked in Lubukusu

Pers.	Num.	SM	TM	VR	MM	Gloss
1 st	SG	e-	-kha-	-kend-	-е	I will walk
	PL	khu-	-kha-	-kend-	-е	We will walk

2 nd	SG	0-	-kha-	-kend-	-е	You will walk
	PL	mu-	-kha-	-kend-	-e	You will walk
3 rd	SG	<i>a</i> -	-kha-	-kend-	-e	He/she will walk
	PL	ba-	-kha-	-kend-	-е	They will walk

The examples in the table above indicate that the prefix <-kha-> marks the intermediate future. While the SMs are considered to be obligatory, it is possible to hear native speakers express the first person singular without a subject marker. That is, speakers will say kha-kend-e instead of e-kha-kend-e. This situation should not be equated to the first person singular immediate future because here the prefix -kha- does not contain a sound used to mark for subject.

The remote future

This refers to events and actions that are indefinite in the future (not soon).

Table 14: How the remote future is marked in Lubukusu

Pers.	Num.	SM	TM	VR	MM	Gloss
1 st	SG	e-	-ndi-	-kend-	-а	I will walk
	PL	khu-	-li-	-kend-	-а	We will walk
2^{nd}	SG	0-	-li-	-kend-	-a	you will walk
	PL	mu-	-li-	-kend-	-a	You will walk
3 rd	SG	<i>a</i> -	-li-	-kend-	-a	He/she will walk
	PL	ba-	-li-	-kend-	-a	They will walk

The table shows that the prefix <-li-> marks for the remote future apart from the first person singular where <-ndi-> is used.

2.3 The aspect marker

Aspect in Lubukusu is marked by mood markers and auxiliaries.

2.3.1 The progressive aspect

This refers to events or actions that are ongoing.

Table 15: How the progressive aspect is marked in Lubukusu

Pers.	Num.	SM	AUX	OM	VR	MM	Gloss
1 st	SG	e-	ndikho-	-e-	kend-	-а	I am walking
	PL	khu-	-likho-	-khu-	kend-	-a	We are walking
2^{nd}	SG	0-	-likho-	-0-	Kend-	-а	You are walking
	PL	mu-	-likho-	Mu-	Kend-	-а	You are walking
3 rd	SG	a-	-likho-	-a-	Kend-	-a	He/she is walking
	PL	ba-	-likho-	ba-	Kend-	-a	They are walking

Apart from the first person singular, the auxiliary <-likho-> is used to mark the progressive aspect. However, most of the native speakers tend to delete the vowel sound /o/ in the auxiliary and replace it with the object marker so that we have some other versions like < -likhe-> and <-likha->.

2.3.2 The habitual aspect

In Lubukusu, this can be divided into the ongoing habitual, the past habitual, and the future habitual.

The habitual

This refers to events and actions that have always happened so far.

Table 16: How the ongoing habitual aspect is marked in Lubukusu

<
<
walks
lk

The table above shows that the habitual aspect is marked by one morpheme in all paradigms from person to number. This is the post-root aspect marker <-ang->.

The past habitual

This refers to events or actions that used to happen in the past without referring to any specific time.

Table 17: How the past habitual is marked in Lubukusu

lk
ı

The table above indicates that the past habitual aspect is marked using the same morpheme as in the habitual aspect. However, there is always a notable difference in how the verbs are pronounced in terms of tone. With the habitual aspect, the root vowel <-e->receives a higher tone than any other vowel in the verb. On the contrary, a higher tone is put on the SM vowel <-a-> in the past habitual aspect.

The future habitual

This refers to actions and events that will happen in the future where the exact period of the action remains implicit.

Table 18: How the future habitual aspect is marked in Lubukusu

	Pers.	Num.	SM	AUX	VR	PAM	MM	Gloss
•	1 st	SG	e-	-kha-	-kon-	-eng-	-е	I will usually sleep
		PL	khu-	-kha-	-kon-	-eng-	-e	We will usually sleep
	2 nd	SG	0-	-kha-	-kon-	-eng-	-е	You will usually sleep
		PL	mu-	-kha-	-kon-	-eng-	-e	You will usually sleep

3 rd	SG	a-	-kha-	-kon-	-eng-	-е	He/she	will	usually
							sleep		
	PL	ba-	-kha-	-kon-	-eng-	-е	They	will	usually
							sleep		

The data given in the table above shows that the future habitual is marked by the post-root aspect marker <-eng->. Another unique feature that differentiates it from the other two types of habitual aspect is the introduction of the auxiliary <- kha-> before the verb root. Also, the mood marker vowel changes from <-a> to <- e>. It should be noted that the post-root aspect marker and the mood marker are toneless in all paradigms.

2.3.3 The perfective aspect

This refers to completed situations to show punctuality.

Table 19: How the perfective aspect is marked in Lubukusu

Pers.	Num.	SM	VR	PAM	MM	Gloss
1 st	SG	na-	-tex-	-il-	-е	I have cooked
	PL	khwa-	-tex-	-il-	-e	We have cooked
2 nd	SG	wa-	-tex-	-il-	-e	You have cooked
	PL	mwa-	-tex-	-il-	-e	You have cooked
3 rd	SG	ka-	-tex-	-il-	-e	He/she has cooked
	PL	ba-	-tex-	-il-	-e	They have cooked

As the table above shows, the perfective aspect is marked by the post-root aspect marker <-il->, which is followed by the mood marker <-e>.

The immediate future perfective

This refers to actions and situations that are likely to happen on the same day as the time of speaking. The following table presents data on the immediate future perfective.

Pers.	Num.	SM	AUX	SM	VR	PAM	MM	Gloss
1 st	SG	e-	-ndaba-	na-	-tex-	-il-	-е	I will have cooked
	PL	khu-	-laba-	khwa-	-tex-	-il-	-е	We will have cooked
2 nd	SG	0-	-laba-	Wa-	tex-	-il-	-е	You will have cooked
	PL	mu-	-laba-	mwa-	-tex-	-il-	-е	You will have cooked
3 rd	SG	a-	-laba-	Ка-	tex-	-il-	-е	He/she will have
								cooked
	PL	ba-	-laba-	ba-	-tex-	-il-	-е	They will have cooked

The table above shows that the immediate future perfective is realized with a double subject marking where the markers differ in form except for the third person plural. Apart from the first person singular, the auxiliary <-laba-> is used in all other paradigms.

The intermediate future perfective

This refers to actions that will happen some two or three days in the future.

Table 21: How the intermediate future perfective is marked in Lubukusu

Pers.	Num.	SM	AUX	SM	VR	PAM	MM	Gloss
1 st	SG	е-	-khabe-	-na-	-tex-	-il-	-е	I will have cooked
	PL	khu-	-khabe-	-khwa-	-tex-	-il-	-е	We will have cooked
2 nd	SG	0-	-khabe-	-wa-	-tex-	-il-	-e	You will have cooked
	PL	mu-	-khabe-	-mwa-	-tex-	-il-	-e	You will have cooked
3 rd	SG	a-	-khabe	-ka-	-tex-	-il-	-е	He/she will have cooked
	PL	ba-	-khabe-	-ba-	-tex-	-il-	-е	They will have cooked

The examples above show that the intermediate future is marked uniformly, by the auxiliary <-khabe->.

The remote future perfective

This refers to actions that will happen in the future. Unlike the intermediate future, this refers to things that will happen months or even years from the time of speaking.

Table 22: How the remote future perfective is marked in Lubukusu

Pers.	Num.	SM	AUX	SM	VR	PAM	MM	Gloss
1 st	SG	e-	ndiba-	na-	tex-	-il-	-е	I will have cooked
	PL	khu-	-liba-	-khwa-	-tex-	-il-	-e	We will have cooked
2 nd	SG	0-	-liba-	-wa-	tex-	-il-	-е	You will have cooked
	PL	mu-	-liba-	-mwa-	-tex-	-il-	-е	You will have cooked
3 rd	SG	a-	-liba-	-ka-	tex-	-il-	-е	He/she will have
								cooked
	PL	ba-	-liba-	-ba-	-tex-	-il-	-е	They will have cooked

In the table above a difference can be noted on the auxiliary in the marking of the remote future perfective aspect from the intermediate future. It is marked by the auxiliary <-liba-> in all paradigms apart from the first person singular.

2.3.4 The sequential aspect

This type of aspect does not express specific time orientation, but instead receives its time orientation from the preceding verb.

Table 23: How the sequential aspect is marked in Lubukusu

Pers.	Num.	Verbs	Gloss
1 st	SG	ne-ch-a, na-tekh-a, na-li-a, na-	I came, cooked, ate,
		sing-a, na-kon-a.	washed and slept.
	PL	khwe-ch-a, khwa-tekh-a, khwa-	We came, cooked, ate,
		li-a, khwa-sing-a, khwakona.	washed and slept.
2 nd	SG	we-ch-a, wa-tekh-a, wa-li-a,	You came, cooked, ate,
		wa-sing-a, wa-kon-a.	washed and slept.
	PL	mwe-ch-a, mwa-tekh-a, mwa-	You came, cooked, ate,

		li-a, mwa-sin-a, mwa-kon-a.	washed and slept.
3 rd	SG	ke-ch-a, ka-tekh-a, ka-li-a, ka-	He/she came, cooked, ate,
		sing-a, ka-kon-a.	washed and slept.
	PL	be-ch-a, ba-tekh-a, ba-li-a, ba-	They came, cooked, ate,
		sing-a, ba-kon-a.	washed and slept.

The data presented above shows five verbs. The last four verbs whose subject marker has vowel $\langle -a \rangle$ receives their time orientation from the first verb whose subject marker has the vowel $\langle -e \rangle$. The aspect marker is thus the vowel $\langle -e \rangle$ in the first verb.

2.3.5 The iterative aspect

It expresses events that are repeated frequently. It is often marked by the complete reduplication of the root.

Table 24: How the iterative aspect is marked in Lubukusu

Pers.	Num.	Verb	Gloss
1 st	SG	e-ngend-a-kend-a	I walk frequently
	PL	khu-kend-a-kend-a	We walk frequently
2 nd	SG	o-kend-a-kend-a	You walk frequently
	PL	mu-kend-a-kend-a	You walk frequently
3 rd	SG	a-kend-a-kend-a	He/she walks frequently
	PL	ba-kend-a-kend-a	They walk frequently

2.4 The object marker

In Lubukusu, an object marker can simply be referred to as a morpheme attached to a particular verb. Diercks and Sikuku (2013: 5) note that:

Lubukusu OMs are clitics that are capable of showing the properties of pronoun incorporation in many (but not necessarily all) instances [...]. In Bantu languages each noun is lexically specified as belonging to a particular noun class, and therefore object markers can take a variety of morphological forms.

Table 25: How objects are marked in Lubukusu

Class	Num.	ОМ	Verb	Gloss
1	SG	a-la- mu-	loka	He/she will bewitch her
2	PL	ba-la-ba-	loka	They will bewitch them
3	SG	a-la -ku-	bona	He/she will see it
4	PL	ba-la-ki-	bona	They will see them
5	SG	a-la- li-	samba	He/she will kick it
6	PL	ba-la-ka-	samba	They will kick them
7	SG	a-la -si-	singa	He/she will wash it
8	PL	ba-la-bi-	singa	They will wash them
9	SG	a-la- ki-	bona	He/she will see it
10	PL	ba-la-chi-	bona	They will see them
11	SG	a-la- lu-	mwata	He/she will throw it
10	PL	ba-la-chi-	mwata	They will throw them
12	SG	a-la- kha-	buta	He/she will pinch it
8	PL	ba-la-bi-	buta	They will pinch them
14	SG	a-la-bu-	suta	He/she will carry it
14	PL	ba-la-bu-	suta	They will carry them

From the table above, it can be noted that < mu -> and < ba -> are the only markers⁴ for person, with < mu -> marking the singular and < ba -> the plural. Since object markers are preceded by SMs, they serve as an optional element. For example, a-la-mu-bona 'he will see him' can be simply put as a-la-bona 'he will see'.

2.5 The root

Given that the verb root has been shown in all the discussion of verbal affixes, little information is required concerning its description here. Consider the following example:

⁴ The post-root aspect marker is not discussed in this paper as a separate section because all the morphemes involved have already been dealt with in sub-section 2.4.2 on the habitual aspect.

(3) Ne- ba- a- -mu-andik-il- -ang- -a-kho
REL-SM-TM-OM-VR- -APPL- AM- -MM-AE
'When they write for him'.

The verb root is -andik-. It is also called verb base or base form of the verb. In languages such as English, where words determine the syntactic relations in a sentence, the verb root is the same as the infinitive; that is, without including the infinitive marker to. On the contrary, a verb root in Lubukusu (and may be many other agglutinating languages) cannot be the same as the infinitive. This is because of the presence of the mood marker vowel < -a> on Lubukusu infinitives as illustrated in Table 6 on non-obligatory subject markers in Lubukusu. The root is the host of all the other verbal affixes attached to it.

3. CONCLUSION

This paper described all the possible morphemes that can be incorporated into a finite verb form in Lubukusu, an agglutinating language. It looked at how negation is marked in conjunction with tense and in conjunction with aspect. It also looked at how obligatory and non-obligatory subjects are marked, how tense is marked --where it is divided into past and non-past, and how aspect is marked in its specific forms, namely progressive, habitual, perfective, sequential, and iterative. It further looked at how objects are marked.

While this paper has looked at the possible components of a single verb form in Lubukusu, an elaborate description of aspects of mood would be necessary for a complete picture of the language's verb inflectional morphology. This could be the subject of further research on the topic.

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