

The *e/a* Alternation in Mbugu: The Limits of Allomorphy

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0. Introduction

The description of the verbal morphology of Mbugu presents us with a problem of whether to treat certain tense prefixes as independent morphemes or as allomorphs of each other. The candidates for allomorphy are *ne* and *na*, *te* and *ta*, *re* and *ra*, *ée* and *áa*, and *ze* and *za*. On the face of it, these data suggest a recurrent *e/a* alternation. The drive to consider these pairs as allomorphs is even stronger given the fact that immediately preceding the tense prefixes, the subject prefixes show a non-problematic instance of allomorphy involving precisely such an *e/a* alternation. However, examination of the meaning and use of these tense prefixes shows that only some of them can be paired as allomorphs.

Common semantic distinctiveness, including differences that are a reflection of their distribution, is a prerequisite for analysing different forms as allomorphs of one morpheme. On the form side, the differences must be either phonologically or structurally defined. There are certain restrictions on the application of structurally defined allomorphy, such as, staying within the same word class, or avoiding conditioning by environment over a distance. The allomorphy under review is always within verbs and not phonologically determined. Common meaning and distributional conditions are crucial to the present problem.

Mbugu is a Bantu language spoken in the Usambara mountains in Tanzania. There are two varieties of Mbugu, one of which is known as a mixed language by the name of Ma'a. This variety is referred to as Inner Mbugu (IMb) in this paper, the other variety being Normal Mbugu (NMb). The differences are purely lexical and not important for this paper. The reader is referred to Mous (1994) for further details and references on this issue.¹ Other Bantu languages in the area, notably Shambaa and Chasu (Pare), show a similar *e/a* alternation in both subject prefixes and tense prefixes, but this alternation is atypical for Bantu in general.² The morphological structure of the verb is as follows: every inflected verb has a subject prefix. In most verb forms the subject prefix is the first morpheme but it may be preceded by a negation marker *te* and/or a high tone marking a non-

¹ The data were collected by the author in four fieldwork periods in 1990 to 1994 which were sponsored by the Deutsche Forschungsgemeinschaft, Sonderforschungsbereich 214 Identität in Afrika, Teilprojekt A 5. I am grateful to the referee and to Eithne Carlin for comments on this paper.

² Nurse (1979:489-495) offers a historical explanation for this alternation relating it to the inflectional final vowel of the verb.

assertive domain.³ The subject prefix is usually followed by one or more tense prefixes. Between the tense prefixes and the verb stem there is a position for one (occasionally two) optional object prefixes. The last vowel of the verb indicates tense again. The structure is summarized in the following formula, (1), which is illustrated by examples (2) and (3).⁴

(1) (neg)-subj-(tense-(tense-(tense)))-(obj(obj))-STEM-inflectional vowel

(2) u-ne-vi-kicha
2SG-EXPEC-8-find
'You will find them.'

(3) te-ve-na-ghuhw-aa
NEG-2-C:EXPEC-marry:PAS-NEG
'They are not married yet.'

The third person is subdivided into the various noun classes. Noun classes are primarily determined by their agreement pattern. The agreement markers include subject and object prefixes on the verb, which are given below. Nouns are overtly marked for noun class by the presence of a noun class prefix. Noun class membership is not predictable on semantic grounds. Number is an inherent part of the noun class system and does not exist as an independent category: noun classes form singular - plural pairs. The traditional Bantu numbering is used to refer to the noun classes; 14.1 and 14.2 reflect a recent diachronic split. Classes 1 and 2 contain human third persons in singular and plural respectively.

The set of subject prefixes that shows *e/a* alternation are those for noun classes 1, 2, 6, 12, 16 as can be seen in table (1). These are the classes that contain an *a* in the object prefixes, or in any other concordial prefix such as the pronominal prefixes. The basic or underlying form of the alternants can be assumed to contain *a*.

³ The first person singular subject is, in negative tenses, expressed in a portmanteau prefix *si* NEG 1SG

⁴ The following abbreviations are used in this paper. 1SG refers to first person singular but otherwise 1 (and other numbers) refers to the noun class 1 (i.e. one of the third persons), in combination with DEM, for demonstrative, numbers refer to degree of distance (1-3); EXPEC for expectational, C EXPEC for counter-expectational, PF for perfect, CSEC for consecutive, COND for conditional, BGND for backgrounding, IT for itive, EVI for evidential, PST for past, IMPF for imperfective, SBJ for subjunctive, NEG for negation, PRES for present, REL for relative, CON for connective, PS for passive, CS for causative, REC for reciprocal, APL for applied, IMb for Inner Mbugu (Ma'a) and NMb for Normal Mbugu. The following orthographic conventions are used: gh for the voiced velar fricative, mhp, nht, nhk for a voiceless stop with voiceless prenasalisation, when an m precedes a non-homorganic consonant, or an m, it is syllabic, the opposition between syllabic m-b and prenasalised b is represented by using a hyphen (morpheme boundary) for the former

Table 1: Overview of Subject and Object Prefixes

singular			plural		
	SUB	OBJ	SUB	OBJ	
1SG	ni	ni	1PL	tu	z tu
2SG	u	ku	2PL	m(u)	m(ú)
1	<u>é/á</u>	m(u)	2	<u>vé/vá</u>	vá
3	ú	ú	4	í	í
5	lí	lí	6	<u>é/á</u>	á
7	chí	chí	8	ví	ví
9	í	í	10	jí	jí
11	lú	(l)ú			
12	<u>ké/ká</u>	ká	14.1	vú	vú
14.2	ú	ú			
15	kú	kú			
16	<u>hé/há</u>	há			

The alternation *e/a* in all these subject prefixes is determined by the same factor, the tense of the verb. The subject prefixes for these classes have an *e* for most tenses, but *a* for the subjunctive and *a* for the conditional *he*. The two forms are allomorphs of the same morpheme and the allomorphy is morphologically conditioned. The same condition is valid for the alternation in all the relevant subject prefixes and this set of relevant subject prefixes can be defined in general terms, i.e. all the prefixes that contain an *a* in the object prefixes.

1. Tense prefixes

The tenses of the verb consist of a combination of the tense prefix and the verb ending. Here and elsewhere I use the word 'tense' in the meaning of verbal inflectional class regardless of whether it signals time reference, internal time structure or mood. In fact these tense prefixes indicate primarily attitude and information structure rather than tense in the literal sense. The default final vowel is *a*; the other endings are: *-íye* perfect, *-áa* perfect, *-e* subjunctive, *-é* for some negative tenses, high tone for past perfect, and negative conditional, "not yet". The tense prefixes are presented in (4):

- (4) Possibly paired allomorphs: *ée, áa; ze, za; re, ra; te, ta; ne, na; sée, sáa, kuse, kusa*.⁵
and others: *ka₁, ka₂, kaha, kú, eku, kura, hé, si, tuwáa, chéri, réngé, manga*.

With the exception of the narrative *ka₁* and the negative future *ka₂*, all the monosyllabic tense prefixes that contain an *a* have a counterpart that contains an *e*. Since we have accepted *e/a* allomorphy in the subject prefixes preceding these tense prefixes, the temptation arises to treat the pairs *áa/ée, ra/re, ta/te, na/ne, and za/ze* as allomorphs of one tense prefix.⁶ In order to decide this, we will have to compare the actual usage of the members of these pairs and investigate for every one of them whether the forms in *a* and *e* convey the same meaning or not and we will see that the results are not uniform; some but not all the putative pairs are allomorphs.

1.1 *na/ne*. The markers *na* and *ne* do not convey the same meaning; on the contrary they are opposite in meaning and are therefore different morphemes; *na* is glossed as EXPEC for expectational and *ne* as C.EXPEC for counter-expectational. However, a superficial investigation into the facts might lead one to a single meaning and thus to a single-morpheme-analysis. The affirmative future tense marker is *ne*, (5-6), whereas the marker *na* is used in conjunction with the negative marker *te* in pre-subject position and a final high tone in the negative tense meaning 'not yet', (7)

- (5) u-na mburi ani hambu vinhtu vy-ose u-ne-vi-kicha (NMb)
2SG-with matter what because things 8-all 2SG-EXPEC-8-find
'What doubt do you have, because, all the things, you will find them.'
- (6) te-m-róána kúné nkaé mpaká hódi m-né-gáya. (IMb)
NEG-2PL-leave:REC 2PL long:ago until place 2PL-EXPEC-die:APL
'You don't leave each other from that time until you die.' (about marriage)
- (7) va-ngi vaana te-ve-na-ghuhw-aa (NMb)
2-other children NEG-2-C:EXPEC-marry:PAS-NEG
'Other children are not married yet.'

Further examination of the meaning of *ne* reveals that it is also used to express positive expectation or intention, (8-9).

⁵ These tense prefixes *sée, sáa* and *kuse, kusa* are not discussed in this paper despite the fact that they seem to show the same *e/a* alternation. The reason is that their number of tokens in texts are too few to allow a discussion.

⁶ It is noteworthy that the tense prefixes *re/ra, te/ta, ne/na* and *ze/za* are similar in that they begin with an alveolar consonant.

- (8) mi ni-tonga hanhtu ha-siku mira vagheni va-etu ve-ne-za
 I 1SG-go place 16-certain but visitors 2-our 2-EXPEC-arrive
 saa vu-siku (NMb)
 hour 14.1-certain
 'I go somewhere but visitors are expected to come at a certain time.'
- (9) kwátó n-ne-endelea ku-bó'i na yá vasítá na va'ariyé.
 thus 1SG-EXPEC-continue 15-make with this Shambaa with Pare
 'Therefore I will (intend to) go on with these Shambaa and Pare.' (IMb)

Another exponent of the expectational meaning is the high occurrence of *ne* in complements of an irrealis condition, (10).

- (10) i-ne-bigha he i-li isanga ve-ku-ji-finga j-ose (NMb)
 9-EXPEC-hit 16 5:DEM1 land 2-COND-10-close 10-all
 'It would rain in that land, if they closed it (the clouds) all.'

One could argue now that the meaning 'not yet' in negative tenses is also an exponent of positive expectation on part of the speaker, the negative part of 'not yet' being expressed by the co-occurring negation markers. Positing *ne* and *na* as one morpheme with one meaning of positive expectation and saying that its allomorphy is conditioned by the presence or absence of negation markers would seem possible. Such an analysis is, however, ruled out because *na* also occurs - be it marginally - in affirmative tenses. In elicitation its meaning in affirmative tenses was given as indicating indignation (11) and in texts, there are instances where it indicates annoyance, (12), or surprise (13). On the basis of this evidence the meanings of *ne* and *na* cannot be combined since they are in fact quite the opposite of each other: positive attitude for *ne* but negative for *na*.

- (11) ni-ka-na-kúru (IMb)
 1SG-CSEC-C:EXPEC-cultivate
 'Why should I cultivate?! (indignantly)'
- (12) vé-ba-we m-ka-na-chele-ja wa tó sari saa ikumi
 2-say-PAS:PF 2P-CSEC-C:EXPEC-late-CS cattle just until hour ten
 ní ahoni
 is what
 'They were told: "Why do you make it so late for the cattle, until four o'clock?"'
- (13) niyo á-na-uma hé-dini kidogo (IMb)
 it:is 1-C:EXPEC-stand 16-religion a:little(Sw)
 'He stood with religion for a while.'

Thus *na* and *ne* are similar in meaning but different: *ne* indicates expectation, intention and *na* the opposite, counter-expectative. Both indicate involvement of the subject. This is in line with the fact that in the majority of tokens of the tense marker *ne* or *na* in positive tenses, the subject is first or second person.

1.2 *ta/te*. Semantically *te* and *ta* can be described as having one and the same meaning, glossed by EVI for (self-)evident, but the fact that both can be combined rules out the possibility of analysing them as two allomorphs of one morpheme, although there is only one example in my data in which they are combined, (14).

- (14) tu-té-ta-lita
 1PL-EVI-EVI-come
 'We should come (It was proper for us to come).'

A sequence of twice the same tense prefix is excluded in the verbal morphology, as can be concluded from the fact that when two homophonous verbal prefixes *ka* appear in a series, the second one is automatically interpreted as the class 12 object marker. For this structural reason *te* and *ta* have to be analyzed as different morphemes.

The two forms are not found in strict complementary distribution but they would appear to be in a sort of statistical complementary distribution. Different types of texts favour either *ta* or *te*. The prefix *ta* is used in procedural texts, (15), in historic accounts indicating general custom, (16), and in clauses supplementing a conditional, (17). The form *ta* is four times more common than *te*.

- (15) mhé é-zóko é-'óro ndoá y-a ki-ma'á, é-ta-dáa na'á,
 man 1-sit 1-close marriage 9-CON 7-Mbugu 1-EVI-see honey
 é-ta-dáa churú, é-ta-dáa mipahé, é-ta-vá-se vahé,
 1-EVI-see bull 1-EVI-see sugar-cane 1-EVI-2-call people
 é-ta-m-sé mkóra kú'u w-a ki-'ágirú na w-a kí-lagé
 1-EVI-1-call in-law his 1-CON 7-male and 1-CON 7-mother
 na va-háli vá-bahú (IMb)
 and 2- other 2-siblings
 'Somebody who wants to marry the Mbugu way looks for honey, a bull,
 sugarcane and he calls people, he calls his in-laws of the male and female
 type and others, brothers and sisters.'

- (16) é-ta-tí'í-wa ikeréno ní-hó éhla y-etu (IMb)
 1-EVI-carry-PAS earring is-16:REL circumcision
 'He receives an earring; this is our circumcision rite.'

- (17) *kai ni-ló baari, ni-ta-baari* (IMb)
 if 1SG-have journey 1SG-EVI-journey
 'If I have a journey I will travel'

The form *te* is used in stories, and also in historical accounts but indicating the flow of events as a logical sequence, with the meaning 'it could not have been otherwise', (18,19)

- (18) *kwátó ání ni-te-daha anhaoanhao mpaka ni-ka-he maghamba* (IMb)
 thus I 1SG-EVI-walk carefully until 1SG-CSEC-arrive M
 'Thus I walk on carefully until I arrive in Magamba'

- (19) *mlala u-la e-ka-endelea ku-fw-i-wa ko*
 mother 1-DEM3 1-CSEC-continue 15-die-APL-PAS every
tw-ée-mogha ke-te-fwa (NMb)
 1P-PST-give birth 12-EVI- die
 'That mother continued to be met with death, for every child that we begot, died'

This distributional difference suggests a difference in meaning of the two forms but what the usages of *te* and *ta* have in common is that the action or event is according to what it is to be expected, is what should be, or what is a logical consequence or (self-)evident.⁷ A division into two meanings seems equally possible though *te* to indicate the logical flow of events and *ta* for community expectation and after a condition. Deciding what is one meaning and what are two is not a straightforward issue in the area of the tenses of the verb, as these data show. It often depends on the degree of abstractness that one allows for. Here, however, the decisive argument against a mono-morphemic analysis comes from a distributional fact namely that the combination *te-ta* has been attested, as shown above.

13 *re/ra* Both *re* and *ra* occur in a very similar context, for example after *ka-kwa* 'and-is', (20-21) This suggests that the forms are interchangeable and thus have one meaning

- (20) *mirá té-hlamáye a-ka-kwá é-re-úma sawasawa bí* (IMb)
 but NEG 1-leave NEG 1-CSEC-be 1-BGND-stand equal only
 'He did not end up staying at a standstill'

⁷ The difference between *ne* and *te/ta* is that *te/ta* denies any possible influence of the subject on the event, whereas *ne* signals just that. As a consequence, the two tense markers are mutually exclusive.

- (21) vé-ka-kwa vé-ra-salia i'í (IMb)
 2-CSEC-be 2-BGND-pray here
 'When they prayed here.'

The discourse function of this tense prefix is opposite to that of *te*, namely indicating events that are not in the natural flow of time, such as a habit (in the past) against which background the action has to be interpreted, (22), or general background against which the action is narrated, translated by 'when', (23).

- (22) ání ni-aho-íye tó aba é-re-ata i'í (IMb)
 I 1SG-see-PF just father 1-BGND-be here
 'I saw it when father was still here.'

- (23) a-re-chi-pata u-la, e-m-ti mche w-akwe (NMb)
 1-BGND-7-get 3-DEM3 1-1-say wife 1-his
 'When he got that, he told his wife.'

The tense is also used for events before the point of reference on the story line. For example, the sentence *á-ré-bátíjwa péré* 'he was baptised already' refers to an event that had happened in the years before the reference time at that point of the story. A few sentences later we find a similar example of *re* used for a previous event that is now relevant background, (24).

- (24) ká pádre á-re-gá ni-ho kenedi é-lita (IMb)
 DEM2 priest 1-BGND-die is-16:REL Kennedy 1-come
 'After that priest had died, Father Kennedy came.'

The fact that that both *re* and *ra* can be used in the same environment and that they have the same function of backgrounding, supports the assumption that they are allomorphs of one morpheme. The semantic analysis of this tense marker is however not complete since the label "background" certainly does not cover every usage of the marker, nor does it account for the fact that this tense is often used in the resultative present with recipient telic verbs such as 'know', 'die', 'slim', 'be called', (25).

- (25) jo ni-re-manya? jo u-re-manya. (NMb)
 10:REL 1SG-BGND-know 10:REL 2SG-BGND-know
 'Those that I know?' 'Those you know.'

The incompleteness of the semantic analysis would not concern us too much here as long as the two forms *re* and *ra* showed differences in use. This is however not the case. There are differences in use in at least three areas: it is only the form *re* and not *ra* that occurs in this usage for resultative present of recipient telic verbs.

A similar problem is the use of *ra*, but not *re*, indicating an obligation, which occurs at one place in our text about the history of the Mbugu, (26). And finally, the combination *ku-ra* means 'once in the past', e.g. *ukurasikia* 'Have you ever heard of?'; the combination *ku-re* is attested too, but not in this meaning. These observations could be due to the limitations of the corpus.

- (26) kai ni ng'ombe m-ra-ghava sawa-sawa u-ra-ghuha nhtatu
 if COP cows 2PL-BGND-divide equal-equal 2SG-BGND-take three
 kana u-ra-ghuha mmwe
 or 2SG-BGND-take one
 'If it is cows, you are to distribute equally. You will take three or you will take one.'

The form *re* occurs more often than *ra*. In the form *re* the tense marker is identical to one of the verbs 'to be'. The verb 'to be' never has a variant *ra*. Historically, the origin of the tense marker might well lie in the verb 'to be', note the parallel in English usages such as *being* for background and *is to* for obligation. In this light, the two forms *re* and *ra* are considered to be allomorphs, partly in free variation and partly restricted to certain environments.

1.4 *áa/ée*. The semantic equivalence of *áa* and *ée* is exemplified by the following two very similar sentences (27a and b) which came immediately after each other in elicitation. In addition, both *áa* and *ée* are used as the equivalent of Swahili *me* in elicitation, (28 a and b).

- (27) a) *ée*-hátsiya (NMb) b) *áa*-bigha miyayú (NMb)
 1:PST-sneeze 1:PST-hit yawn
 'He sneezed' 'He yawned'
- (28) a) Sw: wamevuta kamba b) Sw: ameuzá kibuyu chake
 v-*ée*-húru lumuhlú (IMb) *áa*-dí kishaghú kú'u (IMb)
 2-PST-pull rope 1-PST-sell calabash his
 'They pulled the rope.' 'He sold his calabash.'

The past tense prefix *áa*, but not *ée*, may be combined with an inflectional suffix *áa* which lays emphasis on the completion of the action, e.g. *yázakitáa* 9:end 'It is completely finished.' (IMb). The perfect suffix *íye* is either used without any tense prefix or with the prefix *ée*, (29), but seldom with *áa*; in fact only passive verb forms allow such a combination, (30). As was the case with *re* and *ra*, the two allomorphs are only partly restricted in distribution.

- (29) badáaye ku-pata mateso v-éé-dumú-ye ní-há-ka i'í (IMb)
 afterwards 15-get problems 2-PST-want-PF 1SG:SBJ-16-leave here
 'After getting problems, they wanted me to leave here.'
- (30) ma'í y-áa-wáhá-we ní wá (IMb)
 water 6-PST-drink-PAS:PF by cattle
 'The water was drunk by cattle'

1.5 *za/ze*. Both forms are used as an equivalent to the Swahili consecutive prefix *ka*. For example *ázaima* or *ázeima* 1:IT:cultivate (NMb) 'and he cultivated, he went to cultivate' is rendered in Swahili as *akalima* and *ázepáta* 1:IT:get (NMb) 'and he got' is in Swahili *akapata*.⁸ This in itself is evidence for sameness in meaning and allomorphy. The allomorph *za* is more common than *ze*, but in several instances we have noted that they are interchangeable. The meaning of the tense marker is itive, i.e. 'go and ...', (31), and as an extension of this meaning the marker is also used for near future without necessarily involving movement, (32).

- (31) hé-ló i'ázé i-wé áa-sé vama'á na vasitá na va'ariyé
 16-have day 5-one 1:PST-call Mbugu and Shambaa and Pare
 vá-so vá-zé-m-hand-íya magerú kú'u. (IMb)
 2:SBJ-go 2:SBJ-IT-1-plant-APL bananas his
 'On a certain day he called the Mbugu, Shambaa, and Pare people to go
 and plant his banana trees.'
- (32) tú-zé-ga'á-we. (IMb)
 1PL-IT-kill-PAS:PF
 'We are going to be killed.'

The prefix often follows other tense prefixes. Attested combinations include *aa/ee-za*, *ta/te-za*, *ne-za*, *ku-za*. The prefix *za* is always the last in such combinations and never takes the form *ze*.⁹ Apart from this distributional restriction, the forms are in free variation and no conditions for allomorphy can be given. The restriction is probably a remnant of the origin of *ze/za*, which is the verb *za* (NMb) 'arrive', still noticeable in the frequent use of this tense prefix with ventive verbs such as 'come', 'bring', 'arrive', 'enter', 'return'.

⁸ The forms do not necessarily refer to the past as is suggested by these translations.

⁹ There is, however, one instance of *za-ku* in the texts.

2 Overview and conclusions

Investigation into semantic differences has led to setting up two different morphemes *ne* and *na*, and *te* and *ta*, but one morpheme with *e*- and *a*-allomorphs in the cases of *za/ze*, *ra/re* and *áa/ée*. This lack of uniformity is also reflected in the variety of distributional restrictions, all of which are morphological and never phonological. These morphological restrictions involve not only subsequent morphemes but also distant morphemes. Examples of restrictions on subsequent morphemes are

- Exclusion of *ze* but not *za* and *te* but not *ta* as second or third tense prefix in a series
- Exclusion of *ra* but not *re* as second or third tense prefix in a series, but not absolutely since the combination *kura* has grammaticalized to mean 'once in the past'
- Combinatory restrictions that must have led to the tense prefix *eku* which is presumably a combination of *eelaa* and *ku*, but which is never *aku*
- In negative tenses, the combination *kaha* occurs to the exclusion of *kahe*, but the negative conditional *he*, originating from the locative *ha*, has no variant *ha*

Examples of exclusion at a distance are the combination of the perfect suffix *-íye* with the past tense marker *ée* but not with *áa* (unless it is suffixed to a passive derivational suffix) and that of the emphatic perfect suffix *-áa* with the past tense marker *áa* but not with *ée*.

Other morphological (or syntactic) restrictions can be stated in relation to a semantically (or syntactically) defined group of grammatical morphemes. In non-verbal sentences, the *a*-allomorphs are excluded *m-te-na mahemba* 2PL-EVI-with maize 'You (pl) have rice' (not *m-ta-na*). Negative verb forms also consist of such a group but the restrictions in negative verb forms do not allow generalisations in terms of an *a* or *e* alternant.

(33) Distribution of *e*- and *a*- variants in affirmative versus negative tenses

Affirmative	Negative
<i>za/ze</i>	<i>ze</i>
<i>re/ra</i>	<i>re</i>
<i>ée/áa</i>	<i>ée</i>
<i>ne,na</i>	<i>na</i>
<i>ta,te</i>	<i>ta,te</i>

There seems to be a general tendency towards *e* in tense prefixes in negative verb forms. In addition to *ze*, *re* and *te*, the tense prefix is *sée* in the negative irrealis and never *sáa*, the negative conditional *he* has no variant *ha*. On the other hand, however, the tense prefix *te* is rare in negative verb forms, *ne* is excluded in negative verb forms and *kaha* occurs in negative tenses to the exclusion of *kahe* while the (negative tense) combination *kusa/kuse* occurs in both variants.

The alternants are not equally frequent: the prefixes *ta* and *za* are more common than *te* and *ze*, while *re* is more common than *ra*. These differences are probably, at least partly, a remnant of their historical origin.

(34) *Statistical differences in usage between e- and a- variants*

áa = ée
 za > ze
 ra < re
 ta >> te

Both subject prefixes and the tense prefixes show *a/e* allomorphy and in both positions this allomorphy has some free variation. On top of that, however, there are restrictions on the use of one or the other of the allomorphs in certain syntactic or morphological environments. In the case of the tense prefixes, most of these restrictions are specific to the prefix in question and not overall for all the tense prefixes. On semantic grounds some of the seemingly alternant tense prefixes have to be analyzed as separate morphemes, despite an apparent drive towards *e/a* alternation in this subsystem of the verbal morphology of Mbugu.

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