

**THE DISTINCTION BETWEEN ABSOLUTE AND RELATIVE TENSES
WITH REFERENCE TO ZULU (AND OTHER BANTU LANGUAGES)**

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AIMS

The first aim of this article is to distinguish between the two types of tense system, namely absolute and relative tense in Zulu. Secondly, it is essential to analyse the individual tense forms distinguished within each of these tense systems within an adequate framework and to adopt appropriate terminology to refer to the array of tense forms of Zulu (and the other Bantu languages).

INTRODUCTION

In order to offer a satisfactory description of tense and to propose appropriate terminology for the individual tense forms of Zulu a synthesis of the general theories on tense need to be made taking the nature of the Zulu language data into account. It is furthermore necessary to take proper cognisance of the Bantu grammarians' treatment of tense in general, and that of the Zulu grammarians in particular.

In this article the focus will be on aspects of the general theory of tense and time reckoning. A synthesis will be made of the different views on tense. Secondly, the article will provide a brief overview of the treatment of tense in the Bantu languages, focussing on Zulu in particular. Thirdly, the misconceptions and erroneous treatment of tense will be highlighted and proposals put forward for a proper analysis of tense. Appropriate terminology will be proposed for the two tense systems and the individual tense forms distinguished within each of them.

It is essential for the development of Bantu philology to make a well-grounded selection of an appropriate approach to tense and to standardise terminology used for the labelling of the various tense forms distinguished in these languages.

LANGUAGE MECHANISMS EMPLOYED FOR TIME RECKONING

Comrie (1986: 8) distinguishes three types of expressions (or mechanisms) for locating events in time, namely 1) lexically composite expressions such as imizuzu emine ngaphambi kokufika

kwaMphemba ‘four minutes before Mphemba arrived’ (which are virtually infinite); 2) lexical items such as manje, namhlanje and kuthangi ‘now, today’ and ‘the day before yesterday’ and 3) grammaticalised categories such as present and past (which are generally referred to as tenses). In this article the focus is on the latter of the three mechanisms used for time reckoning, namely tense.

THE DISTINCTION BETWEEN TENSE AND TIME REFERENCE

It is essential to draw a clear distinction between tense and time reference on the one hand, and between tense and aspect, on the other hand. All these categories pertain to the verb, but they are not all verbal categories and neither do they reflect the same aspects of meaning.

Languages indicate the location of events in time (relative to the deictic centre) primarily by means of two types of strategies, namely varying the morphological form of the verb (which constitutes the tense system) and using descriptive lexical items (which constitutes the most productive strategy of time reference). Both these time establishing mechanisms are operative in the Bantu languages. Generally they have the same relational value, as is evident in example 1 where **izolo** ‘yesterday’ has an anterior relational reference and the verb form **sibone** ‘we saw’ also marks the event¹ as being prior to coding time. Tense as well as time reference is therefore anterior in this example.

1. **Sibone** inyamazane ibalekela izinja **izolo**.

'We see (near past) an antelope it run away from (present) the dogs yesterday.'
 ‘We saw an antelope running away from the dogs yesterday.’

However, in example 2 the temporal adverbial clause **kuthangi kusihlwa** ‘the evening of the day before yesterday’ has an anterior referential value, while the verb form **ngihlala** ‘I sit (down)’ is a verb form associated with an event coinciding with coding time.

2. **Kuthangi kusihlwa ngihlala** esigqikini kanti sengizibeka phezu kofezela ...

'The day before yesterday, the evening I sit (present) on the stool, but then I place (present) myself on top of a scorpion ...'
 ‘The evening of the day before yesterday I sit (down) on the stool, but I was putting myself onto a scorpion ...’

Time is a category that is superimposed on tense. The major time establishing device is the interrelation between tense forms and temporal adverbials. Time is that category which causes the event **ngihlala** in 2 to be interpreted as being anterior even though the verb form (tense) is present. This time interpretation is brought about by the temporal adverbial **kuthangi kusihlwa**.

The fact that the location of events in time in example 2 does not coincide with the tense analysis should not be attributed to an inadequate tense analysis but to the influence of time interpretation.

1 The term event/event time is used here in a broad sense to include actions, processes and states.

Apart from the time interpretation, aspectual distinctions may also exert an influence on the temporal interpretation of tense. Referring to the various applications of the present tense Du Plessis (1986: 71) remarks:

Xhosa has grammaticalized certain forms as the present tense: This grammaticalized tense does not necessarily need to have one meaning or even have a meaning related to the name of the form.

Comrie points out that the past tense of English can be used to express politeness apart from denoting past time. In this regard he (1986: 19-20) comments as follows:

The existence of such counterexamples to the general characterisation of the English past as indicating past time reference does not invalidate this general characterisation, given the distinction adopted here between basic and secondary meanings ...

While grammarians, such as, Gabbay and Moravcsik (1980: 59), distinguish between tense and time, others, for example, De Klerk (1978), make no distinction between tense and time.

While tense is a verbal category, time is a sentence category. There are a number of mechanisms that contribute to time reference - the most common being the use of temporal adverbials².

WHAT IS TENSE?

Tense is the grammaticalised expression of location in time. Since time itself does not provide any landmarks in terms of which one can locate situations, events are typically grammaticalised in the verb by locating them in relation to the moment of speech (the deictic centre). In this regard Comrie (1986: 14) remarks:

What one rather finds most typically is the choice of the speech situation as the reference point, i.e. the present moment (for time) ... As far as tense is concerned, then, the reference point is typically the present moment, and tenses locate situations either at the same time as the present moment ... or prior to the present moment, or subsequent to the present moment, with further potential categories if degrees of remoteness from the present moment are distinguished grammatically.

Comrie distinguishes explicitly between tense and aspect. He (1986:14) declares:

A system which relates entities to a reference point is termed a deictic system, and we can therefore say that tense is deictic. (By contrast, aspect is non-deictic, since a discussion of the internal temporal constituency of a situation is quite independent of its relation to any other time point).

He (1986: 6) clarifies the semantic nature of aspect:

2 For a detailed discussion of time reference in Zulu see Posthumus (1984; 1990).

The internal temporal contour of a situation provides the conceptual basis for the notion of aspect, which refers to the grammaticalisation of expression of internal temporal constituency.

Johnson (1981) notes that many current theories on tense have been influenced by Reichenbach (1947). Nerbonne (1983: 3) and Guenther (1977: 83) are two of a host of scholars who concur with Reichenbach's analysis of tense. Followers of Reichenbach's tense analysis assert that the temporal interpretation of tense should be described in terms of the relation between speech time, event time and reference time. Nerbonne (1983: 3) explains these three concepts as follows:

Reichenbach distinguished speech time *s*, event time *e* and reference time *r*. ... Speech time is simply the time of utterance ... while the time of the various episodes described constitutes event time. ... reference time is the time "from which an event is seen".

Comrie concurs with Lyons in describing tense as a deictic category. Lyons (1968: 304) describes the deictic nature of tense as follows:

The essential characteristic of the category of tense is that it relates the time of the action, event or state of affairs referred to in the sentence to the time of utterance (the time of utterance being 'now'). Tense is therefore a *deictic* category ...

Tense has been discussed as a deictic phenomenon by, inter alia, Fillmore (1975), De Klerk (1978), Gabbay and Rohrer (1978), Bäuerle and Von Stechow (1980), Lyons (1968; 1977), Steedman (1982), Levinson (1983), Posthumus (1983; 1988; 1999) and Comrie (1986).

In his discussion of tense in Tumbuka, Botne also alludes to the deictic nature of tense. He (1993: 7) states:

Tumbuka employs a variety of affixes to indicate differences in temporal relations between the discourse event and the speech locus.

Palmer (1991: 7; 21) maintains that the distinction between mood and modality exactly parallels the distinction between tense and time. He (1991: 21) furthermore, points out that, like mood, the category of tense is traditionally restricted to verbal morphology. He states that tense is a morphosyntactic category of the verb, even though its semantic function relates to the sentence as a whole.

As for the marking of tense, Comrie (1986: 12) remarks:

In most languages that have tense, tense is indicated on the verb, either by the verbal morphology ... or by grammatical words adjacent to the verb, as with the auxiliaries ...

Bybee *et al.* (1994: 3) also allude to the fact that tense is marked morphologically on the verb.

The two crucial characteristics of tense are thus that tense: 1) is grammatically marked within the verb, and 2) expresses the relation between event time and a reference point (which is generally the deictic centre).

According to Comrie (1986:11) clear instances of tense cross-linguistically can be represented as the location of events at, before, or after the deictic centre. He asserts:

The notions that are most commonly grammaticalised across the languages of the world are simple anteriority, simultaneity, and posteriority, i.e. with the present moment as deictic centre, past, present and future.

Tedeschi and Zaenen attribute the major shortcoming of tense analysis to the fact that tense analyses focus on either general theoretical issues or on a particular language. They remark (1981: xv):

Treatments of tense and aspect have tended to fall into two categories: language-specific studies that did not attempt to address questions of general theoretical interest and more philosophical studies that frequently did not pay sufficient attention to natural language phenomena.

Zulu is an example of a language that distinguishes between degrees of remoteness in both the past and the future, hence the distinction between a near and remote past, and a near and remote future tense³.

The near past and remote past tenses and the near and remote future tenses of Zulu are very often respectively interchangeable. This overlapping of the tense forms is shown in figure 1 which depicts the tense paradigm of the absolute tense forms of Zulu.

THE STATUS OF THE FUTURE TENSE

The status of the future tense as a tense form is a controversial issue. As for English, Lyons (1968: 306), Smith (1980: 356) and Comrie (1986: 47) point out that the verb forms indicative of future events are in fact not tense forms but modal distinctions. On the other hand Saurer (1981: 62) distinguishes a future tense for English.

Comrie (1986: 19) admits that a grammatical category may have more than one meaning. He alludes to the fact that the future auxiliary *will* of English has both temporal and modal meanings. He (1986: 21) remarks:

Great controversy has surrounded the question whether the future ... should be given a single characterisation that captures both its temporal and its modal uses; or whether it should be considered basically a tense with secondary modal uses, or basically a mood with secondary temporal uses; or whether it should simply be said to have two sets of meanings, temporal and modal, with neither being dominant.

Bantu language scholars are also not in agreement as far as the classification of the so-called future tense forms are concerned. Welmers (1973: 352), Ponelis (1975: 46 *et seq.*), Van Wyk (1981: 89) and Posthumus (1983: 87) are among the linguists who do not distinguish a future tense while Lombard *et al.* (1985: 142) restrict the use of the term 'future tense' to the semantic

3 The distinction between near and remote past and near and remote future is not absolute. There is a great deal of overlap between the usage of the two past and two future tenses respectively.

conceptualisation of this phenomenon. Van Wyk (1981: 89) describes the so-called future tense forms as tenses while in a later publication (1987: 283) he describes these forms as implications. Chaphole (1993: 53), on the other hand, describes the South Sotho verb forms containing –tla as future tense forms.

Engelbrecht (1994: 50) argues that the future forms of Zulu with –zo– and –yo– express deontic modality and thus have a modal meaning apart from expressing futurity.

In this article the verb forms containing the future tense morphemes –zo– and –yo– are regarded as future tense forms.

TWO TENSE SYSTEMS: ABSOLUTE VERSUS RELATIVE TENSE

Since Reichenbach's (1947) publication, scholars have realised that event time may be indexed in relation to another reference point that is not the deictic centre.

Comrie maintains that the semantic interpretation of event time is not always done from coding time, but can also be made from another reference point. He (1986: 56) says:

In chapter 2 we illustrated absolute tense, whereby the reference point for the location of a situation in time is the present moment. We now turn to relative tense, where the reference point for the location of a situation is some point in time given by the context, not necessarily the present moment.

Tense interpretation is not always made in relation to coding time. It may also be made in terms of a newly established reference point. This newly established reference point that serves as primary anchoring point for the temporal interpretation of events, may be prior to or subsequent to coding time. The events can then be located as being prior to, simultaneous with or subsequent to this newly established anchoring point. Complex tense reference is thus possible by the representation of events in relation to other events, which are themselves in turn represented in relation to coding time (the deictic centre). Tense paradigms of this nature are generally called relative tenses. For a basic discussion on the distinction between absolute and relative tenses see Gabbay and Rohrer (1978), Rohrer (1980) and Comrie (1986).

Comrie distinguishes between pure relative and absolute-relative tenses. He (1986: 65) describes pure relative tenses as tenses where a situation is located at, before, or after a reference point provided by the context. Absolute-relative tenses, on the other hand, are described by Comrie (op cit.) as those tenses where a situation is located at, before, or after a reference point that is in turn situated at, before or after the present moment (the deictic centre).

The relative tenses of Zulu discussed in this article are in Comrie's terms absolute-relative tense forms.

THE ABSOLUTE TENSES OF ZULU

Tense forms wherein the interpretation of event time is grammatically marked (within the verbal morphology) in relation to coding time (the deictic centre) are called absolute tenses. An absolute tense can thus be defined as that verb form which locates the event time relative to a reference point which coincides with coding time (the deictic centre).

A verb such as *udla* 'he eats' in example 3 below, grammaticalises the 'eat' event as coinciding with coding time (the deictic centre).

3. Umfana **udla** amaswidi manje.
'The boy he eat (present) sweets now.'
 'The boy is eating sweets now.'

On the other hand a verb form such as *udle* 'he ate' in example 4 below, grammaticalises the 'eat' event as having taken place 'shortly' before coding time (the deictic centre).

4. Umfana **udle** amaswidi ekuseni.
'The boy he eat (near past) sweets in the morning.'
 'The boy ate sweets in the morning.'

A verb form such as *wadla* 'he ate (long ago)' in example 5 grammaticalises the 'eat' event as having taken place 'long' before coding time (the deictic centre).

5. Umfana **wadla** amaswidi ngalelo langa.
'The boy eat (remote past) sweets on that day.'
 'The boy ate sweets on that day.'

A verb form such as *uzo(ku)dla* 'he will eat' in example 6 grammaticalises the 'eat' event as an event that will take place 'shortly' after coding time (the deictic centre).

6. Umfana **uzo(ku)dla** amaswidi kusasa.
'The boy he eat (near future) sweets tomorrow.'
 'The boy will eat sweets tomorrow.'

A verb form such as *uyo(ku)dla* 'he will eat (later)' in example 7 grammaticalises the 'eat' event as an event that will take place 'long' after coding time (the deictic centre).

7. Umfana **uyo(ku)dla** amaswidi kusasa.
'The boy he eat (remote future) sweets tomorrow.'
 'The boy will eat sweets tomorrow.'

The five absolute tenses distinguished for Zulu are the remote past, near past, present, near future and remote future. These tense forms are marked in the basic morphological structure of the verb by a combination of the subject agreement morpheme, the categorial verb final morpheme (the future tense morpheme) and the negative morpheme. However, there is no one-to-one relation between these categories and the morphemes that mark them.

THE ERRONEOUS USE OF THE TERMS 'IMPERFECT TENSE' AND 'PERFECT TENSE'

Bantuists have erroneously referred to the present and past tenses as the imperfect and perfect tenses respectively. In this regard, examine amongst others, Van Eeden (1956: 257), Ziervogel, Louw and Taljaard (1985: 87), Lombard *et al.* (1985: 141) and Taljaard and Bosch (1988: 55).

In the summary of his article on aspects in Northern Sotho, Louwrens (1994: 116) concludes:

This analysis leads, *inter alia*, to the conclusions that (a) the terms **perfect** and **imperfect** 'tense' should be done away with by replacing them with **past tense** and **present tense** respectively ...

It is unfortunate that Louwrens did not maintain this distinction between tense and aspect in the Northern Sotho grammar which he coauthored with Poulos during the same year. Poulos and Louwrens (1994: 213) refer to the past tense as the 'principal perfect tense'.

The term 'principal perfect tense' is used instead of 'past tense' in the Zulu version of the above-mentioned grammar as well. (Refer to Poulos and Msimang (1998: 265).)

Although Van Wyk used the terms 'imperfective' and 'perfective tense' to refer to the present and past tense forms of the Northern Sotho verb, he abandoned these terms in favour of the terms 'present' and 'past tense'. With reference to the 'perfect' and 'imperfect verb forms' Van Wyk (1987: 283, footnote 12) remarks:

I have used the term TENSE for these categories in the past, but now I consider ASPECT to be more appropriate.

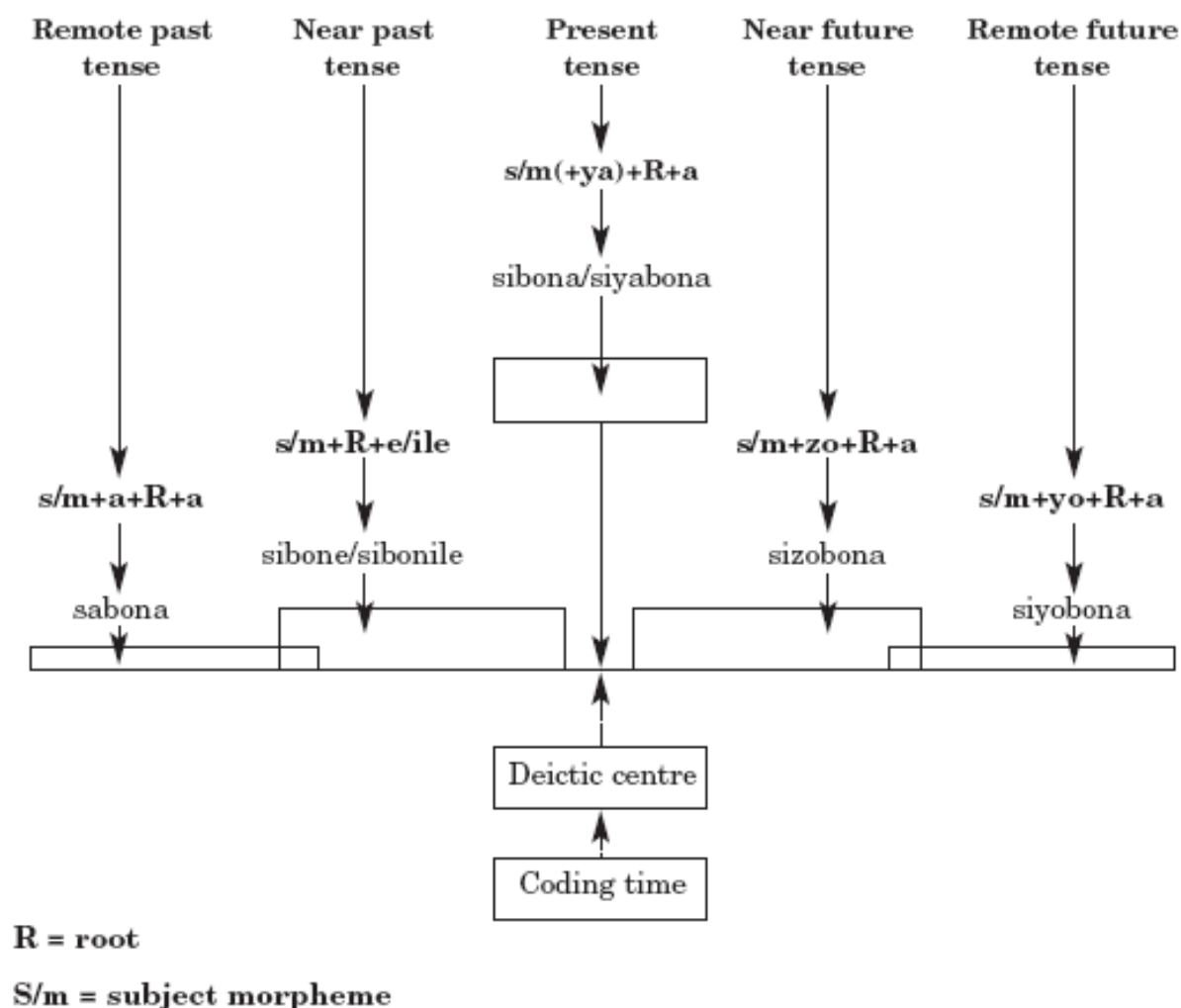
Comrie (1986) employs the terms 'present tense' and 'past tense' consistently when referring to the verb forms under discussion. In doing so he draws a clear distinction between tense and aspect.

Posthumus has been using the terms 'present tense' and 'past tense' consistently since his 1983 publication. In his analysis and description of tense, he has been following scholars such as Gabbay and Moravcsik (1980) and Rohrer (1977). He thus described the verb forms under discussion as present and past tenses even before the publication of the standard work of Comrie (first published in 1985).

The terms 'imperfect tense' and 'perfect tense' have been (and still are) inappropriately used in the Bantu languages as labels to refer to the present and past tenses respectively. This practice is probably due to language mapping in that these terms (which are widely used in the description of the Slavonic languages) have been applied to the Bantu languages. 'Imperfect' and 'perfect' are aspectual distinctions and should not be used to refer to tense forms.

Schematically the tense paradigm for the absolute tenses of Zulu can be represented as illustrated in figure 1.

Figure 1: The paradigm of the absolute tenses of Zulu



THE RELATIVE TENSE FORMS OF THE BANTU LANGUAGES

Botne (1993: 10) describes the function of the auxiliary *-ba* of Tumbuka and the eastern Bantu languages as follows:

Specifically, in its referential function *-ba* refers to some time, *te* in its capacity to function as a second tense locus, L_2 . The event named the complement verb in the complex *-ba* construction is directly interpreted temporally with respect to this secondary locus rather than to the primary tense locus established by the speech event.

Unlike Comrie and other scholars, Botne (1986: 308; 1993: 11) does not refer to these tense forms (of which the event time is interpreted from a second locus) as relative tenses. He refers to the auxiliaries *-ba* and *-li* as ‘shifters’. He (1986: 303 *et seq.*) remarks:

In this paper I want to propose that -ba and -li, in those languages that utilize them in such complex constructions, are not semantically empty but function to establish additional parameters to the temporal framework in which the narrated event is to be interpreted, thereby indicating more precisely the temporal location of the event. More specifically, I will argue that -ba and -li function as shifters, having both referential and indexical properties.

The verb *beziphumile* '(they) had gone out' in example 8 below, is not temporally directly anchored to coding time.

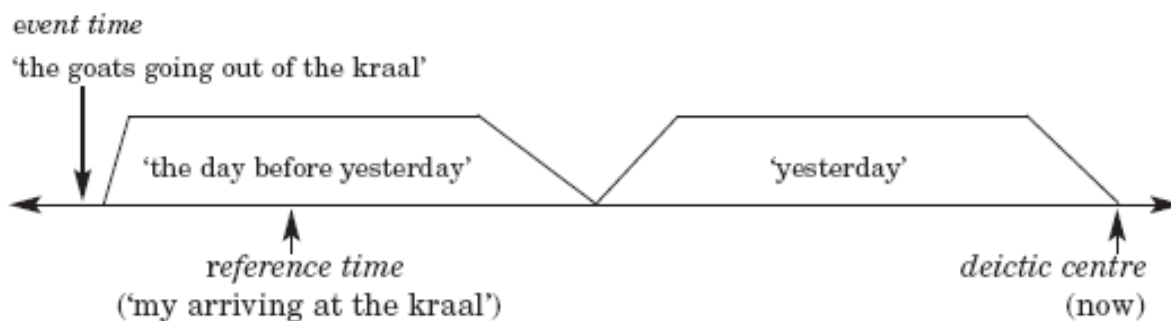
8. *Izimbuzi beziphumile ngokufika kwami esibayeni kuthangi.*

'The goats they be (near past) they go (near past) out at the arrival of mine at the kraal the day before yesterday.'

'The goats had gone out at the time of my arrival at the kraal the day before yesterday.'

What is of prime importance in the verb *beziphumile* in example 8, is that the 'having gone out' of the goats had taken place before 'my arriving at the kraal (the day before yesterday)'. These two events are described in relation to each other at another reference point (which is not coding time but) the time of 'my arrival at the kraal'.

Language data from Zulu and the other Bantu languages thus necessitates the need to distinguish between absolute and relative tenses. It is clear that in an example such as 8 above, the event –'the having gone out' of the goats– should not be interpreted from utterance time (the deictic centre), but rather from reference time 'my arrival at the kraal'. The example above is a typical tense form in which an event has to be interpreted from reference time ('my arrival at the kraal') which is in turn located in a particular relation to coding time (the deictic centre). Schematically this relation can be illustrated as follows:



Relative tenses are distinguished by the fact that the reference point from which the temporal semantic interpretations are made, is a point other than coding time. The exposition of relative tense offered here is contradictory to that of Comrie (1986: 58) who differentiates between absolute and relative tenses in the following manner:

The difference between absolute and relative tense is not that between the present moment versus some other point in time as reference point, but rather between a form whose meaning specifies the present moment as reference point and a form whose meaning does not specify that the present moment must be its reference point.

Like Posthumus (1982; 1983; 1988; 1999) Botne also stresses the fact that this second reference point (which he calls the event-locus) is dependent on the speech event (the deictic centre). Botne (1986: 304) declares:

In effect, the grammaticalization of this second event-locus establishes a second temporal continuum, dependent on the time of the speech event for its proper temporal interpretation.

However, this second event-locus does not become a deictic centre as Botne (1993: 26) maintains. For a detailed discussion of why this second reference point should be regarded as a reference point and not as another deictic centre, see Posthumus (1999: 188-195).

Whenever the usage of tense departs from the deictic simultaneity assumption we are dealing with relative tense that is obviously more complex. Tense forms that express a relation between event time, reference time and coding time are called relative tenses.

In any of the relative tense forms of the Bantu languages (basically marked by -be/-ba) it is always possible to index the position of the second reference point from which the event has to be interpreted in relation to coding time. This second reference point becomes the primary reference point for the temporal interpretation of the event time whereas the deictic centre (as the default reference point) becomes the secondary reference point.

When using these relative tense forms the speaker/writer and hearer/reader always have to keep track of coding time even though the temporal interpretations are primarily done in relation to an established reference point (which is not coding time). The morphological structure of the (deficient) auxiliary⁴ verb with -be marks the position of this second reference point in relation to coding time. In Zulu this second reference point can be located at a point relative to the default position of the reference point (which is coding time/the deictic centre) at one of four possible positions, namely long before, shortly before, shortly after and long after coding time.

The verbs in examples 9a, 9b, 9c and 9d are in a relative tense with the second reference point situated long before, shortly before, shortly after and long after coding time respectively.

9a. Iqembu lethu **lalidlala** (< **labe lidlala**) ibhola eThekwini ngokuvakasha kwethu khona.
'The team of ours it be (remote past) it play (present) the ball in Durban at the visiting of ours there.'

'Our team was then (long ago) playing a game in Durban when we visited there.'

9b. Iqembu lethu **belidlala** (< **libe lidlala**) ibhola eThekwini ngokuvakasha kwethu khona.
'The team of ours it be (near past) it play (present) ball in Durban at the visiting of ours there.'

'Our team was playing a game in Durban when we visited there.'

4 The term 'deficient auxiliary' is used to typify the nature of this auxiliary verb form. The use of the auxiliary verb stem -be with its complementary verb often leads to the occurrence of a deficient verb form in which case various forms of omission can take place. The subject morpheme of the auxiliary verb may be omitted (as in the example zibe zigijima > bezigijima). The vowel of the auxiliary verb stem -be may be omitted (as in the example ube ugijima > ubugijima). The auxiliary verb stem may be omitted in its entirety (as in the example labe ligijima > laligijima); or the deletion of the auxiliary verb stem may result in the insertion of a semi-vowel (as in the example wabe egijima > wayegijima).

- 9c. Iqembu lethu **lizobe lidlala** ibhola eThekwini ngokuvakasha kwethu khona.
'The team of ours it be (near future) it play (present) ball in Durban at the visiting of ours there.'
 'Our team will be playing a game in Durban when we visit there.'
- 9d. Iqembu lethu **liyobe lidlala** ibhola eThekwini ngokuvakasha kwethu khona.
'The team of ours it be (remote future) it play (present) ball in Durban at the visiting of ours there.'
 'Our team will be playing a game in Durban when we visit there.'

The verbs in examples 9a to 9d denote an event which has coincided or will coincide with 'our visit to Durban' which in turn took place long before (9a) or shortly before (9b) coding time or which will take place shortly after coding time (9c) or long after coding time (9d). Note that the second reference point can never coincide with coding time. This rules out the possibility of a relative tense being interpreted as absolute tense as well. Although coding time (the deictic centre) does not serve as primary reference point for the interpretation of relative tense, the interlocutors may never lose track of coding time (the deictic centre). Relative tense is not an instance of event time being interpreted from a 'shifted deictic centre' neither is it an instance of event time being interpreted from 'another deictic centre'. Relative tense is an expression of the relation between event time, reference time and coding time. In the so-called be-past tenses of the Bantu languages in general, and of Zulu in particular, the position of reference time in relation to coding time is marked by the morphological structure of the deficient auxiliary -ba verb (that has diachronically been derived from a copulative verb stem). On the other hand, the relation between event time and reference time is marked by the morphological structure of the complementary verb.

Posthumus (1988: 142) points out that the use of a copulative verb stem as deficient auxiliary verb stem to mark the relative tenses is commonly found in the Bantu languages. While the Nguni languages and Northern Sotho use -ba, Southern Sotho uses -na and -ba, Ndonga -li and Herero -ri.

The relation between the reference point and coding time is marked by the morphological structure of the auxiliary verb part of the relative tense form. If the reference point is located long before coding time the basic morphological structure of the auxiliary verb (in Zulu) is *subject morpheme + remote past tense morpheme -a- + auxiliary verb root -b- + categorial final morpheme -e*; if it is located shortly before coding time the morphological structure is *subject morpheme + auxiliary verb root -b- + categorial final morpheme -e*; if it is located shortly after coding time the structure is *subject morpheme + near future tense morpheme -zo- + auxiliary verb root -b- + categorial final morphem a/-e* and finally, if it is located long after coding time the structure is *subject morpheme + remote future tense morpheme -yo- + auxiliary verb root -b- + categorial final morpheme -a/-e*.

The form of the complementary verb in the relative tense form marks (as already indicated) the relation between event time and reference time.

Example 10 below is an instance of a relative tense where reference time occurs shortly before coding time, while the event time coincides with reference time.

10. Umntwana ubedla (< **ube edla**) ...
 'The child it be (near past), it eat (present) ...'
 'The child was eating ...'

Example 11 below is an instance of a relative tense where reference time occurs shortly before coding time, while the event time occurs shortly before reference time.

11. Umntwana ubedlile (< **ube edlile**) ...
 'The child it be (near past), it eat (near past) ...'
 'The child had eaten ...'

Example 12 below is an instance of a relative tense where reference time occurs shortly before coding time, while the event time occurs shortly after reference time.

12. Umntwana ubezokudla (< **ube ezokudla**) ...
 'The child it be (near past), it eat (near future) ...'
 'The child was going to eat ...'

Example 13 below is an instance of a relative tense where reference time occurs shortly before coding time, while the event time occurs long after reference time.

13. Umntwana ubeyokudla (< **ube eyokudla**) ...
 'The child it be (near past), it eat (remote future) ...'
 'The child was going to eat ...'

The possible occurrences of these tense forms have been discussed exhaustively in Posthumus (1982: 94 *et seq.*) and Posthumus (1988: 139 *et seq.*).

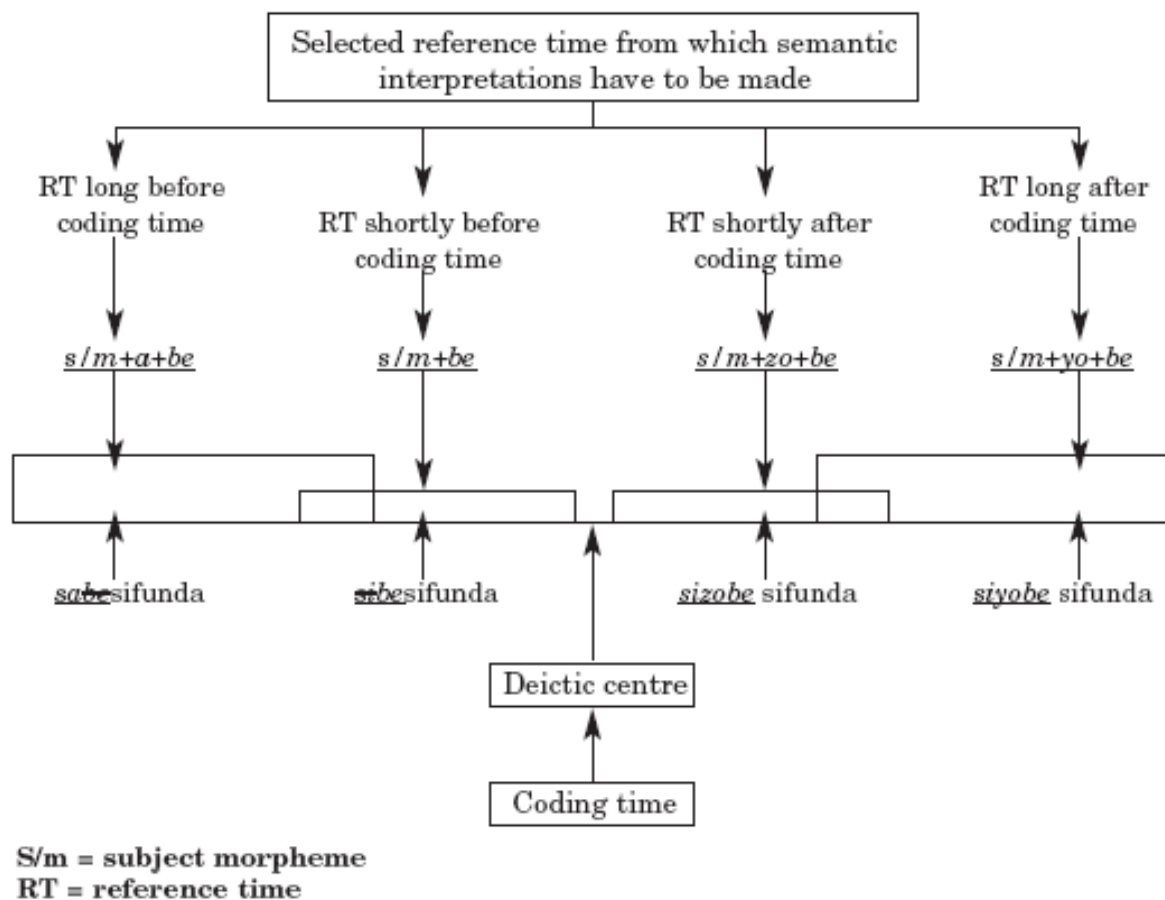
The complement of –be can be a main verb (as illustrated in the examples used hitherto) or an auxiliary verb group as in example 14 or a copulative word group as in example 15 below.

14. Abantwana babethanda ukudla (< **babe bethanda ukudla**) amasi ...
 'The children, they be (remote past), they like (present) to eat curds ...'
 'The children liked eating curds ...'

15. Abantwana babenamaswidi (< **babe ben(a) (a)maswidi**) uma bephuma edolobheni.
 'The children, they be (remote past), they are with sweets when they come (past) from town.'
 'The children had sweets when they came from town.'

Figure 2 is a schematic representation of the four possible positions where reference time may be situated in relation to coding time. In the examples in the figure below event time (which is marked by the form of the complementary verb) coincides with reference time (which is marked by the form of the auxiliary verb) in each instance.

Figure 2: Tense paradigm for the relative tense forms of Zulu



DEFINING ABSOLUTE AND RELATIVE TENSES

In terms of the foregoing discussion there are two options open for the definition of tense. Firstly, separate definitions can be provided for absolute and relative tense. An absolute tense can then be defined as the verb form that marks the relation between event time and coding time, while a relative tense can be defined as the verb form that marks the relation between event time, reference time and coding time.

The second option is to amend Lyons's definition of tense (that served as a working definition for this article) to be applicable to both absolute and relative tenses. This approach would result in tense being defined as follows:

Tenses are semantic-syntactically distinct verb forms that are morphologically and phonologically marked in the tense paradigms of the verb to express the relation between event time, coding time and reference time. (In the case of absolute tense the reference time coincides with coding time.)

NAMING OF THE RELATIVE TENSE FORMS (OF ZULU)

Traditional Bantu grammarians did not treat tense as a deictic category. Doke (1981: 195) refers to (some of) the relative tense forms as the 'contingent mood' while Van Eeden (1956: 379 *et seq.*) uses terms such as 'voortdurende nabye verlede tyd' (continuous near past tense) and 'voortdurende verre verlede tyd' (continuous remote past tense). Ziervogel *et al.* refer to the relative past tense forms with *-be* as the 'continuous past tense'. The tense forms under discussion do not denote continuity and the term 'continuous past tense' (used by the majority of Bantuists) is thus unfitting.

Taljaard and Bosch (1988: 149) describe the function of the 'auxiliary verb stem *-be*' as follows:

The auxiliary verb stem *-be* is the stative perfect form of the copula auxiliary *-ba*. It denotes a continuing action or state that takes place at a certain point in time, and can be used in the past, present or future tense.

Needless to say, these verb forms can never denote a 'continuing action in the present'. The present tense (of the absolute tense forms) which includes a progressive aspectual morpheme *-sa-* denotes such an event. Although Taljaard and Bosch do not label the individual relative tense forms, they (1988: 150) single out a form such as example 16 below which they call a 'continuous past tense'.

16 Ngabe ngifuna izinto zami.
I be (past), I look for the things of mine.
 'I was looking for my things.'

They explain the formation of this type of tense as follows:

Although the construction with the auxiliary *-be* often refers to some time in the past ... it has its own past tense form as well. This "continuous" past tense is formed by means of a past tense concord prefixed to *-be*.

The term 'continuous past' is unsuitable as has already been explained. Chaphole (1992: 55) describes the relative tense forms of South Sotho as 'past duratives'. This term is equally inappropriate as an umbrella term for the relative tenses since these tenses may refer to an event which still has to occur. The word 'past' is thus inappropriate. Furthermore these tenses do not denote a 'durative' event *per se*.

Van Wyk (1981: 85 *et seq.*) refers to the relative tense forms as 'saamgestelde tye' (compound tenses). Poulos and Msimang (1998: 306) also use the term 'compound tenses'. This term implies that these verbal forms comprise a combination of two (or more) tenses. From the preceding discussion it has transpired that a relative tense is a (single) tense form that expresses event time in relation to reference time which is in turn indexed in relation to coding time. The term 'compound tenses' is thus a misnomer.

The terms used by Bantuists as an umbrella term to refer to the relative tenses are inappropriate and misleading. Since the term 'relative tense' is a well-established term used cross-

linguistically to refer to those types of tense where the temporal interpretation involves a relation between event time, reference time and coding time there is no need to use any other term.

The majority of Bantuists have not attempted to coin characteristic terms to distinguish between the individual tenses occurring within the relative tense system. Poulos and Msimang (1998:307), however, propose two possibilities in this regard. They propose the use of terms such as '*past future present tense*' and '*perfect future present tense*'. As a second option they suggest that the naming of the particular tense be done by naming the 'monoverbal tenses that combine to form this compound tense'. Again the preceding discussion of the relative tenses rules out both strategies proposed by these two scholars.

The solution in terms of a strategy for the labelling of the individual tense forms distinguished within the relative tenses, lies in the very nature of these tense forms. Taking into account that the (deficient) auxiliary part of these tense forms denotes the relation between coding time and reference time, while the complementary part denotes the relation between reference time and event time, it is obvious that these tense forms should be labelled accordingly. The elucidating examples below will illustrate this principle.

The relative tense form wayezobaleka (< u+a+b+e e+zo+balek+a) will, in terms of the proposed method of naming be referred to as **a relative tense with reference time long before coding time and event time coinciding with reference time.**

A relative tense form, such as, uzobe edlile (< u+zo+b+e e+dl+il+e) will, in terms of the proposed method of naming be referred to as **a relative tense with reference time occurring shortly after coding time and event time occurring shortly before reference time.**

A relative tense form, such as, uzobe eyosebenza (< u+zo+b+e e+yo+sebenz+a) will, in terms of the proposed method of naming be referred to as **a relative tense with reference time occurring shortly after coding time and event time occurring long after reference time.**

The proposed method of referring to the individual relative tense forms may be cumbersome but there is no other appropriate way of labelling the array of relative tense forms that realise in the Bantu languages.

CONCLUSION

From the preceding discussion it is evident that:

- Tense has to be distinguished from time reference and aspect;
- Tense is a deictic category marked within the verb;
- Tense is grammaticalised in the verbal morphology;
- Tense can be absolute or relative;
- Absolute tenses are generally distinguished as present, past and future (though some languages, such as Zulu, distinguish degrees of remoteness of past and future from the deictic centre);

- The five absolute tense forms distinguished for Zulu are the present, near past, remote past, near future and remote future tense;
- The terms ‘imperfect tense’ and ‘perfect tense’ should not be used to refer to the present and past tenses since these terms relate to aspect and not to tense;
- Relative tenses are generally distinguished from absolute tenses in that in these tense forms event time is expressed in relation to reference time which is in turn indexed in relation to coding time;
- The individual relative tenses each constitutes a single tense form that should be labelled in terms of the relation between coding time and reference time, and reference time and event time.

REFERENCES

- BÄUERLE, R. S. AND VON STECHOW, A. 1980. Finite and non-finite temporal constructions in German, C. Rohrer (ed.). *Time, tense and quantifiers Proceedings of the Stuttgart conference on the logic of tense and quantification*. Tübingen: Max Niemeyer Verlag.
- BOTNE, R. D. 1986. The temporal role of Eastern Bantu -ba and -li*. *Studies in African Linguistics*. Volume 17, Number 3: 303-317.
- BOTNE, R. D. 1989. The function of auxiliary -bá in Kinyarwanda. *In Modèles en tonologie: Kirundi et Kinyarwanda*, F. Jovannet (ed.). Paris: CNRS.
- BOTNE, R. D. 1993. Differentiating the auxiliaries -li and -va in Tumbuka (N.21). *Linguistique Africaine* 10: 7-28.
- BÜHLER, K. 1965. *Sprachtheorie: Die Darstellungsfunktion der Sprache. 2., Unveränderte Auflage mit einem Geleitwort von Friedrich Kainz*. Stuttgart: Gustav Fisher Verlag.
- BYBEE, J., PERKINS, P & PAGLIUCA, W. 1994. *The evolution of grammar*. Chicago: The University of Chicago Press.
- COMRIE, B. 1986. *Tense*. Cambridge: Cambridge University Press.
- CHAPHOLE, S. 1992. The tense system of Southern Sotho in Gowlett, D. F. (ed.) *African Linguistic Contributions*. Pretoria: Via Afrika.
- DE KLERK, W. J. 1978. *Inleiding tot die semantiek*. Durban: Butterworth.
- DOKE, C. M. 1981. *Textbook of Zulu Grammar*. (Sixth edition, eighth impression.) Cape Town: Longman Southern Africa.
- DU PLESSIS, J. A. 1986. Present tense in Xhosa: What does it mean? *South African Journal of African Languages*. Pretoria: Bureau for Scientific Publications.

- ENGELBRECHT, E. 1994. Mood and modality in Zulu. *Unpublished MA dissertation*. Pretoria: University of Pretoria.
- FILLMORE, C. J. 1975. *Santa Cruz lectures on deixis*. Bloomington: Indiana University.
- GABBAY, D AND MORAVCSIK, J. 1980. Verbs, events and the flow of time, C. Rohrer (ed.). *Proceedings of the Stuttgart conference on the logic of tense and quantification*. Tübingen: Max Niemeyer Verlag.
- GABBAY, D. AND ROHRER, C. 1978. Relative tenses: The interpretation of tense forms which occur in the scope of temporal adverbs or in embedded sentences. In *Papers on tense, aspect and verb classification*. Rohrer, C. (ed.) Tübingen: Gunter Narr Verlag.
- GUENTHNER, F. 1977. Remarks on the present Perfect in English. C. Rohrer (ed.). *On the logical analysis of tense and aspect*. Tübingen: TBL Verlag Gunter Narr.
- JOHNSON M. R. 1981. A unified theory of temporal theory of tense and aspect. In Tedeschi, P & Zaenen, A. (eds.) *Syntax and semantics* Volume 14: Tense and aspect. New York, London: Academic Press.
- LEVINSON, S. C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- LOMBARD, D. P., VAN WYK, E.B. AND MOKGOKONG, P.C. 1985. *Introduction to the grammar of Northern Sotho*. Pretoria: J.L. van Schaik.
- LOUWRENS, L. J. 1994. Aspect as an essential sub-category of the verb in Northern Sotho. *South African Journal of African Languages*. Volume 14, No.3. Pretoria: Bureau for Scientific Publications.
- LYONS, J. 1968. *Introduction to theoretical linguistics*. Cambridge: Cambridge University Press.
- LYONS, J. 1977. *Semantics*. Vol. 2. Cambridge: Cambridge University Press.
- NERBONNE, J. A. 1983. German Temporal Semantics: Three-dimensional tense logic and a GPSG fragment. *Unpublished D. Phil. thesis*. Ohio: The Ohio State University.
- PALMER, F. R. 1991. *Mood and modality*. Cambridge: Cambridge University Press.
- PONELIS, F. A. 1975. Die ontwikkeling van hulpwerkwoordgroepe: Hulpwerkwoord en infinitiefsin. *Studies in Bantoetale*. Pretoria: Universiteit van Pretoria.
- POSTHUMUS, L. C. 1982. A review of the so-called -be/-ba past tenses of Zulu. *South African Journal of African languages* 2.2. Pretoria: Unisa.

- POSTHUMUS, L. C. 1983. Werkwoordkategorieë in Zulu. *Ongepubliseerde proefskrif*. Bloemfontein: Universiteit van die Oranje Vrystaat.
- POSTHUMUS, L. C. 1984. Tyd en tempus met verwysing na Zulu. *Linguistevereniging van Suider-Afrika kongresreferate*. Volume 2. Pretoria: Universiteit van Pretoria.
- POSTHUMUS, L. C. 1988. Basis for tense analysis in African languages. *South African Journal for African Languages*. Volume 8, Number 4. Pretoria: Bureau for Scientific Publications.
- POSTHUMUS, L. C. 1990. Time reference in Zulu. In *South African Journal for African Languages*. Volume 10, Number 1. Pretoria: Bureau for Scientific Publications.
- POSTHUMUS, L. C. 1999. Can the deictic centre be shifted?. *South African Journal for African Languages*. Volume 19, Number 3. Pretoria: Bureau for Scientific Publications.
- POULOS, G. & LOUWRENS, L. J. 1994. *A linguistic analysis of Northern Sotho*. Pretoria: Via Afrika.
- POULOS, G. & MSIMANG, C.T. 1998. *A linguistic analysis of Zulu*. Cape Town: Via Afrika.
- REICHENBACH, H. 1947. *Elements of symbolic logic*. New York: The Free Press.
- ROHRER, C. 1977. *On the logical analysis of tense and aspect*. Tübingen: TBL Verlag Gunter Narr.
- ROHRER, C. 1980. *Time, tense and quantifiers - Proceedings of the Stuttgart conference on the logic of tense and quantification*. Tübingen: Max Niemeyer Verlag.
- SAURER, W. 1981. A formal semantics of tense, aspect and aksionsarten. *Unpublished D. Phil. thesis*. Pittsburgh: University of Pittsburgh.
- SMITH, C.S. 1980. Temporal structures in discourse. C. Rohrer (ed.). *Time, tense and quantifiers – Proceedings of the Stuttgart conference on the logic of tense and quantification*. Tübingen: Max Niemeyer Verlag.
- STEEDMAN, M. J. 1982. References to past time, R. J. Javella & W. Klein (eds.). *Speech, place and action: Studies in deixis and related topics*. New York: John Wiley & Sons.
- TALJAARD, P. C. & BOSCH, S. E. 1988. *Handbook of isiZulu*. Pretoria: J.L. van Schaik.
- TEDESCHI, P. J. & ZAENEN, A. (eds.) 1981. *Syntax and Semantics*, Volume 14. Tense and aspect. New York, London: Academic Press.
- VAN EEDEN, B. I. C. 1956. *Zoeloe-grammatika*. Stellenbosch: Die Universiteitsuitgewers en -boekhandelaars.

VAN WYK, E. B. 1981. Saamgestelde tye en modi en aspekte in Noord-Sotho. In *Opstelle oor taal- en letterkunde: opgedra aan prof. dr. J.A. Ferreira*. Johannesburg: Randse Afrikaanse Universiteit.

VAN WYK, E. B. 1987. Linguistic theory and grammatical description: the case of the verb categories of Northern Sotho. In *African Studies* Vol. 46, No. 2.

WELMERS, W. M. E. 1973. *African language structures*. Los Angeles: University of California Press.

ZIERVOGEL, D., LOUW, J. A. AND TALJAARD, P. C. 1985. *A handbook of the Zulu language*. Pretoria: J.L. van Schaik.