The classification of morphological forms marking tense and aspect in Luguru

Mr Onesmo Simon Nyinondi[1]* and Dr Hashim Issa Mohamed[1]

[1]*Sokoine University of Agriculture, Department of Language Studies*
P.O. Box 3035, Morogoro Tanzania
Corresponding author: email onesmon@hotmail.com, phone +255752445434

Abstract

Previous studies have been inconsistent in describing tense and/or aspect (T/A) systems in Luguru language and do not satisfactorily explain the differences of the morphological norms that mark T/A in the language. This study aims to describe the T/A system of Luguru as it is used in the verb system, particularly in the Morogoro Region of Tanzania. The study applied the Linear Approach in the analysis of T/A. In this approach, tenses are considered as expression of the relationship between speech time and another interval of interest called reference time and event time and Also tense meaning is represented as a sequence of the three time points namely; past, present and future time. Group discussions, questionnaire and interview were employed to collect primary data, from adult native speakers of the language in Matombo and Mgeta wards of Morogoro Rural District. The tools were employed because they correspond to the linear approach and that they are benched in the attitude of the language users. Data were analyzed by the identification of various T/A formatives so as to describe the distinction between them and the classification of morphological forms of tense and aspect in Luguru constructions which was done using linear approach. The study revealed four tense categories marked in the verbal morphology (i.e. remote past, recent past, present and future tenses) and four aspect categories, namely habitual, progressive, perfect and persistent. However, some T/A formatives depend on the three auxiliaries tsaa, maa and -gh'ali to complete their meaning. The study also reveals the prevalence of the difference between absolute and relative perfect marking and a high degree of interaction between tense and aspect.

Keywords: Luguru; Tense; aspect; morphological forms; Verb.

Background

Scholars (Petzell, 2008; Maho, 1999; Muzale, 2005) argue that the challenges of analyzing and describing Bantu languages revolve around geographical stretch of Bantu languages, and resulting poor documentation. Furthermore, some Bantu studies that are undertaken concentrate on a few easily reachable languages leaving majority of languages unstudied. The promotion of Kiswahili has also contributed to the death of ethnic languages in Tanzania (Maho, 1999).

According to Mkude (2004) all language policies whose purpose was and still is to nurture and promote unity, promoted the use of Kiswahili and English as official languages while all other languages, were excluded from use in public sphere. Mkude (2004) gives an example of the 1997 Tanzania education policy, which though recognizes the role of ethnic languages, as only serving as a reservoir of the cultural values and source of vocabulary to enrich Kiswahili. However, the policy does not state how these ethnic languages should be preserved.

According to Petzell (2008), the promotion of Kiswahili penetrated deeply all over the nation endangering local languages as they were only left to be used in rural homes or communities. If these local languages are left to disappear unrecorded, they will lose many of their speakers in one generation, and that linguists will lack adequate data for linguistic analysis (Mkude, 2004; Petzell, 2008). The death of these languages will also jeopardize the growth and development of Kiswahili which depends on these

languages as a reservoir of cultural values and vocabulary. These reasons emphasize the importance of analyzing and documenting local languages. Verbal morphology is one of the aspects that have received more attention in Bantu languages (Nurse, 2003). But, paucity of data, the authors' limited knowledge on the language and the theoretical approaches have been often reported to lead to a problem of overgeneralization; thus studies of individual languages would reduce overgeneralization problem.

As Muzale (2005) argues, the linguistic problems facing Bantu languages in Tanzania include orthographic problems and researcher/informant abilities. While the former may lead to inconsistency in writing, the latter may lead to paucity or inaccuracy of the data collected. Linguists are therefore challenged to go to the field and collect data for validating and correcting information presented by surveys conducted by linguistically incompetent people.

Luguru is also said to be understudied due to the problems already cited. As a result, there are few published documents on the language including Mkude (1974), Vermunt (1978), Marten and Ramathan (2001), Mkude (2004) and the translation of some chapters in the New Testament. However, most of the mentioned documents are confined to certain aspects such as nouns, adjectives and inflections and none of them focuses exclusively on tense and aspects (T/A) in the language. This motivated the current researchers to carry out a study of T/A in Luguru so as to expand the area of coverage in the language description.

The Language of Study

Luguru is a Bantu language of the G30 Zigula-Zaramo with about 692,000 native speakers (Mkude, 2004; Maho, 2009) or an estimated 403,602 people (LOT, 2009); and the number of speakers was projected to have reached 1.2 million by the late 20th (Encyclopedia Britannica, 2013). Luguru is spoken by people of the hills of Uluguru mountains and coastal plains of east-central Tanzania mainly south-east of Morogoro region, particularly Kilosa, Mvomero, Morogoro Urban and Rural Districts. The speakers are known as *Waluguru* and the land is *Uluguru*.

Luguru Verbal Morphology

The verb in Bantu languages is an open word category since new verbs can be formed. Lusekelo (2007) and Nurse (2008,) reveal that verb morphology as is the case with many other languages is a pivot for the study of T/A as one cannot study a verb in isolation because verbs cannot stand alone to complete their function in a sentence in Bantu language. Therefore, the description of Luguru verbal morphology, under this section, forms the foundation of T/A system.

Verbal Structure

In both the tensed and the non-tensed forms, the root, which is formed by consonant-vowel-consonant, is the core of the verb in Luguru, as in many other Bantu languages. The minimal verbal structure, however, consists of the root and the final vowel, which must always be present in the verb. This form (consonant-vowel-consonant) can, however, be extended as will be shown in the following sections.

Some scholars refer to verbal structure as verb form (Rugemalira, 2005) and verb unit (Lusekelo, 2007). In this study, the term verbal structure will be used. Table 1 shows the verb structure in Luguru.

Table 1: *Luguru Verbal Structure*

S/N	Slot	Derivational/Inflectional affix
1	Pre-Subject	Negative Particle or Relative Pre-prefix
2	Initial	Subject Marker (SM) (verbal prefix)
3	Post-subject	Modal Elements
4	Formative	Tense/Aspect Marking
5	Pre-root	Object Marking

6	Verb Base	Lexical Verb Base/Stem/Radical
7	Post-verb base	Extension
8	Final	Final Vowel
9	Post-final	Plural Marking and Imperative/TAM Marking

Source: Mkude (1974, p.77)

Luguru, like other Bantu languages, has a complex agglutinating morphology. It is possible to arrange the morphemes of verbs in this language in a strict linear order into slots or position classes. Morphemes occur in a fixed order and when these morphemes are added to the root, they extend both the form and meaning of the root. Each of these positions reflects a morphological function.

Verb Elements

This part presents the elements of the verb and their functions, as in Table 2.

Table 2: *Luguru Verb Template*

1	2	3	4	5	6	7	8	9
Pre-SM	SM	Post-SM	T/A	OBJ	ROOT	EXT	FV	Post-FV

Pre-Subject

The pre-subject has two possible morphemes which are commonly marked. One is the primary negative and another is the bound (object) relative (Nurse, 2008). Although, this is true with Luguru, it is applicable only in relative tense but not in absolute tense. The slot is occupied by a negative marker (1a) and a relative marker, the shape of the relative agrees with the class of the head noun (1b).

1) a) Affirmative: *tutsosang'ana ilupfi* 'we will work tomorrow'

Negation: **ng'a***tutsosang'ana ilupfi* 'we will not work tomorrow'

b) Relative: *Ing'anda ila yambonile tsaa ikala ng'ulu*

Ing'anda ila **i-** *a- m- bon -ile tsaa i-kala nk'ulu*

House that 9REL- SM- OBJ- see- PERF early SM-be big

'That house which saw earlier was big'

Subject

The second slot is occupied by the verb SM, filled by a set of morphemes showing compulsory concord with the subject preceding the verb. The SM indicates that the verb is singular or plural. It also shows agreement with nouns, adjectives and objects. While it may be the second element in the relative tense, it is always the first element in an absolute tense. The subject agreement is almost the same in all cases and both tenses except that the relative subject agreement for second and third person singular (i.e. *u- and a-)* differs from the non-relative ones (i.e. *ku- and ka-*), as illustrated in sample 2.

(2) a) Non-relative

(i) **ka***- O- chi- som- a chi- tabu chose chino*

3SG- T/A- OBJ- read-FV CL7 -book all this

'He read this entire book'

(ii) **ku- o***- hulik- a ku- imba kwewana*

2SG-T/A-hear-FV INF-sing of children

'You are listening the singing of the children'

b)   Relative

(i)   **u**- ng'ali   **u**- O- tend-a   choni?

2SG - still   2SG- T/A-do- FV   what

'What were you doing?'

(ii)   yuni **a**- bak - ile   langi ing'anda ino?

Who 3SG-paint-ANT   colour house this

'Who has painted this house?'

Post-subject

While in most Bantu languages the 3rd slot is for negation, in Luguru it is for the locative modality *-ka-*
'go' specifically the subjunctive mood, *-tsa-* 'come' and the conditional *-ng'a-* 'if'. Subjunctive mood in
Luguru is distinguishable by four features; final vowel *-e,* relative subject agreement, locative modality *-
ka-,* and lack of overt tense marker (Mkude, 1974). However, these morphemes are not always pre-
sent in the construction as for locative which is claimed to be dependent mood. The conditional mor-
pheme occurs only in conditional sentences as illustrated in Sample 3.

3)   a)   *a-* **ka-** *mu- andik -e   tsibaluwa*

SM-MOD-her- write- FV   letters

'He should go to write her letters'

b)   *ka- tsa- kwandik -a   tsibaluwa*

SM -MOD- write - FV   letters

'He might write letters'

c)   u- **ng'a**- ni- langus-a   inzila   ni- tso -ku- ing'-a   sendi

2SG-CON-OBJ- show- FV   way   1SG- T/A-OBJ-give-FV   money

'If you show me the way, I will give you money'

Tense/Aspect Formative

As in most Bantu languages, the 4th slot is occupied by morphemes marking tense and aspect. The
morphemes vary structurally depending on the tense/aspect they mark. In Luguru, some of the tense
and aspect formatives seem to be fused together. However, this slot is occupied by only three forma-
tives: *-O-, -o-* and *-tso-*. These formatives co-occur with other formatives to form the meaning of the
tense marked. Also these formative are not limited to one meaning because the action performed in
the past, present or in the future must be associated with time (progressing, habitual, completed,)
which are elements of Aspect.

Object

In the verb template, the fifth slot marks the object which is immediately after T/A formatives. In Lu-
guru, the object can be regarded as both an agreement marker (since the object of the verb is reflect-
ed in the verb) and as pronominal (since they represent or behave on behalf of the nominal). The verb
stem has to be attached with a pronominal concord that will occur in concordial relationship with the
noun functioning as an object. There are different pronominal object concords for each noun class to
enable verbs agree with noun from different noun classes.

Object markers may function as markers of definiteness, specificity, or emphasis. The object marker is
integrated within the verb form and it may or may not be included in the verb form. The object displays
various forms related to person; first, second and third persons both in singular and plural forms. This
is as given in sample 4.

4)   a)   *Mloka   ka- o- **u**- eng' -a   iwana   ipfidyo*

          Mloka   SM- T/A-OBJ- give- FV   Children   food

           'Mloka is giving children food'

     b)   *Mloka ka- o- **pf-** ing'-a   iwana   ipfidyo*

          Mloka   SM-T/A-OBJ-give-FV   children   food

           'Mloka is giving food to children'

Root

The root, which is the most basic form of the verb and constitutes morphological and semantic core of the verb, occupies slot 6, The verb root, which cannot be used without a final vowel, is the nucleus of the verb complex to which various prefixes (pre-root) and suffixes (post-root) may be attached (Rugemalira, 2005). In Luguru, the canonical structure of the verbal root is consonant-vowel-consonant - (vowel-consonant -)*. Whereby (vowel-consonant -)* indicates an optional series of one or more sequences of vowel-consonant. However, Mkude (1974) classifies the roots into three sub groups:

     a)   Vowel initial stem e.g. -im-a (stand)

     b)   Monosyllabic stem e.g. -f-a (die),-j-a (eat)

     c)   The rest e.g   -lim-a (dig)

This classification is very important in the study of T/A system in Luguru because tense and aspect formatives depend on the structure of the verb. The vowel initial and monosyllabic stems need the supportive marker *-ku-* or an object marking for the choice of which formative to be used.

Extension

As Nurse (2008) observes, there is a large group of verb suffixes in Bantu languages which are known as extensions occupying slot 7. However, only few suffixes that are not extensions occur in the slot since most extensions express valency-changing derivational categories.

Traditionally, extensions are regarded as derivational suffixes contrary to tense and mood suffixes which are regarded as inflectional (Rugemalira, 2005). The common extensions in Luguru are given in Table 3. Though, some extensions such as reciprocal *-an-,* Reversive *-u/o-* inceptive *-h-* and static *-am-* exist, are not common in the language and occur only with some verbs.

Table 3: *Summary of the Verbal Extensions*

S/N	MEANING/EXT	FORM(SUFFIX)	EXAMPLE
1	Applicative	-il-/el-	ghend-el-a 'go for'
2	Causative	-its-/ets	ghend-ets-a 'cause to go'/drive
3	Passive	-(ig)w-	ben-igw-a 'be broken'
4.	Stative	-ik-/-ek-	ben-ek-a 'be broken
5	Intensive	-is/es-	loNg-es-a 'speak verily

Source: Mkude (1974, p.84)

Final Position

This position is occupied by an obligatory element in the verb structure. In Luguru, the slot can be occupied by one of the following morphemes –*a* tense/aspect or neutral or indicative (5a); -*e* subjunctive (5c); and -*ile* anterior (5b). In Luguru, the default final vowel (-*a*) co-occur with other T/A markers for marking Tense/Aspect system (Sample 5d).

5)   a)   *ghul -a*

Buy- FV

'Buy'

        b)   *a- ghul -ile*

SM-buy- ANT

'He has bought'

        c)   *u-ghul-e*

SM- buy-SUB

'You should buy'

        d)   *n- **o**- ting'an **-a**   naye*

SM-T/A- meet-FV him

'I meet him/am meeting him/ will meet him'

Post-Final Position

The post final position which is the last slot in the template is occupied by habitual aspect *-gha* and a plural addressee marker **-ni.** While Mkude (1974)   and Nurse (2007) identify the habitual morpheme as *-agh-* and *-agha* respectively, this study identifies *-gha*.   Habitual marker with the vowel (noun) consonant structure, according to Rugemalira (2010), is an affix in the verb extension system and the one with the structure (noun) consonant vowel is a clitic, and emphasizes that an affix has to follow the general rule of verbal suffix ordering which places the vowel (especial the passive -u-), which is the last in the series after vowel-consonant suffixes, have been attached.   In Luguru, there are two pieces of evidence to justify *-gha* as a clitic with consonant vowel structure (Rugemalira, 2010).

The first evidence is passive formation. In Luguru, the formative *-gha* occurs after the passive (-i(g)w-) and when it is placed otherwise, the construction becomes ill-formed. If the *-gha* was an affix; it would conform to affixation rules so that the constructions (in 6b and d) are well formed.

6)   a)   *lim-   igw- a -gha*

        Cultivate- PAS-FV-HAB

        'Be cultivated always'

        b)   **lim- agh- igw- a*

         Cultivate-HAB- PAS -FV

         'Be cultivated always'

        c)   *beg- igw -a- gha*

        Break-PAS-FV-HAB

        'Be broken always'

        d)   **beg- agh -igw-a*

        Break-HAB-PAS-FV

        'Be broken always'

The second evidence is the inflection of the final vowel in subjective constructions before the habitual (Sample 7). The subjective -*e*, however, assimilates the vowel in the habitual formative -*gha* to -.*ghe*

7)   a)   *u- som- e- ghe*

SM-Read-FV-HAB

'You read continuously'

b)   *u- gum- e- ghe*

SM-pour-FV- HAB

'You pour (it) repeatedly'

On the other hand, the plural clitic -*ni* occurs in the imperative and in the 1st person plural of the hortative constructions. This element, which is not part of the person-concord system, indicates that more than one person, is addressed. When the clitic -*ni* is used, the final vowel does not assimilate to the following addressee marker vowel -**ni** (samples 8a and 8b). The imperative constructions can take optional locative modality morpheme (8c).

8)   (a)   *ni- o- m- lams- a-* **ni**

SM -T/A-OBJ- greet- FV-PF

'I am greeting you all'

(b)   *m- ong- el-   a-* **ni**

OBJ-tell- APL- FV -PF

'tell them'

(c)   **ka**- *m- long- el- a-* **ni**

(MOD)-OBJ-tell- APL- FV- PF

'Go and   tell them'

Problem

There are several studies on tense and aspect in most Bantu languages including Swahili (Lindfors, 2003), Rutara (Muzale, 1998), Chasu (Mreta, 1998), Kinyakyusa (Lusekelo, 2007), Ikihehe (Mtavangu, 2008), Bantu languages (Nurse, 2008) and many others. All these studies described the behaviour of tense and aspects in Bantu languages focusing on forms and order of tense and aspects within the verbal/clause structure. However, the findings of these studies could not be generalized because each language has its uniqueness (also see Maho, 2007; Mkude, 2004 on the problem of overgeneralization). It is on these grounds that the current study is carried out so as to explore the uniqueness of Luguru T/A.

Furthermore, previous studies in Luguru tried to describe T/A system. However, there have been inconsistencies in the manner scholars have analyzed T/A of the language and how they are marked. For example, Mkude (1974) analyzed progressive aspect as being marked by doubling the vowel of the subject. This analysis seems unsatisfactory since in other constructions the progressive aspect is marked by either auxiliary verb or by other forms in the morphology of the main verb.

In trying to solve the problem of aspect, Nurse (2007), paid no attention to the doubling of the subject vowel in marking progressive; instead he insisted on auxiliary marking and morphological marking, which is textual dependence. On the whole, both Nurse (2007 and Mkude (1974) do not clearly describe some basic issues on T/A including *tsaa* and *maa.* The current study explores whether *(tsaa* and *maa* are inflectional morphemes or auxiliaries marking T/A, in other words, the study investigates

the differences between the morphological forms that mark tense and those which mark aspect in Lu-guru.

The study objective was to provide a systematic description of T/A system in Luguru. Specifically, the study intended to identify morphological forms that mark temporal reference in Luguru and to classify morphological forms that mark tense and aspect in Luguru.

The Concept of 'Tense' and 'Aspect' and related theories

There are varied interpretations of terms T/A among linguists. Some linguists consider the term 'Tense' as similar to 'Aspect' and they use TAM to refer to Tense, Aspect and Mood; while other scholars (Muzale, 1998, Mreta 1998; Lindfors, 2003; Lusekelo, 2007) recognize the distinction between T/A. The discrepancy regarding the concepts 'Tense' and 'Aspect' relies on the structural differences of the languages. The differences emerging from grammatical analysis of languages have forced each language to define the terms differently depending on how T/A operate.

While Comrie (1985,) defines tense as grammaticalised expression of location in T/A as grammaticalised expression of 'internal temporal constituency (concepts adopted in the current study), Nurse (2008. p. 80) defines tense as the different representations of the time containing the event and aspect as the differing representations of the time contained in the event.

From the two definitions, it is clear that tense represents time that contains the event and aspect represents various ways in which a verbal action is visualized. As Dahl (1985) and Muzale (1998,) observe, tenses are typically deictic categories in the sense that they relate time at the moment of speech. Aspects, on the other hand, are non-deictic categories. Hence, the term deictic centre is significant in the current study for classifying tenses in Luguru. Three classes of tenses are identified in the language namely past, present, and future. This means that situations are located before (past), after (future), or during the deictic centre (present).

Considering aspects as non-deictic categories that is not concerned with relating the time of the situation to any other time-point but rather with the internal temporal constituency of one situation (Dahl, 1985), this study has identified four aspects namely; habitual, progressive perfect and persistive.

The concepts of T/A comprehensively explained in the theories of cognitive approach by Guillaume (1883-1960) and a linear approach by Reichenbach (1947). Guillaume looks at time as chronogenesis whereas the time is viewed as either ascending Time or Descending Time. Ascending time is referred to mind working in time, thus giving the external view of an event (incomplete), while descending time is the time that works in the mind, hence representing the internal view of an event (complete). Basing on these facts, one can conclude that the memory which marks past is viewed in Descending Time and imagination which explore the present and future is viewed in an Ascending Time.

Michaelis (2006), observe that, in the model, tense meaning can be represented as a sequence of the three time points being past, present and future time. He emphasized that tenses do not express the relationship between the temporal zero-point and the time of the state of affairs described, instead tenses express the relationship between speech time (S) and another interval of interest which Reichenbach (1947) called Reference time (R) and Event time (E), as given in Figure 1 .
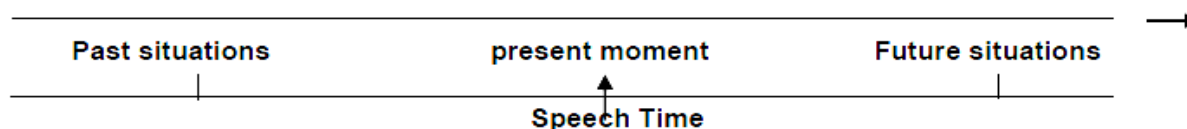

Figure 1: Tense and Aspect Linear Model

Source: Lusekelo (2007)

Cognitive (Guillaume, 1960) and Linear approach (Reichenbach, 1947) have been debated for a long time in the analysis of T/A systems in languages. For example, it is argued that the Linear Model by Reichenbach (1947) was not capable of expressing all forms of tense. Nevertheless, his views on tem-

poral semantics are highly significant in contemporary natural language semantics, and his inspired ideas are primary for the recent work.

In the cognitive approach the role of a linguist specializing in T/A description, is said to identify the T/A forms and expressions, find their positioning in human mental ability, trace their relationships and look into their use in real life in the society concerned (Lusekelo, 2007). This assumption can be interpreted that one cognitively locates T/A forms in mind after analyzing sub systems (phonology, morphology and syntax) tracing the forms, functions and meanings as discussed through cognitive approach. In this study, T/A formatives in Luguru were identified and their functions analyzed.

Even though, it is clear that no theory is capable of capturing all items in a language (Mreta, 1998), the current study found it essential to employ the linear approach of T/A in the description and analysis of Luguru. There are two reasons for analyzing T/A in the present study through linear model. The first one is that the three relations pointed out in the model (R, E and S) are the basic elements of T/A temporal structure (Muzale, 1998,). Therefore, the current study analyzed tense that is based on the temporal relations mentioned.

The second reason is that tenses are typically deictic categories and aspects are non-deictic categories in that they relate time points to the moment of speech. The time intervals presented in the model locates the event in universal time which gives past, present and future tenses. According to Hachmack (1957), the tenses serve the function of locating events in time. It accounts, for example, the differences in Luguru constructions *Mloka kokuuka* 'mloka is leaving' and *mloka tsaa kakuuka* 'mloka left'. The model encompasses morphological aspects namely; a system of tenses encoded in the verb morphology and semantic aspect dealing with the temporal location of the event or event depicted in one or more sentences. As Muzale (1998) observes, aspect is the realization of time contained in the event. This suggests that aspect is embedded in an event and thus it is possible to have aspect in the tense and not the opposite. For example, in Luguru present progressive aspect is contained in present tense and marked by formative (-o-) as in *ka-o-lim-a mumghunda* 'he is cultivating in the farm'.

Methodology

The primary data for this study were collected from Matombo and Mgeta ward, Morogoro Rural District in Morogoro Region. The target population for the study included adult native speakers of the language from Matombo and Mgeta wards of Morogoro Rural District, aged between 30 and 70 who have been residing in the villages throughout their lives. Five participants (three from Matombo and two from Mgeta) were involved in this study.The Researcher also used the assistance of three native speakers from Pioneer Bible Translators (PBT) aged between 30 and 40 years old who acted as translators and helped in cross checking the correctness of the data collected. This was to ensure that the language data collected were original and natural.

The data for this study were obtained by different methods. Primary data were obtained through group discussion, direct interview, and questionnaires. The questionnaire used for this study was TMA (Tense, Mood Aspect) questionnaire developed by Dahl (1985). The researcher adapted this to suit the culture of the study area. The research technique of administering the questions was guided one. The questionnaire was worked out by participant and the researcher in elicitation form where by the researcher read the questions in Kiswahili and participants answered in Luguru. Then, the researcher recorded down the answers in the spaces given in the research questionnaire. In addition, the participants were asked to write down answers in their questionnaires in Luguru for later comparison. The secondary data were obtained from documentary review which included story books written in Luguru and chapters in New Testament translated into Luguru.

This study followed the standard procedures for social research, whereby permission was granted by the University of Dar es salaam and Morogoro Regional Commissioners Office. All participants in the study willingly agreed to participate and confidentiality of the participants was strictly observed.

Data analysis procedures for this study were carried out as follows. Firstly, the identification of various T/A formatives so as to describe the distinction between them was done in oral and written texts. Oral texts were transcribed into normal orthography and IPA symbols where necessary. This was done in the field so as to cross-check errors which might have occurred among thee informants. Secondly, the classificaion of morphological forms of tense and aspect in Luguru constructions was done using linear approach as explained in the section on the concept of T/A and related theories.

Findings and discussion

As observed in the Luguru verbal structure, all morphological formatives of T/A are expressed by both prefixes and suffixes. Tense is classified into three temporal perspectives; past, present and future (Botne 2012 & Kanijo 2012). In the case of Luguru, four tense categories; present tense (-), remote past tense (*tsaa -O-*), near past (*-O-*) and future tense (*-tso-*) were identified .The study also identified aspect into four major categories which include habitual (*-gha*), progressive *(-O-),* persistive (*-ng'ali*) and perfect/anterior (*maa* and *-ile*).

The Luguru T/A markers are summarized in Table 4 using the verb root *-ghula* 'buy' and SM *ka-* 'S/he'. In the table, formatives are indicated in their appropriate slots except those which are marked periphrastically by auxiliaries which will be discussed in the following sections.

Table 4: *Tense and Aspect Formatives in Luguru*

Pre-in	In	Pre-root Forms	Verb Root	Post –Root	
Pre-SM	**SM**	**T/A$_4$**	**VR**	**FV**	**T/A$_9$**
	k-	-o-	-ghul-	-a	
	ka-	-ø-	-ghul-	-a	-gha
ng'a-	-ka-	-ø-	-ghul-		-ile
	ka-	-tso-	-ghul-	-a	

Examples given in Table 4 showing T/A formatives in Luguru are illustrated in Sample 9.

9) (i)   *k-**o**-ghul-a*   'He is buying/he buys'

   (ii)   *ka-**O**-ghul-a-**gha***   'he used to buy'

   (iii)   *nga'ka-**O**--ghul-**ile***   'he did not buy'

   (iv)   *ka-**tso**-ghul- a*   'he will buy'

   (v)   *ka-**O**-ghul-a*   'he bought'.

While Besha (1989) asserts that in Kiswahili each form carries one function:- Muzale (1998) analyzed the final vowel (*-**a***) as one of the morphemes which interact with other T/A forms to mark aspectual meaning of the construction in Rutara languages. Following the meaning -to-form/function viewpoint, it was found that one morpheme identified performs one function on marking tense; however, same as in Rutara, some aspects are marked by both tense formative and the final vowel as discussed in the following sections and summarized in Table 5:

Table 5: *Functions of T/A Formatives in Luguru Constructions*

AUX	SM	T/A$_1$	R	FV	T/A$_2$	Function	Example	Gloss
	k-	-o-	-lim-		-a	PROG	Kolima	He cultivates/ he is cultivating
-ng'ali	ka-		-lim-	-a		PES	ang'ali kalima	He is still cultivating
	ka-	-O-	-lim-	-a		P1	Kalima	He cultivated
tsaa	ka	-O-	-lim-	-a		P2	tsaa kalima	He cultivated (then)
	ka-		*-lim-*		*-ile*	ANT	*kalimile*	He has cultivated
maa	*ka-*		*-lim-*	*-a*		ANT	*Maa kalima*	He has cultivated already

ka-	-tso-	-lim-	-a		FUT	*Katsolima*	He will cultivate
ka-	-O-	-lim-	-a-	-gha	HAB	*Kalimagha*	He used to cultivated

Tense Forms

In Luguru a linear approach, which views tense as grammaticalised expression of location in time diverging from present moment to either future or past, was used. This approach applies Reichenbach model which has been used by many scholars including Comrie (1985), Besha (1989), Mreta (1998), Lindfors (2003) and Lusekelo (2007). Basing on the model, this study identified four types of tenses (remote past, near past, future and Present) as presented in Figure 2.
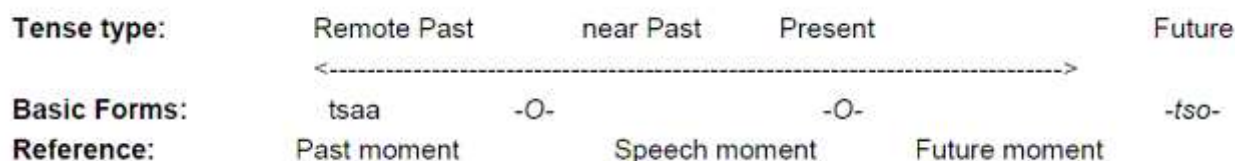
Tense type:	Remote Past	near Past	Present		Future
	<-->				
Basic Forms:	tsaa	-O-	-O-		-tso-
Reference:	Past moment	Speech moment	Future moment		

Figure 2: Luguru Tense Formatives and Types

Remote Past Tense

The remote past (P2) in Luguru refers to an event or action which took place yesterday to infinite in past from the moment of speech. While Nurse (2007), identified remote past morphemes (*tsa…-O-*) in Luguru, this study opposes the treatment of *tsa-* 'come' as a pre-subject morpheme for marking remote past, instead it identifies that the tense is marked by a combination of both a compulsory adverbial *tsaa* and morphological formative (-O-) marked on the 4th slot of the main verb.

There are three reasons to why this study disproved the conclusion by Nurse (2007) on the status of *tsaa.* The first reason is that other particles can come in between as illustrated (10) which is not the case in the verbal structure which takes only the SM immediately after the pre-subject if present.

10)   a)   *tsaa   ka-O- som- a   ichitabu chino*

Earlier SM-P2-read-FV   book   this

'He read this book long time ago'

b)   ***tsaa   Maa   ka- O- som- a ichitabu chino***

Earlier   already   SM-P2- read-FV   book   this

'He had read this book already'

c)   *tsaa   kaa ka- O- som- a ?*

Earlier if   SM-P2-read-FV

'Had he read?'

The second reason is replacement test. As Muzale (1998,) observes, the pre subject slot in Rutara is occupied by copula *(ni-)* and the negative (*ti-*) which are mutually exclusive in the slot. This situation applies to Luguru. As it was shown in the verb template, the pre-subject slot is occupied by the relative and negative markers which cannot co-occur. The co-occurrence of *tsaa* with negative marker *ng'a-* proves that the term is not a pre-subject; instead it is a different word.

11)   a)   *tsaa   ni-O- tingan-a naye*

Earlier SM-P2-meet-FV   him

'I met him long ago'

b)   *tsaa   ng'a- na-O- tingan- e   naye baye*

Earlier NEG-SM-P2-meet-SUB him never

'I never met him before'

Lastly, it was found that *tsaa* cannot be used with adverbial of time referring to past since its meaning and those adverbials seem to be interconnected hence, marking it with adverbials of time is double marking.

12)   a)   ***tsaa***   *ka- O- ndik -a   ibaluwa*

Earlier SM-P2-write-FV letter

'He wrote the letter long ago'

b)   *****tsaa***   *ka-O- ndik -a   ibaluwa mwande*

Earlier SM-P2-write-FV letter long ago

'He wrote the letter long time ago'

Near Past

The Near Past is realized by the formative (-O-) in affirmative constructions (13a & c) and formatives (-O-…-ile) in the negative constructions (13b & d). The meaning of the Near Past (P1) can be defined as tense that covers events or actions that occurred earlier on the same day or night or sometimes the previous day. Therefore, events represented by this tense are recorded in immediate memory and their results might still have consequences in the current situation.

Cognitively, this tense looks like an extended aspect that has a temporal reference perfective.

(13)   (a)   *mndewa ka-**O**-ghul-a   ing'owo*

King   SM-**P1**-buy FV banana

'The king bought banana'

(b)   *mndewa ng'a- a- **O-** ghul-**ile** ing'owo*

King   NEG-SM-**P1-** buy-PERF banana

'The king did not buy banana'

c)   *ka- **O**- som -a   itchitabu chino*

SM-**P1**-read-FV book   this

'He read this book'

d)   *ng'a- a- **O**- som -**ile**   itchitabu chino*

NEG-SM-**P1**-read-PERF book this

'He did not read this book'

Present Tense

While, Lusekelo (2007) defines present tense as any situation which a speaker associates with the perspective of time of communication or expresses events that take place at the time of speech; Mtavangu (2008) presents present tense as a form that refers to the time of an event contemporaneous with the time of utterance. These definitions are disputed by Nurse (2008,) because of their limited use. The author refers to present tense as a situation representing the period between past and future on the timeline. In Luguru, the present tense which can be defined as any event between past and future is morphologically unmarked. The only formatives present in this verb structure are aspectual markers.

According Bybee *et al.* (1994, as cited in Lindfors (2003) present tenses, progressive aspect and imperfective aspect are cross-linguistically originated from the same lexical sources. The form formative (*-o-*) functions as progressive aspect, habitual aspect and future tense depending on the context. Therefore, the sample 16 can be interpreted differently depending on the context of speech and sometimes the adverbials used.

(14)   a)   *n-* ***o-*** *ting'an* ***-a*** *naye*

SM-T/A-meet-FV him

'I meet him/am meeting him/ will meet him'

b)   *imwana k-* ***o-*** *ghend-**a** Matombo*

Child   SM-T/A-go -FV Matombo

'The child goes/is going/will go Matombo'

Future Tense

In Luguru, future tense signals any situation or event which a speaker associates with the perspective of time to come. It denotes events that will take place after speech time which can be later, tomorrow or some years to come. It is marked by the forms (*-tso-*). While, Mkude (1974) calls *-tsa-* a modal verb anticipating possibility and a remnant of the verb 'come', this study found that there are two different forms . The first *-tsa-* modal verb is slotted on the third slot in the verb template and it anticipates possibility. The second is based on Muzale's (1998) observation that the lexeme *-iza/-ija- 'come',* same to -**tso-** in fourth slot in Luguru, indicates the early stage of developing a new marker for tense and/or aspect which is verified to be true in this study. See samples 15 (a) and (b).

(15)   (a*)*   *mwalimu   ka-* ***tso-*** *m- tow-a   imwana*

Teacher   SM-FUT-OBJ-hit-FV child

'The teacher will hit a child'

(b)   *tu-* ***tso-*** *ghul- a   ing'anda ng'ulu*

SM-FUT-buy-FV   house   big

'We will buy a big house'

However, as discussed in the previous section, future tense can also be marked using the present progressive formative (*-**o**-*) depending on the context or with temporal adverbial. This is illustrated in Sample 16.

16)   a)   *k-* ***o-*** *ghend-a   ilupfi*

SM-T/A-go-FV tomorrow

'She will go tomorrow'

b*)*   *tokuuka sambit-* **o** *-ku -uk- a   sambi*

SM-T/A-INF-leave-FV soon

'We will leave soon'.

Aspect Forms

This section discusses aspect categories of Luguru in terms of their forms, meaning and functions. The identified two types of aspectual markers are *completive aspects* which indicate that an event is complete by the moment of speech such as anterior/perfect and *incompletive aspects.* These refer to aspects that mark incomplete events, such as habitual, persistive and progressive. Therefore, in Luguru, four aspects have been identified. There is a great degree of interaction between aspectual markers and tense markers.

Habitual Aspect

Muzale (1998) and Mkude (1974) define habitual as a form used to mark events or facts that are happening regularly, frequently, repeatedly and/or continuously as an attribute of the subject. They maintain that it expresses a state of affair and long established facts as opposed to progressive aspect which marks ongoing events or facts pertaining recent realization. There are three aspectual forms in Luguru namely; present, past and future habitual. These are indicated by different combination of forms as follows.

The present habitual aspect is marked by the formative -**gha**. It is used to mark events which the speaker realizes that are taking place every day or a repeated event (Sample 17).

(17)   a)   *mayi   ka- ghul-a-* **gha**   *ipfidyo*

mother   SM-buy-FV-HAB food

'The mother buys food always'

b)   *imwali   ka-pfing'-a-***gha***   iwana ipfidyo*

The girl   SM-give-FV-HAB children food

'The girl always gives the food to children'

In Luguru, the combination of the auxiliary *-ng'ali* and (-O-…-gha) is used to express situations which are continuously occurring in the past; therefore, it is a past habitual aspect (Sample 18). However, it should be understood that the SM in the auxiliary verb always takes the relative subject agreement while the subject in the main verb is the absolute subject agreement.

18)   (a)   *tu-* **ng'ali**   *tu-* **O***- som-a-* **gha**

SM-still   SM-T/A-read-FV-HAB

'We used to read regularly'

(b)   *a-***ng'ali***   ka-* **O***- lim-a* **-gha***   imumghunda*

SM still   SM-T/A-dig-FV-HAB   in the farm

'He used to cultivate in the farm regularly'

Lastly, the combination of *(-tso-…-gha)* is used to express situations which will continuously be occurring in future; therefore, it is a habitual aspect in future. It is morphologically marked by a prefix *-tso-* occupying a slot before a subject and a suffix *-gha* occupying a slot after a final vowel as given in Sample 19

19) a) *tu- **tso**- ghul-a- **gha***

SM-T/A-buy-FV HAB

'We will be buying regularly'

b) *ka- **tso**- ku- imb- a -**gha***

SM-T/A-INF-sing-FV-HAB

'She will be singing regularly'

Progressive Aspect

Dahl (1985) and Lindfors (2003), define progressive aspect as an on-going activity which is in the relationship between the dynamic situation and a point in time and that naturally occurs with punctual temporal reference. In Luguru, it expresses an activity which is ongoing at the reference time and it can occur with the past tense markers present progressive aspect is morphologically marked on the 4th slot by the formative (-**o-**) as shown in 20 below.

(20) *noghenda kughula ichidyo*

*ni- **o**- ghend-a ku-ghul-a ichidyo*

SM-PROG-go-FV INF-buy-FV food

'I am going to buy food'

The progressive form has other two functions: one is used to mark events or states which would be expressed as basic unmarked constructions expressed under Section near past (See Sample 21a). Second, progressive is used to mark future events. According to Muzale (1998), when progressive form is used, it normally means that the decision has already been made, and the action will be effected or implemented at the appropriate time as opposed to the normal future formative such as (-*tso*-) (Sample 21b).

21) a) *n- **o**- noghel-a ku- nu- a ichai*

SM-PROG-love- FV INF-drink-FV tea

'I like to drink tea'

b) *k- **o**- lim- a mghunda gwetu*

SM-PROG-dig-FV Farm ours

'He will cultivate/cultivates our farm'

Also progressive aspect is used with past tense. Different from present progressive, past progressive is marked with the combination of both the auxiliary verb -*ng'ali* and the Near Past formative (-O-) as illustrated in Sample 22.

22) a) *a- **ng'ali** ka- O- ku - imb- a*

SM-still SM-T/A-INF-sing-FV

'She was singing'

(b) *ni- **ang'ali** ni- O -ku- andik- a tsibalua*

SM-still SM-T/A-INF-write-FV letters

'I was writing letters'

Persistive Aspect

Muzale (1998) defines the term persistive as an event that persists from a non-present time to the present and it is also likely to extend to the future (if not interrupted just after the speech event). In Luguru, persistive is a marked auxiliary -*ng'ali* as given in (23a and b). However, if the term -*ng'ali* is omitted,

the construction becomes ill formed and if used with P1 formative (-*O*-), it becomes past progressive as in Sample 22.

(23)   a)   *a-**ng'ali**   ka-ku- andik-a tsibalua*

               SM-still   SM-INF-write-FV letters

               'He is still writing letters.'

    b)   *tu-**ng'ali**   tu- lim-a   imghunda*

               SM-still   SM-dig-FV   the farm

               'We are still cultivating in the farm'

Anterior

The anterior aspect refers to a completed action or an event whose beginning and completion are specified. The perfective aspect is taken to be different from imperfective one, which indicates an on-going or repeated event. In Luguru, the perfective is marked with the formative *(-ile)* which has different realizations (-*e* and -*ele*) brought about by Imbrication process which is more phonologically conditioned. The stem with one syllable takes -*e,* or -*ele* (for glide), disyllabic stems take the -*ile* and the rest take -*e* with a lengthened vowel preceding the final consonant as in Sample 24.

24)   a)   *tu- nw- **ele***

               SM-drink-ANT

               'We have drank'

    b)   *tu- ghend-**ile***

               SM-go-ANT

               'We have left'

    c)   *a- huliik -e*

               SM-hear-ANT

               'He has heard'

However, this kind of marking a complete event is not used in absolute tense rather it is used commonly in relative tense. Comrie (1985) defines absolute tenses as the one that take the present moment as a deictic centre – the time of utterance. The three absolute tenses are 'present', 'past' and 'future'. Relative tenses are defined virtually to an additional reference point which does not necessarily correspond with the moment of utterance. In Luguru absolute tense, the subject is the first element of the verb structure (see Samples 26a and b) while in the relative tense, subject (subject relative agreement) can be preceded by negative particles or a relative marker (Mkude 1974,). The absolute tense marks the perfect by auxiliary *maa* 'already', the near past formative (-*O*-) and the final vowel (-a). As Muzale (1998) and Nurse (2008) reveals, the word *maa* derives from the verb **mala* 'finish' which was grammaticalized to anterior and past.

(25) Relative tense

    a)   *ing'owo   ya- a- ghul -**ile***

               Banana   REL-SM-buy-ANT

               'Banana   which he has bought'

    b)   *ichiya a- chi- tul   -**ile**   imwana*

               Pot   SM-OB-breaks-ANT a child

               'The child has broken the pot'.

(26)   Absolute tense

    a)   **Maa**   ka-**O**-som **-a**   ichitabu chino

            Already   he-P1-read-FV   book this

            'He has read this book already'

    b)   *Imwana* **maa**   ka -**O**- *tul-* **a** *ichiya*

            Child   already SM-P1-break-FV pot

            'The child has broken the pot'

Conclusion

The purpose of this study was to describe the tense and aspect systems in Luguru language spoken in Morogoro region specifically in Morogoro urban and rural, Kilosa and Mvomero Districts. This aim was achieved by answering the research questions: What are the morphological markers for tense and aspects in Luguru, and how are the morphological forms for tense and aspect classified in Luguru? Responding to the first question, the examination of the tense and aspect system in Luguru revealed that tense and aspect are marked both morphologically and periphrastically by auxiliaries.

The findings indicate that morphological forms that mark tense and aspect in Luguru support the basic principle described by Besha (1989, p. 154) regarding an analysis of the tense and aspect in Shambala. This principle "Every identifiable grammatical form is assumed to have basic meaning." complement Muzale (1998) who revealed that grammatical forms are both external and internal arrangement of the language system, whereby the external deals with T/A formative and the internal deals with their meaning.

This study identified the following T/A formatives inflected on the verb; near past (-O-), future (-tso-), progressive aspect (-o-), habitual (-gha), anterior (-ile), negative past *(-O-…-ile)* and future habitual (-tso-…-gha). Also, there are those whose meanings become complete by auxiliaries; they include: past habitual (-ng'ali -O-…-gha), past progressive (-ng'ali -O-…-a), remote past (tsaa -O-…-a) and absolute anterior (maa -O-…-a).

It was found that all formatives in slot four which do not co-occur with either formative -ile or -gha take the default final vowel -a. The assumption that tenses are prefixes and aspect are suffixes may be argued for and against. In Luguru, the progressive aspect is marked on the pre-root position by the formative (-o-) which supposes that aspects can also be prefixes. On the other hand, the relative perfective -ile which replaces a final vowel and habitual -gha occur after final vowel can be related to suffixes, even though, the habitual form seems more a clitic than a suffix.

It was shown that the formative -ile has a different realization depending on the structure of the verb and it is used only with the relative tense to mean a completion of an event. Hence, perfect, when used in a negative construction, it gives negative meaning in past and not in present.

Further, the study analysed the adverb *tsaa* 'early' in relation to –tsa- 'come'. While Nurse (2007), identified them as one element interpreted as remnant of -itsa 'come', this study found that the two terms are different and have different interpretation. The former, when used in the construction, is always the first element and it gives the meaning remote past and the latter is a modal verb predicting possibility. Moreover, it was recognized that the auxiliary *maa* 'already' is the remnant of the proto-Bantu verb *mala* 'finish'. This auxiliary is used only with an absolute tense to mark anterior present aspect.

Responding to the second question, it was found that there are those which occur singly in a single - word, those which combine in a single verb and those which occur in a compound verb (auxiliary and infinitive). While those which occur singly mark either tense (-tso- and -O-) or aspect (-o-), those which occur in combination (the formatives on the left) mark tense and the ones on the right (habitual **-tso-…-gha**) and Negative past **(-O-…-ile)** mark aspects.

The formatives in the compound verb is guided by the principle that, normally, in a compound verb the morphological element that carries tense will be in the auxiliary and aspect in the main verb (Muzale

1998). It was found that only formatives in slot 4 in the main verb are for tense while the auxiliary and formative in slot 9 mark aspects contrary to the principle.

Generally, the language differentiates tenses from aspects. There are four types of tenses: remote past, near past, present and future. However, the present tense, which forms the deictic center, is not marked. Also four aspects which include progressive, habitual, anterior and persistive were identified. With Anterior aspect, it was observed that there are different markers for the relative tense and markers for absolute tense.

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