The morphological evolution of the *-ile* suffix across Bantu languages in the Nyasa-Tanganyika corridor

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Abstract

This paper describes the morphological evolution of -ile suffix across four Bantu languages selected from the Nyasa-Tanganyika corridor. The suffix -ile which is traditionally an aspect (perfective) marker is changing and becoming amenable to different roles across Bantu languages. This poses a challenge in specifying its roles as a tense and/or an aspect marker unless attention is paid to an individual language. The findings presented in this paper indicate that in the languages under study, the suffix -ile functions as both a tense and an aspect marker. It co-occurs with pre-root formatives to mark different past tenses. In Nyakyusa, in particular, the suffix marks different categories of aspect, namely anterior, non-progressive and indefinite conditional aspect. However, in Ndali, Malila and Nyiha, the suffix -ile marks only the non-progressive aspect. In this view, this paper concludes that the -ile suffix is gradually vanishing in the forms for aspect meanwhile it extends its roles into marking different tense categories.

Keywords: *morphological evolution, -ile suffix, tense, aspect, Nyasa-Tanganyika corridor*

Introduction

This paper describes the evolving (changing) morphological properties of *-ile* suffix[3] across four selected Bantu languages forming the Nyasa-Tanganyika corridor[4]. The languages are Nyakyusa (M31), Ndali (M301), Nyiha (M23) and Malila (M24). These languages have been selected because they are genetically closely related such that it is possible to study changes involving *-ile* suffix using a comparative method[5]. The suffix *-ile* is one of the inflectional morphemes of the verb across many Bantu languages (Botne, 2010) denoting one of the morphological categories of the verb such as tense, aspect, mood, polarity, gender, case and number (see Kiango, 2000).

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[3] The suffix *-ile* manifests in different phonetic forms; *-ide, -ite, -ile/-ire*, *ie* and *-ye*. In this paper, the *-ile* form is adopted because it is the most common form across the four selected languages.

[4] Nyasa-Tanganyika Corridor is a geographical stretch that was named by social anthropologist Monica M. Wilson in 1958 after the two lakes (Nyasa and Tanganyika) defining it to the south and north (see Persohn 2017).

[5] In studying language change, linguists apply two methods (Campbell, 1999) which are studying changes in a single language (text in Old English and Modern English) and using comparative method to study changes among languages that are genetically related.

Traditionally, *-ile* suffix is regarded as an aspect marker across Bantu languages (see Nurse, 2008). However, a review of scholarly works shows that the suffix is morphologically changing, such that it is difficult for one to regard it as a tense or an aspect marker unless close attention is made to an individual language. In these scholarly works, the suffix is given different labels, as some of the scholars label the suffix as an aspect marker (Kahigi, 1988; Mkude, 1994; Nurse, 2008), whereas other scholars label the suffix as both a tense and an aspect marker (see Botne, 2010; Hyman, 1995).

The morphological change involving *-ile* suffix is deep-rooted in the general changes of tense and aspect systems (Nurse, 2008). Nurse and Philippson (2006) and Nurse (2008) identify two kinds of changes involving tense and aspect system in Bantu languages. These are changes in encoding and prominence. To start with the former, across Bantu languages, the tense was originally marked by pre-root morphemes (i.e., prefixes) while aspect was marked by post-root morphemes (i.e., suffixes) including the *-ile* suffix. However, evidence suggests that nowadays, some languages such as Kiswahili (Kiango, 2000) encode both tense and aspect before the verb root, while other Bantu languages express individual tenses or aspects by a combination of morphemes occurring before and after the verb root (Nurse & Philippson, 2006). Other studies have reported that for languages such as Kiswahili where both tense and aspect are encoded before the root, the *-ile* suffix has disappeared (Kiango, 2000). This implies that the change in encoding has a direct effect on the changes involving the *-ile* suffix.

With regard to change in prominence, Nurse (2008) maintains that Bantu languages were traditionally aspect prominent. The concept of prominence is well explained by Bhat (1999) who points out that languages may be classified according to the priority they give to the relevant dimension of tense, aspect and mood (TAM). This view implies that there are tense, aspect and mood prominent languages. The fact that Bantu languages were originally aspect prominent does not mean that there was no tense; rather languages gave a priority to aspect marking. Some Bantu languages have also changed from being aspect prominent to tense prominent, thus a number of them have multiple tenses, as Nyakyusa demonstrates. This paper is of the view that the change in prominence may have affected the traditional role of *-ile* suffix.

To specify the properties of the *-ile* suffix in the verb morphology, it is worth presenting the concepts of tense versus aspect, on the one hand, and perfective versus perfect, on the other hand. Lyons (1968) states that the term *tense* is derived from a Latin translation of the Greek word for 'time' and the same view. Also, Comrie (1976) defines *tense* as the grammaticalised expression of location in time. The views given by these scholars suggest that the category of tense relates the time of the action, event, or state of affairs referred to in a sentence to the time of the utterance. On the contrary, the term *aspect* was translated from a Russian word *vid* referring to the distinction of perfective and imperfective (Lyons, 1968). Following the same view, Katamba (1993) defines aspect as an inflectional category of the verb that indicates whether an event, state, process or action denoted by the verb is completed or in progress.

As mentioned previously, the *-ile* suffix has been regarded as a perfective marker (aspect), therefore, it is worth defining the term perfective. Nurse (2008) defines perfective as semantically representing a situation as complete, as a single bounded whole, without regard to its internal structure or its constituent phrase. According to Nurse, the perfective answers wh-questions, such as 'when did you see X? or 'when will you see X? to which the answers 'I saw her this morning/yesterday' or 'we will see her next week', respectively, presenting the seeing as a single event. Following this understanding, the perfective is not only restricted to the past event, but also to the future as well as to the present situations.

The definition of *perfective,* one of the aspect categories, as provided by Nurse (2008) and Lyons (1968), carrying the notion of completion of action, is controversial as it overlaps with the term *tense*. Spencer and Zwicky (1998) stress this controversy by pointing out that there is the semantic conceptual overlap between the categories of aspect and tense. The scholars argue that an event that is described in aspectual terms as having come to completion by a particular time (perfective) can likewise be described in temporal terms as a past event relative to that time. In attempting to overcome this challenge of tense-aspect overlap, scholars such Lyons (1968), Bostoen (2008) and Botne (2010) use the term *perfective* referring to perfect. On top of that, Bybee and Dahl (1989) use anterior to denote perfect. Therefore, the terms perfect and anterior are associated with the term perfective.

In the same view of the terminological controversy, scholars use different terms, but with the same meaning for the traditional role of the *-ile* suffix. For instance, Beaudoin-Lietz (1999) use the term *retrospective* to refer to the Kiswahili marker *-me-* which originated from *-ile* (Mazrui, 1983; Heine & Reh, 1984; Muzale, 1998), while Kiango (2000) uses the term *perfective*. Although these authors use different terms, they all provide the same meaning and/or the same role played by this marker in Kiswahili. For instance, Beaudoin-Lietz (1999) defines retrospective as an aspectual category expressing an event from the point of view of its result phrase, from where it may be seen either as a complete event or an event having further consequences, but having an influence on the present; similar to anterior. However, Kiango (2000) points out that the pre-root formative *-me-* marks perfective as, it indicates that the action expressed by the verb is completed at the time under reference, and its effect or result is still present. In this regard, the term *perfective* (the label for the Swahili marker, *-me-*) is the same as *anterior* and *perfect*, following the descriptions provided by those scholars.

Generally, following the terminological controversy, this paper supports the view by Nurse (2003) that to be more transparent and less confusing when dealing with Bantu languages, the Latinate terms for aspect which are numerous, should be reduced in number. In this view, the terms; perfective, retrospective and perfect, in this paper, have been reduced into anterior as the cover term. Also, although tense overlaps with aspect, we have been able to identify tense categories different from aspect categories that are very important for the analysis of the roles of *-ile* suffix to account for its evolution.

Theoretical Framework
This paper is guided by two theories, namely Reichenbach's linear model and Guillaume's Cognitive Theory. The theories supplement each other in providing a framework for the conception of tense and aspect. Reichenbach's linear model takes its inspiration from Reichenbach (1947) who associates tense and aspect in natural language with systems of time reference, distinguishing three distinct temporal reference points in an utterance: the "point of speech" (S), the "point of reference" (R), and the "point of the event" (E). This theory provides a framework for the analysis of tense/aspect in which the *-ile* suffix is part. The theory is applicable in the analysis of the morphological properties of the *-ile* suffix, particularly in identifying morphemes that denote tenses (i.e., past, present and future) in the selected languages. However, Reichenbach's linear model is inapplicable in circumstances where a verb lacks a specific morpheme that marks tense, but the same verb indicates a particular grammatical time. Also, the theory fails to apply in cases where one morpheme marks both tense and aspect, which is common in some Bantu languages. Given these limitations, the cognitive theory is applied.

The cognitive theory originates from the work by Guillaume in 1984. The underlying thesis of the theory (as modified by Muzale (1998)) is that a language develops tense formatives depending on the speaker's mind in making time partition in the universe. Therefore, tense and aspect are cognitive properties. This theory offers a broader view of the meaning of tense/aspect beyond morphological forms as handled by the linear theory. In this paper, both Reichenbach's linear and cognitive perspectives are employed for adequate analysis of the

changing properties of the *-ile* suffix which relates directly to tense and aspect in the selected languages.

Method
The data presented in this paper were obtained through a review of a thesis by Robinson (2021), portions of the Bible translated by SIL[6] into the selected languages and oral narratives. From these documents and oral narratives, we analysed how the languages encode tense and aspect with which the *-ile* suffix is associated. To ascertain the acceptability of the data presented in this paper, a follow up through interviews was done with four native speakers, one from each of the four selected languages.

Result and Discussion
This section presents the morphological evolution of *-ile* suffix by analysing the roles of the *-ile* suffix with regard to tense and aspect marking across the four selected Bantu languages. The findings presented in this paper show that in some contexts, the suffix *-ile* works in conjunction with pre-root morphemes to mark different tense and/or aspect categories. Therefore, the following subsection begins by presenting the position of *-ile* suffix in marking different tense categories attested in the languages under study.

The -ile Suffix in Marking Tense
The analysis of the position of *-ile* suffix in marking tense across the four languages considered the extent to which the suffix is involved in marking different tense categories. Under the two theories; Reichenbach's linear theory and the cognitive theory, we identified inflectional morphemes for different tense categories across the four languages with reference to the time they denote. Also, in identifying inflectional morphemes for tenses in relation to time (tense remoteness), temporal adverbials such as *now*, *in the morning*, *yesterday*, *last week/month/year* and *long time ago* were involved.

The findings indicate that the languages under investigation represent Bantu languages that have a complex tense system. For instance, Malila, Nyiha and Ndali have three past tenses (i.e., remote past, yesterday past and today past) and two future tenses (i.e., near and far future). In the view of innovation, Malila, Nyiha and Ndali have up to six tenses, while Nyakyusa has three tenses, namely past, present and future.

Since three out of the four languages exhibit up to six tenses, Reichenbach's model had to be modified to suit the symbolic representation of tense categories in these languages. Figure 1 illustrates the symbolic representation of tense categories using the modified linear model.
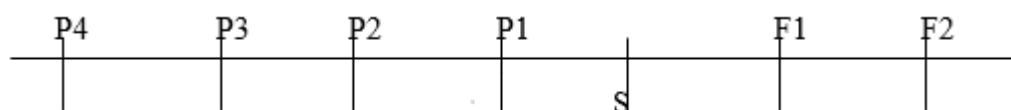

Figure 1. Tense categories in Nyiha, Malila and Ndali

The symbolic representation of tenses for Nyiha, Malila, and Ndali as presented in figure 1 has adopted Ps and Fs model, as proposed by Kershner (2002)[7]. These tense categories have forms representing them, as shown in Table 1.

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[6]Accessed through www.malilalanguage.com, www.ndalilanguag.com and www.nyakyusalanguage.com
[7]The letter P stands for past and F for the future. P4 stands for remote past, P3 for yesterday past, P2 for today past, P1 for anterior, S for present tense, F1 for near future and F2 for far future.

Table 1
Summary of tense categories

Symbol	Function	Forms/ constructions	Languages
P4	Remote past	*SM/H- θ -…-ile/ -ka…a*	[M23, M24]/[M301]
P3	Yesterday past	*-a-…-ile*	[M23], [M24], [M301], [M31]
P2	Today past	*- θ -…-ile*	[M23], [M24], [M301]
P1	Anterior	*-a-…-a*	[M23], [M24], [M301]
S	Present	*-ku-*	[M23], [M24], [M301], [M31]
F1	Near future	*kwe - θ -…-e*	[M23]
		-ti-…-e	[M24]
		ti- θ -…-e	[M301]
F2	Far future	*-li-…-a*	[M23]
		-ka-…-yi-…-a	[M24]
		ti- θ -…-ka-…-e	[M301]
F	Future	*a-…-ku-…-a*	[M31]

Table 1 summarizes the forms for different tense categories across the four languages under study. In the following sub-sections, the forms with their meanings as well as the context in which these forms are used to denote different tense categories in the four languages are presented.

The -ile Suffix in Marking Remote Past

The data examined in this paper demonstrate that the remote past verb forms in Malila, Nyiha and Ndali denote the events/situations that go beyond the speakers' memory. The common phenomena that go beyond the speakers' memory include such events as the falling of natural bodies from the sky such as a meteorite, birth and resurrection of Jesus, fiction in stories and when referring to what the forefathers did. Remote[8] past, therefore, implies the situation/event that happened a long time ago which is beyond speakers' memory. Examples in (1) demonstrate how remote past is encoded in Ndali [M301], Nyiha [M23] and Malila [M24].

1. a) *a-bha-Jelemani   bha -ka- tu- twaal -il- a-   fi-bhiliti*   [M301]
Aug-2-German   2SM- P4- OM-bring- APPL -FV   8-matches
'The Germans brought for us matches'
   b) *i-shi-mondo   shá-guuye   ku-shi-jiiji   sha Ndolezi*   [M23]
Aug-7-meteorite   7SM/H-VBimbr   17-village   of Ndolezi
'The meteorite fell down in Ndolezi village'
   c) *i-shi-taabu   ishi shá-simbiilwe   nu Luuka*   [M24]
Aug-7-book   this 7SM/H-VBimbr by   Luke
'This book was written by Luke'

Examples in (1) indicate that the remote past (P4) in Ndali is denoted by the morpheme *-ka-* without the *-ile* suffix while in Malila and Nyiha, the remote past is marked by a combination of a high tone placed on the subject marker (SM) for affirmative construction. However, in negative constructions, remote past forms in Malila and Nyiha are marked by *-ile* suffix with a high tone placed on the negative marker, as examples in (2) illustrate.

2. a) *u-mu-zungu   a- tá- lees -ite   a- ma-shine*   [M23]
Aug-1-whiteman SM-Neg/H-bring-P4 Aug-6-machine
'The white did not bring machine for processing coffee'
   b) *u-mu-zungu   a- tá- leet- ile a-ma-wuwa   ku-Malila*   [M24]

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[8]Although the term far past can be used to imply the same notion, the term remote past becomes more specific than the latter as far as these languages are concerned. The term remote past is more appropriate than far past because the languages under study inflect for more than two pasts.

Aug-1-whiteman   SM-Neg-H-bring-P4   Au-6-pyrethrum 17Malila
'The white brought pyrethrum in our Malila land'

The -ile Suffix in Marking Yesterday Past

Yesterday past is sometimes referred to as hesternal past. This tense category is symbolically represented by P3. Yesterday past in the languages under study denotes events/situation that happened in the past starting from the day before today, and then it moves in the continuum to the time when speakers still have the memory of the events/situation/action. Yesterday past forms may co-occur with temporal adverbials, such as yesterday, before yesterday, last month and last year. Examples in (3) illustrate how yesterday past (P3) is encoded across the four languages.

3. a) *igolo   tu- a- dumuuye   a-ma-kwi   aminji*   [M23]
    before yesterday SM-P3-VBimb   Aug-6-tree many
    'The day before yesterday we cut many trees'
   b) *mazubha tu- a- sogooye ku-mbeeya*   [M24]
    yesterday SM-P3-VBimbr 17-mbeya
    'Yesterday we went to Mbeya'
   c) *ichinja ichwo cha-a-kind- a   tu- a- pat-ite   i-fi-lombe   fyingi* [M301]
    year   that SM-P1-pass- FV SM-P3-get- P3 Aug-8-maize   many
    'Last year we harvested a lot of maize'
   d) *bha -a- bhuk-ile ku-kyaliki   mmajolo* [M301]
    *2*SM-PST- go- PST 17church yesterday
    'They went to church yesterday'

The examples presented in (3) demonstrate that yesterday past (which is the same as past tense (PST) in Nyakyusa) across the four languages is denoted by a combination of the morpheme *-a-* and *-ile* suffix. The data examined indicate that there is no difference in encoding yesterday past in both affirmative and negative constructions.

The -ile Suffix in Marking Today Past

Today past is symbolically represented by P2. This tense category implies that the event or activities took place some hours ago since today's sunrise. Today past is equivalent to the hodiernal past (see Muzale, 1998; Namulemu, 2004). Examples in (4) demonstrate how today past is encoded in Ndali [M301], Nyiha [M23] and Malila [M24].

4. a) *abhoNakalulu   bha- ɵ-kin- ite   u-mu-pila   ubhwisa*   [M301]
    Nakalulu   2SM-ɵ-play-P2 Aug-3-football nice
    'The Nakalulu team played football well'
   b) *bha-ɵ-mal- ile   ukuyebhela   a-ma-wuwa*   [M24]
    SM-ɵ-finish-P2 harvest   Aug-6-pyrethrum
    'They finished harvesting pyrethrum'
   c) *bha-ɵ-maz- ile u-ku-vunza   a-ma-ngagu*   [M23]
    SM-ɵ-finish-P2 INF-harvest-FV Aug-6-maize
    'They finished harvesting maize'

As presented in (4), in Ndali, Nyiha and Malila, today past (P2) is marked by *-ile* suffix occurring with zero formatives. In this view, it assumes the $-\theta-\ldots-ile$ construction across the three languages. The form for this tense category in Ndali, Nyiha and Malila does not change even when the sentence is in negative construction.

The Position of -ile Suffix in Marking Aspect

Spencer and Zwicky (1998) point out that practically, distinguishing aspect from tense is not easy because the two concepts overlap semantically. However, other scholars (Lyons, 1968; Bybee & Dahl, 1989; Kiango, 2000) identify categories of aspect different from tense

categories. Some of the aspect categories identified by those scholars are anterior, non-progressive aspect and indefinite conditional aspect. The focus of this subsection is to examine the position *-ile* suffix in the encoding aspect. Thus, attention is given to the morphological evolution of *-ile* suffix in the encoding aspect across the four languages under study. The following subsection presents the position of *-ile* in encoding different aspect categories.

The -ile Suffix in Marking Anterior

Anterior can be defined as the point of speech being contained in R (point of reference), as diagrammatically illustrated in Figure 2.
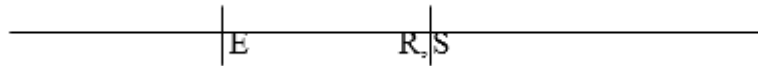
Figure 2. Perfective aspect (Adopted from Reinchbach, 1947)

Following the conceptual overlap between the term perfective and tense, scholars such as Kiango (2000) and Bostoen (2008) treat perfective in the same way as anterior. Also, Bybee and Dahl (1989) regard the perfect as similar to the anterior. Following the same view, this paper uses the term anterior as a cover term for both perfect and perfective. Anterior is generally used to refer to the completion of an action or event expressed by the verb, but having an influence on the present.

The data examined in this paper indicate that there are variations on how the four languages express anterior in relation to the *-ile* suffix. Examples in (5a-d) demonstrate variation among the languages under study on how the anterior is inflected in Nyakyusa, Ndali, Nyiha and Malila.

5.   a) *u-m-manyisi   a- bha- kyap- ile- a   a-bha-sukulu*   [M31]
      Aug-1- teacher   SM-OM-cane- ANT-FV   Aug-2-pupil
      'The teacher has just canned pupils'

   b) *u-mu-manyishi   a- a- bha-chap-a   a-bha-ana*   [M301]
      Aug-2- teacher   SM-ANT-OM-cane-FV   Aug-2-child
      'The teacher has just caned pupils'

   c) *iselekali   ya- a- tu- leet- el-   a   ihela izya a-ma-ua*   [M24]
      government SM- ANT-OM-bring-APPL- FV   money for Aug-6-pyrethrum
     'The government has just brought us the money for pyrethrum'

d) *ivwama vwa bhushilika   vw- a- kal- a   i-kahawa yoonti*   [M23]
     cooperative unions   SM- ANT-buy-FV   9coffee   all
      'The cooperative unions have just bought all the coffee'

The examples in (5) show that while Nyakyusa uses the *-θ-...-ile* form for anterior (ANT) as shown in (5a), Ndali, Malila and Nyiha use the *-a-...-a* form as shown in (5 b-d). This variation among these sister languages implies that the role of the suffix changes over time.

The -ile Suffix in Marking Non-progressive Aspect

According to Lyons (1968), the non-progressive aspect is denoted by stative verbs. However, the findings of the present study demonstrate that across the four selected languages, the non-progressive aspect is denoted by stative verbs and some inchoative verbs, particularly those denoting transitional and resultative interpretation. These verbs do not take a progressive form. Table 2 illustrates the forms for non-progressive aspect in Nyakyusa, Ndali, Nyiha and Malila.

Table 2
The -ile suffix in marking the non-progressive aspect

Verb	Gloss	Example sentence	Gloss	Language
gana	love	*Jeesu a- θ -tu-gan-ile twesa*	Jesus loves us all	M31
		u-Jeesu a- θ -tughan-ite tweshi	Jesus loves all of us	M301
		uYeesu a- θ -bhagan-ile abhantubhakwe	Jesus loves his people	M24
		uYeesu a- θ -bha-sungwiziizyeabhantubhakwe	Jesus loves his people	M23
		umwanaumutunda a-a-mu-gan-a umwanauwashilindu	the boy loves the girl	M24
bhina	get sick	*umwana a- θ -bhin-ile*	the child is sick	M31
		umwana a- θ -bhin-ite/ a-abhin-a	the child is sick	M301
		umwana a- θ -bhinile/ a-abhin-a	the child is sick	M24
hobhoka	be happy	*a- θ -hobhwike*	s/he is happy	M31
lita/katala	be tired	*a- θ -lis-ite / a- θ -kateele*	s/he is tired	M23,24/M31,

The examples provided in Table 2 indicate that all four languages exhibit the *-ile* suffix as a marker of non-progressive aspect. The analysis presented in this paper supports the statement by Botne (2010) that "it seems certain that *-ile* was originally a perfective marker used initially with change-of-state achievement verbs in a resultative interpretation". It has also been established that in Malila, Nyiha and Ndali, two forms exist in marking non-progressive aspect, namely *- θ -…-ile*, and *-a-…-a.* form. The two forms are determined by the context. For example, when a person is generally sick, speakers of Ndali, Nyiha and Malila say *a-bhin-ile* 'he is sick' but when one is travelling, for example, and on the way, he falls sick, the speakers say *a-a-bhin-a* 'he has become sick'.

The -ile Suffix in Marking Indefinite Conditional Aspect
Indefinite conditional aspect is common in Bantu languages (see Kiango, 2000). Similarly, for many other Bantu languages, Nyakyusa, Malila, Nyiha, and Ndali express indefinite conditional aspect. The data examined indicate that the forms used for the anterior and non-progressive aspect in the languages under study are also used to express the indefinite conditional aspect. Examples in (6a-c) illustrate the various forms for indefinite conditional aspect across the four selected languages.

6. a) *linga u-kwel- ile, a- tu- ku- kuul- il- a injinga* [M31]
   If SM-pass-ANT FUT SM-FUT- buy- APPL-FV 9bicycle
   'If you pass the exam, we will buy you a bicycle'
   b) *inga gh u- a-kwel-a ti- tu- ka-ku- ul- il- e injinga* [M301]
   when SM-ANT- pass-FV F2-SM-F2-OM-buy-APPL-FV 9bicycle
   'If you pass the exam, we will buy you a bicycle'
   c) *nga u- a- kwel-a kwe-tu- ku- kal- il- e injinga* [M23]
   If SM-ANT-pass-FV F1-SM-OM-buy-APPL-FV 9bicycle

'If you pass the exam, we will buy you a bicycle'

d) *inge   u- a-   tuuh- a   umutihani tu- ti- ku- kal- il - a   injinga*[M24]
    If   SM- ANT-pass-FV   exam   SM-F1-OM-buy-APPL-FV 9bicycle
    'If you pass the exam, we will buy you a bicycle'

The examples provided in (6) indicate that in Nyakyusa, the indefinite conditional aspect takes the form of *linga* (if) + - *θ* -…-*ile* +future, while in Ndali, Malila and Nyiha this aspect takes the form of *nga/inge* (if) +-*a*-…-*a* + future. As presented in (6), the indefinite conditional aspect in Nyakyusa involves the *-ile* suffix, while in Ndali, Nyiha and Malila the *-ile* suffix is not involved.

Other Uses of the - *θ* -…-*ile* and -a-…-a Forms

Evidence from the data examined in this study shows that there are other situations in which the forms for anterior and/or non-progressive aspect are used. These situations include a salutation, compliment and thanksgiving.

With salutation, speakers of these languages normally mention the state or activity they are involved in when they greet one another. Table 3 demonstrates forms and situations in which Nyakyusa, Ndali, Nyiha and Malila speakers greet one another.

Table 3
The use of -ile suffix in salutation

Nyakyusa	Ndali	Malila	Nyiha	Context
mugonile	*mu-agona*	*mwagona*	*mwakata*	meeting someone in the morning/for the first time
mulembwike	*mwalembuka*	*mwadamukha*	*mwadamuha*	in the morning
mubhombile	*mwabhomba*	*mwabhomba*	*mwawomba*	at work
mulimile	*mwalima*	*mwalima*	*mwalima*	when cultivating
mutondwile	*mwinula*	*mwayebhela*	*mwavunza*	when harvesting rice
mupijile	*mwapija*	*mwateleha*	*mwateleha*	when someone has given you food

From the examples presented in Table 3, two forms can be identified: - *θ* -…-*ile* and -*a*-…-*a*. As also shown in the previous sections regarding tense and aspect, in salutation, Nyakyusa uses the form with the *-ile* suffix*,* whereas Ndali, Nyiha and Malila use the form without the *-ile* suffix. This variation in the forms used by Nyakyusa speakers against the three sister languages provides evidence for the evolution of the suffix in tense and aspect marking, as well as in other contexts such as salutation.

Also, the - *θ* -…-*ile* and -*a*-…-*a* forms are used in giving compliments for a particular situation or something done brilliantly. In this context, Nyakyusa speakers use the form with *-ile* while Ndali, Malila and Ndali use the form without the *-ile* suffix. For example, when a particular person has built a very beautiful house, Nyakyusa speakers would give a compliment by saying *'u-jeng-ile!'* while Ndali speakers would say '*ghwajenga*!' and Malila and Nyiha would say '*wa-a-jenga!'* and *'wa-a-zeng-a'*, respectively*.*

Finally, the - *θ* -…-*ile* and -*a*-…-*a* forms can be used to show one's gratitude particularly when someone has done something pleasant. In this context, Nyakyusa uses the form with the *-ile* suffix, but Ndali, Malila and Nyiha use the form without such a suffix. For example, when someone has prepared food for you; in Nyakyusa you will need to say (*ndaga*) *upijile* as a way of appreciating, whereas in Ndali you may say (*ndagha*) *ghwapiija* but in Malila and Nyiha you will need to say *wateleha.* Likewise, when someone has done something important for you; in Nyakyusa you will need to say *u-bhomb-ile,* in Ndali you will need to say *ghwa-bhomb-a*, but in Malila and Nyiha you will need to say *wa-salip-a.*

Synthesis on the Morphological Evolution of the *-ile* Suffix
In the first subsection of the results and discussion part, we have presented how different tense categories are encoded in Malila, Nyiha, Ndali and Nyakyusa. In that section, different tense categories and their forms have been identified based on the framework of Reichenbach's linear theory. The establishment of the context in which the forms are used in these languages was guided by the cognitive theory. Therefore, the analysis shows that *-ile* suffix marks different tense categories across the four languages. The four languages examined indicated that there is a variation on the number of tense categories in which the *-ile* suffix is a candidate, as summarized in Table 4.

Table 4
The past tense forms involving -ile suffix across the four languages

Tenses	M23	M24	M301	M31
P4	*-á-…-ile*	*-á-…-ile*	*-ka-…-a*	
P3	*-a-…-ile*	*-a-…-ile*	*-a-…-ile*	*-a-…-ile*
P2	*- θ -…-ile*	*- θ -…-ile*	*-θ -…-ile*	

Table 4 indicates that Malila and Nyiha *-ile* marks three tense categories, namely remote past (P4), yesterday past (P3) and today past (P2). In Ndali, the *-ile* suffix marks two tense categories: yesterday past (P3) and today past (P2), whereas in Nyakyusa *-ile* marks only one past tense category, which is similar to yesterday (P3) past of Ndali, Malila and Nyiha. This analysis suggests that the role of the *-ile* suffix is restricted to past events/situations/activities.

In marking these different past tenses across the four languages, the *-ile* suffix co-occurs with pre-root formatives. For instance, in marking the remote past in Malila and Nyiha, the suffix co-occurs with a high tone placed on either the subject marker (in affirmative constructions) or negative markers (in negative construction). This renders a close relationship between the *-ile* suffix and either the subject marker or the negative marker in Malila and Nyiha. Also, in marking yesterday past across the four languages, the *-ile* suffix co-occurs with a pre-root morpheme, *-a-*, but in marking today past in Ndali, Malila and Nyiha, the *-ile* suffix occurs alone. The analysis of how different tense categories are encoded across the four languages reveals a significant change in the encoding of tense from the traditional system. It has been pointed out by Nurse and Philippson (2006) that although tense and aspect are traditionally marked by pre-root and post-root morphemes, respectively, changes have occurred, thus some languages encode tense and aspect by pre-root morphemes, while others encode both tense and aspect by a combination of pre-root and post-root morphemes.

The data from the four languages examined in this study indicate that tense is encoded by a combination of pre-root and post-root morphemes. This change in the encoding of tense in the languages under study makes tense and aspect formatives including the *-ile* suffix to be dependent on other morphemes. For instance, the pre-root formative *-a-* is dependent on the *-ile* suffix and vice versa, as the two formatives co-occur to mark past tense (yesterday past). This co-occurrence between pre-root formative *-a-*/high tone and the *-ile* suffix denotes past tenses (remote past and yesterday past) as opposed to past perfective. These pre-root formatives co-occurring with *-ile* in this context are bound to perform one role in the verb; the split of these formatives may result in signalling different categories of either tense or aspect. For instance, a sentence with *-a-* formative only marks anterior, but *-ile* alone marks today past in Nyiha, Malila and Ndali, whereas in Nyakyusa it marks anterior. This conclusion on the co-occurrence between the *-ile* suffix and the pre-root morpheme *-a-* as denoting simple past tense and not past perfective is based on the fact that tense (past) and aspect (perfective/perfect) do not co-occur in a single verb across the four selected languages. This is a good example of the merger of tense and aspect formatives (*-ile* and pre-root formative). Even if we accept the claim that the pre-root formatives such as *-a-* were used to mark tense

independently, they are progressively merging with *-ile* in marking different past tenses across the languages examined in this paper.

The morphological evolution of the role of *-ile* suffix manifests itself in a variation of innovation and retention reached. This is done by comparing innovations among the four languages under study which are genetically related. The fact that three categories of tense in Malila and Nyiha, two in Ndali and one in Nyakyusa involve *-ile* suffix implies that the role of *-ile* suffix is not the same across the selected languages. This variation in the roles of *-ile* suffix across these sister languages implies that the suffix is morphologically evolving. Generally, the suffix has extended its traditional role (marking aspect) since the Proto-Bantu into marking tense. However, this suffix has not totally discarded its traditional role (aspect marking) in these languages.

The data presented in second part of result and discussion show that the anterior construction *(-a-…-a)* in Malila, Nyiha and Ndali has no *-ile* suffix, while in Nyakyusa the anterior form *(-θ -…-ile)* has *-ile*. Table 5 provides a summary of aspect forms for different categories in which the concept of evolution of the suffix is evident.

Table 5
Summary on the changing properties of -ile suffix in marking aspect

Category	M31	M301	M24	M23
anterior	*- θ -…-ile*	*-a-…-a*	*-a-…-a*	*-a-…-a*
non-progressive	*- θ -…-ile*	*-a-…-a/- θ -…-ile*	*-a-…-a/- θ -…-ile*	*-a-…-a/-θ -…-ile*
indefinite conditional aspect	*- θ -…-ile*	*-a-…-a*	*-a-…-a*	*-a-…-a*
salutation	*- θ -…-ile*	*-a-…-a*	*-a-…-a*	*-a-…-a*
compliment	*- θ -…-ile*	*-a-…-a*	*-a-…-a*	*-a-…-a*
thanks giving	*- θ -…-ile*	*-a-…-a*	*-a-…-a*	*-a-…-a*

The summary provided in Table 5 shows that, in Nyakyusa, *-ile* suffix is involved in marking all the five categories of aspect presented. However, in Ndali, Nyiha and Malila, the suffix is involved in marking only one category which is the non-progressive aspect. In this view, since the four languages are closely related, the assumption made behind the status of *-ile* suffix is that the suffix shows the signs of disappearing in the forms for aspect (in Malila, Nyiha and Ndali but retained in Nyakyusa) in favour of marking tense categories. The disappearance of *-ile* suffix is well observed in anterior marking as far as Malila, Nyiha and Ndali are concerned. Even though the suffix is retained in the form for anterior in Nyakyusa, evidence shows that the suffix disappears in the form for anterior in negative construction. This is a good indicator that the suffix is gradually vanishing in the forms for aspect. For instance, when the negative marker *-ka-* is introduced, it causes the *-ile* suffix to disappear when it marks anterior/perfective aspect but it remains when the suffix marks the past tense. However, in Malila, Nyiha and Ndali in any construction with the *-ile* suffix that is *á- θ -…-ile, -a-…-ile, and - θ -…-ile,* the negative marker does not trigger the disappearance of the suffix. Examples in (7) demonstrate the disappearance of the *-ile* suffix when the negative marker *-ka-* is introduced.

	Affirmative		**Negative**	
7.	a) *bha- sop-ile*	*umpunga*	*bha- ka- sop -a*	*umpunga*
	SM- sow-ANT	rice	SM-Neg-sow- FV	3rice
	'They have sown rice'		'They have not sown rice'	
	b) *bha-a- sop-ile*	*umpunga*	*bha-ka- a- sop- ile*	*umpunga*
	SM-PST-sow-PST	rice	SM-Neg-PST- sow- PST	3rice
	'They sowed rice'		'they did not sow rice'	

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c) a- son- ile   umwenda   a- ka- son -a   umwenda
    SM-sew-ANT   3clothe   SM-Neg- sew- FV   3clothe
    'S/he has sewn a clothe'   'S/he has not sewn clothe'
d) a- a- son- ile   imienda   a- ka- a- son-ile   imienda
    SM-PST-sew- PST   4clothes   SM-Neg-PST-sew-PST   4clothes
    'S/he sewed clothes'   'S/he did not sew clothes'

The examples presented in (8a & c) have illustrated the disappearance of *-ile* suffix when marking anterior (ANT) in Nyakyusa. However, examples in (8b & d) show that the same suffix remains when it marks past tense (PST). In other words, in Nyakyusa the *- θ -…-ile* construction which denotes aspect (anterior) drops the suffix *-ile* when a negative marker *-ka-* is introduced. However, the *-a-…-ile* form which denotes past tense in Nyakyusa does not drop *-ile* suffix when the negative marker is introduced. However, in Ndali, Malila and Nyiha, the *– θ -…-ile* does not drop the *-ile* suffix when the negative marker is introduced. This implies that the *- θ -…-ile* form of Ndali, Malila and Nyiha has a different function from the *- θ -…-ile* form of Nyakyusa.

To sum up, it is worth noting that although the suffix is traditionally a perfective marker, it co-occurs with pre-root formatives to mark different past tenses, namely remote past, yesterday past and today past in Malila, Nyiha and Ndali. In Nyakyusa, the suffix is both an aspect marker when it occurs alone and a past tense marker when it co-occurs with a pre-root marker *-a-*. In the same view of change, the anterior form; *- θ -…-ile* in Nyakyusa extends its functions into marking today past and yesterday past in combination with the temporal adverbials *nulubhunju 'in the morning'* and *mmajolo* 'yesterday', respectively. When this form, *- θ -…-ile* denotes anterior (the category of aspect) the temporal adverbial *lululu* 'just now' is optional. Additionally, the *-a-…-ile* form (which primarily denotes yesterday past) extends its function into denoting remote past in Nyakyusa. Since the Nyakyusa- *θ -…-ile* form has three functions which are marking anterior, today/recent past and yesterday past with the aid of temporal adverbials (but the anterior does not necessarily require temporal adverbials), it implies that the suffix's role is changing.

Conclusion
This paper has presented the morphological change involving the *-ile* suffix. Regarding the status of the suffix as either a tense or an aspect marker, the findings show that the suffix is both a tense and an aspect marker in the four selected languages. This conclusion supports the general statement made by Botne (2010) that the evolution of *-ile* is of particular interest as it sheds light on possible developmental paths leading to perfectives, perfects (anterior), and pasts. In marking these tense categories (except for the today past), the suffix *-ile* co-occurs with the pre-root formatives. However, in marking aspect, out of the four sister languages, the suffix has been only retained by Nyakyusa and the suffix occurs alone. Therefore, this paper concludes that the morphological evolution of *-ile* suffix, the traditional perfective marker, takes two forms; first, the suffix is gradually vanishing in the forms for aspect and second, the suffix extends its role into marking different tense categories across the four languages examined in the present study.

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