

## THE FUNCTIONS OF KAMBA VERBAL EXTENSIONS\*

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This paper examines four verbal extensions found in Kamba and other Bantu languages, noting the ways in which each extension affects both the number and type of arguments allowed by the verb and the meaning of the entire clause. It criticizes the descriptions of the functions of verbal extensions offered by Guthrie (1962) for Bantu and by Whiteley & Muli (1962) for Kamba, and offers a new description with the premise that the functions of verbal extensions in Kamba can not be accurately described without reference to the semantic roles of the arguments of the verb. It discusses problems with traditional terminology used with verbal extensions and suggests alternative labels.

Kamba,<sup>1</sup> like other Bantu languages, has a method whereby it can modify a clause by suffixing a morpheme directly to the verb root, between the root and any verb-final tense/aspect suffixes. This morpheme is commonly referred to as a verbal extension. In this paper I examine four Kamba verbal extensions and their affect on the clauses in which they appear. I explore the way in which each extension affects the number and type of arguments allowed by the verb and how the extension affects the meaning of the entire clause. At the same time, I critique two prior analyses of the function of the extensions: Guthrie's (1962) purely syntactic description of Bantu extensions, and Whiteley's (1962) semantic description of Kamba extensions. I discuss problems with the traditional terminology used to refer to Bantu verbal extensions and finally, suggest some new, more appropriate terms.

1. CLASSES OF KAMBA VERBS. The usual classification of verbs into transitive/intransitive, and even the more complex Relational Grammar classification of unergative/ unaccusative/ semi-transitive/transitive,<sup>2</sup> are inadequate for describing the inherent valencies of Kamba verbs.<sup>3</sup> Since non-patient objects are usually unmarked by prepositions, there is no observable difference in the structure of the clause or the verb itself whether the clause contains a verb with a patient argument or a verb with a locative, goal, temporal or other 'oblique' argument. Kamba clauses have SVO structure, with as many as three objects following the verb. Kamba verbs have the structure: (pre-prefix)+ noun class + (tense/aspect) + root + (extension) + tense/aspect, where where items in parenthesis only occur under certain circumstances.

- (1) a. *Mosea a-ah-ia ngana*.<sup>4</sup>  
Mosea CL-shoot-PST guinea.fowl  
'Mosea shot a guinea fowl.'  
b. *Mosea a-semb-ia mili omwe*.  
Mosea CL-run-PST mile one  
'Mosea ran for a mile.'  
c. *Mosea a-uwa-ia malaria*.  
Mosea CL-become.ill-PST malaria  
'Mosea became ill with malaria.'  
d. *Mosea a-thok-ia tene*.  
Mosea CL-spoil-PST long.ago  
'Mosea turned evil long ago.'

The verb in 1a, *koatha* 'to shoot', is one we would expect to be transitive. It takes a patient object, which is in object position after the verb. The verb in 1b, *kosemba* 'run', is one we would expect to be intransitive, since it is a verb of motion. But in Kamba it takes an argument of distance, unmarked and in the same position as the object of 1a. In 1c and 1d, we have examples of verbs with affected subjects. This does not, however, prevent them from taking an additional

argument in object position. Not only are the arguments in object position in 1b, 1c, and 1d allowable, they are obligatory for the verb in its basic form.

Every Kamba verb can be used with a different number of arguments than are required by its lexical valence, but in this case it will be marked, either by a verbal extension, or by the prefix *ne-*. This prefix is used (among other places) in statements which are answers to information-seeking questions, where certain verbal arguments are assumed by the asker. Although further systematic study is required to determine the exact function of Kamba *ne-*, it seems to appear whenever some understood argument is not explicitly stated in the clause. For example, *ne-* must be prefixed to a verb when the agent of a *-w/* ('passive') or *-k/* ('stative') clause is not stated. In 2a, the verb *lilikan* does not take the *ne-* prefix because the agent *Kavoli* is specifically mentioned. In 2b, the verb *lilikan* is prefixed with *ne-* and the agent is not mentioned. 2c shows that a 'passive' clause without an agent is ungrammatical unless the verb is prefixed with *ne-*. Examples 3a-c show that the verb in a 'stative' clause must be prefixed with *ne-* unless the clause contains an agent phrase.<sup>5</sup>

- (2) a. *Esiarwa ya mo:ime ye-lilikan-iluwe ne Kavoli*.  
name of husband CL-recall-W+PST by Kavoli  
'The name of her husband was recalled by Kavoli.'  
b. *Esiarwe ya mo:ime ne-ye-lilikan-iluwe*.  
name of husband NE-CL-recall-W+PST  
'The name of her husband was recalled.'  
c. \**Esiarwa ya mo:ime yelilikaniluwe*
- (3) a. *Esiarwe ya mo:ime ye-lilikan-eka ne Kavoli*.  
name of husband CL-recall-K+ASP by Kavoli  
'The name of her husband is recall-able by Kavoli.'  
b. *Esiarwe ya mo:ime no-ye-lilikan-eka*.  
name of husband NE-CL-recall-K+ASP  
'The name of her husband is recall-able.'  
c. \**Esiarwe ya mo:ime yelilikaneka*.

The *ne-* prefix is required whenever the verbs in 1a-d are used without an object, whether they appear to be semantically transitive or intransitive. Again *ne-* appears to be marking the absence of an expected argument.

- (4) a. *Mosea newathia*. / \**Mosea aathia*.  
'Mosea shot.'  
b. *Mosea nosembia*. / \**Mosea asembia*.  
'Mosea ran.'  
c. *Mosea nowaie*. / \**Mosea auwaie*.  
'Mosea became ill.'  
d. *Mosea neathoka*. / \**Mosea athoka*.  
'Mosea turned evil.'

Thus, there is no syntactic criterion for classifying verbs as either transitive or intransitive, and any claim about Kamba extensions which invokes the notion of a transitive/intransitive distinction is misguided. In this paper I classify verbs according to the semantic roles of the arguments in preverbal (subject) and postverbal (object) positions. The main semantic role distinctions I use are 'agent', the argument which initiates the action of the verb, and 'patient' the argument which is directly affected by the action of the verb. Other semantic roles are fairly self-explanatory: locative, benefactor, experiencer, etc. Thus, I invoke a great number of categories of verbs such as: Agent Subject/Patient Object; Agent Subject/Locative Object; Patient Subject/Locative Object; Experiencer Subject/Patient Object; etc. This categorization system, though complex, avoids any

conceptions about the kinds of arguments an unextended verb can take, and therefore any conceptions about the kinds of arguments the extended verb can take.

## 2. PRIOR ANALYSES OF VERBAL EXTENSIONS

2.1. GUTHRIE'S ANALYSIS. Guthrie 1962 states that 'In general, the function of an extension can be correlated with the capacity of the extended morpheme to support (i) an extra object, (ii) one object less, (iii) the same number of objects' (p. 204). In a footnote he defines his use of the term 'object': 'This term [object] is used to refer to a nominal which, in the normal word-order can be supported by a verbal only in the position following the verbal, either immediately or after another object.' This is a purely syntactic definition which makes no reference to the semantic role of the argument in post-verbal position, and by doing so avoids the messy sensitive/transitive distinctions cited earlier. But is it possible to define the function of Kamba extensions purely in terms of the number of postverbal arguments allowed when the extension is affixed to the verb? Or must we take into account the number of preverbal arguments as well? And what about the relevance of the semantic roles of these arguments? Beginning in §3 of this paper I will give examples of types of clauses in which the number of objects following the verb is directly correlated with the choice of verbal extension and show how a characterization of the functions of verbal extensions in terms of the semantic roles of the arguments of a verb can cover a wide range of clause types.

2.2. WHITELEY AND MULI'S ANALYSIS. In contrast to Guthrie's syntactic and formal categorization of verbal extensions, Whiteley & Muli's categorization is purely semantic. They classify extensions by the way in which the suffix changes the meaning of the clause in which it appears. The labels they give extensions are based on Indo-European functional categories. Thus, according to Whiteley & Muli's 1962 grammar of Kamba: 'These extensions include the Causative', 'Prepositional', 'Passive', 'Stative', 'Reciprocal', and 'Reversive', and each is associated with some modification of the meaning of the simple verb' (p. 81). The question this sort of analysis raises is whether the Kamba extensions really function in the same ways as their Indo-European morphological counterparts. Or are the functions of Kamba extensions either broader or more specific? Beginning in §3, I will argue that the semantic functions of Kamba verbal extensions are not adequately described with the traditional linguistic terminology used by Whiteley & Muli. In §7 I suggest some new terminology.

3. THE 'PREPOSITIONAL' EXTENSION /-e/. We will begin by examining an extension which conforms better to Whiteley & Muli's analysis than to Guthrie's. Guthrie labels the extension /-e/ a 'O (object) extension', stating that 'The characteristic of extensions of this type is that a verbal in which one of them occurs can support an object which the corresponding simplex verbal cannot, irrespective of whether or not the latter can by itself also support an object' (p. 204). Thus, if we affix /-e/ to a verb root, the verb should support one more object than it can in its basic form. Whiteley & Muli call /-e/ the 'Prepositional extension' and write that 'As the name implies the "prepositional" form is associated with a prepositional modification to the meaning of the simple verb. Thus, "pass by, do on behalf of, work for, bring to ..." are typical translations for verbs of this form' (p. 82). Guthrie's analysis works for verbs which in their basic form have an agent object and a patient object. The verbs in examples 5-7 take an extra postverbal argument when the /-e/ extension is added.

- (5) a. *Mosea a-ah-ia nganga.*  
Mosea CL-shoot-PST guinea.fowl  
'Mosea shot a guinea fowl.'  
b. *Mosea a-ah-e-ia siana nganga.*  
Mosea CL-shoot-E-PST children guinea.fowl  
'Mosea shot a guinea fowl for the children (on their behalf or instead of them).'

- (6) a. *Siana i-nu-ia nomba.*  
children CL-sweep-PST house  
'The children swept the house.'  
b. *Siana i-nu-e-ia Kavoli nomba.*  
children CL-sweep-E-PST Kavoli house  
'The children swept the house for Kavoli (on her behalf or instead of her).'
- (7) a. *Mosea a-ol-ila kebang.*  
Mosea CL-break-PST machete  
'Mosea broke the machete.'  
b. *Mosea a-ol-e-ila kebang motito-ne.*  
Mosea CL-break-E-PST machete forest-inside  
'Mosea broke the machete in the forest.'

But when we look at the interaction of /-e/ with a different class of verb, Guthrie's analysis fails. The verb *kosemba* 'to run' takes an agent subject and a locative, goal, or distance object in its basic form.

- (8) a. *Kavoli a-semb-ia motito-ne.*  
Kavoli CL-run-PST forest-inside  
'Kavoli ran around in the forest.'  
b. *Kavoli a-semb-ia mili omwe.*  
Kavoli CL-run-PST mile one  
'Kavoli ran for a mile'

It retains its basic form if additional prepositional objects are added.

- (8) c. *Kavoli a-semb-ia kuma osi-ne ngina motito-ne.*  
Kavoli CL-run-R-PST from river-inside until forest-inside  
'Kavoli ran from the river to the forest.'

And, as Guthrie would predict, it assumes the extension /-e/ if a second object, not preceded by a preposition, is added to the clause.

- (8) d. *Kavoli a-semb-e-ia Mosea mili omwe.*  
Kavoli CL-run-E-PST Mosea mile one  
'Kavoli ran a mile for Mosea.'

However, it also acquires the /-e/ extension if the number of postverbal arguments stays the same, but the meaning of the clause changes. In 8e-f, 'forest' and 'road' are no longer bounded locations in which the running is taking place, but pathways which define the location of the running along only one axis. In 8g the single object, which would be a location, goal, or distance if the verb were unmarked, is replaced by a benefactive.

- (8) e. *Kavoli a-semb-e-ila motito-ne.*  
Kavoli CL-run-E-PST forest-inside  
'Kavoli ran through the forest.'  
f. *Kavoli a-semb-e-ila lelo-ne.*  
Kavoli CL-run-E-PST road-inside  
'Kavoli ran along the road.'  
g. *Kavoli a-semb-e-ia Mosea.*  
Kavoli CL-run-E-PST Mosea  
'Kavoli ran for Mosea (on his behalf or in his place).'

The verb *kothoka* 'to spoil' or, when predicated of humans, 'to turn evil' normally takes a patient subject and a temporal object.

- (9) a. *Mosea a-thok-ia tene.*  
Mosea CL-spoil-PST long.ago  
'Mosea turned evil long ago.'

If the temporal object is replaced by a locative or benefactive argument,<sup>6</sup> the verb acquires the extension /-e/, but the number of post-verbal arguments remains the same.

- (9) b. *Mosea a-t-hok-e-ia motito-ne.*  
Mosea CL-spoil-E-PST forest-inside  
'Mosea turned evil in the forest.'  
c. *Mosea a-thok-e-ia Kavoli.*  
Mosea CL-spoil-E-PST Kavoli  
'Mosea got mad at Kavoli.'

Guthrie's analysis also fails with verbs which in their basic form require two postverbal arguments, such as *konenga* 'to give'.

- (10) a. *Siana i-u-neg-ia mbesa.*  
children CL-2SG-give-PST money  
'The children gave you the money.'

Once again we can add /-e/ to the verb without adding an extra argument, but rather changing the semantic role of one of the inherent objects.

- (10) b. *Siana i-u-neg-e-ne-ia mbesa.*  
children CL-2SG-give-I-out-PST money  
'The children gave away the money for you (instead of you on your behalf).'

Furthermore, this verb cannot take a third argument, even with the /-e/ extension.

- (10) c. \**Siana iunegeneia mbesa Mosea.*  
'The children gave money to Mosea for you;  
The children gave money to you for Mosea.'

Thus, we have seen that '+O' is in no way an adequate characterization of the extension /-e/. So what is /-e/ really marking? Table 1 summarizes the effect of /-e/ on various types of Kamba verbs. A verb which allows the semantic roles listed in a given row under 'Basic Verb' will allow the semantic roles listed under 'Verb + /-e/' when extended. For example, row a. shows that a verb which takes an agent and patient in its basic form will take an agent, patient and a benefactive or locative when extended with /-e/. The term 'oblique' is used (for convenience) to refer to any semantic roles other than agent and patient.

Basic Verb			Verb + /-e/				
	SUBJECT	OBJECT 1	OBJECT 2	SUBJECT	OBJECT 1	OBJECT 2	
a.	agent	patient	—	a.	agent	patient	ben/loc
b.	agent	oblique	—	b.	agent	ben/loc	—
c.	patient	oblique	—	c.	patient	ben/loc	—
d.	agent	patient	cative	d.	agent	patient	ben/loc

TABLE 1. Semantic roles allowed by the /-e/ extension.

Thus, the extension /-e/ indicates that the inherent oblique object of a verb is replaced by a locative/benefactive argument. If the verb has no inherent oblique object, /-e/ indicates the addition of a locative/benefactive object. This description must be further modified by the fact that if the basic verb requires a locative/benefactive object, /-e/ indicates that this object has been replaced by another type of locative/benefactive, e.g. 8.

Considering this syntactic analysis of /-e/, can one really claim, as Whiteley does, that /-e/ adds a 'prepositional modification to the meaning of the root'? The main problem with this description is that it fails to distinguish between the function of the verbal extension and the function of actual prepositions (compare 8c with 8d-g). It also ignores the fact that the only type of oblique arguments marked by this extension are locatives and benefactives (as distinguished from datives, instrumentals, temporals, etc.). The term 'applicative extension', used by Guthrie and others, avoids the confusion with true prepositional constructions, but is even more vague as to the function of the morpheme. Maria Thomas-Ruzic has suggested (personal communication) that both locatives and benefactives are arguments having to do with the semantic role of the place toward which the action progresses. And a characterization of the /-e/ extension based on the concept 'place' would be much more descriptive than either the term 'prepositional' or 'applicative.'

4. THE 'CAUSATIVE' EXTENSION /-is/. The verbal suffix /-is/ is another which Guthrie categorizes as a +O extension. Once again, his analysis works for some types of Kamba verbs and not others. We shall consider Guthrie's claim that the /-is/ extension adds an object to the verb, starting with verbs which do not normally take a patient argument.

- (11) a. *Kavoli a-thamb-ia ma:w.*  
Kavoli CL-wash-PST leg  
'Kavoli washed her leg.'  
b. *Kavoli a-thamb-is-ia kana.*  
Kavoli CL-wash-IS-PST child  
'Kavoli washed the child.'  
(12) a. *Mosea a-thok-ia tene.*  
Mosea CL-spoil-PST long.ago  
'Mosea turned evil long ago.'  
b. *Kavoli a-thok-is-ia Mosea.*  
Kavoli CL-spoil-IS-PST Mosea  
'Kavoli corrupted Mosea.'

In examples 11-12 we find that the number of arguments following the extended verb remains the same as the number following the basic verb, however the type of argument the verb allows in subject position changes. In the a. examples the subject is affected by the action of the verb, in the b. examples the subject initiates the action of the verb. When added to a verb with an agent subject, /-is/ adds a type of agent argument in subject position which I will refer to as an 'enabler'. This argument somehow enables the semantic agent to perform the action of the verb. In the absence of the enabler argument, the agent would not have performed the action, whether due to physical inability or lack of motivation. When the enabler argument appears in subject position, the agent is relegated to object position. The total number of arguments in the clause may change or remain the same. In 13-14 it is clear that the /-is/ extension is not adding an object. There is one nominal in object position in these examples.

- (13) a. *Kavoli a-semb-ia mile omwe.*  
Kavoli CL-run-PST mile one  
'Kavoli ran for a mile.'  
b. *Nzo a-semb-ethis-ia Kavoli.*  
elephant CL-run-IS-PST Kavoli  
'The elephant made Kavoli run (by frightening her, chasing her, etc.).'

- c. *Nāakerali a-semb-ethis-ia Kavoli.*  
 doctor CL-run-IS-PST Kavoli  
 'The doctor helped Kavoli to run (She is physically unable to run by herself.  
 The doctor holds on to her and runs beside her as a form of therapy.)'
- (14) a. *Kavoli a-sia-ia kana.*  
 Kavoli CL-bear-PST child  
 'Kavoli gave birth to a child.'
- b. *Moemi a-sia-ethis-ia Kavoli.*  
 Moemi CL-bear-IS-PST Kavoli  
 'Moemi helped Kavoli to give birth.' (Moemi is a midwife.)'
- c. *Mosea a-sia-ethis-ia Kavoli.*  
 Mosea CL-bear-IS-PST Kavoli  
 'Mosea caused Kavoli to give birth (by impregnating her).'

Guthrie most likely based his +O analysis on sentences like the following, in which one argument appears in post-verbal position when the verb is in its basic form and two arguments appear in post-verbal position when the verb is suffixed with /-is/.

- (13) a. *Mosea a-kund-ia kewu.*  
 Mosea CL-sip-PST water  
 'Mosea sipped water.'
- b. *Kavoli a-kund-is-ia mondo mowau kewu.*  
 Kavoli CL-sip-IS-PST person sick water  
 'Kavoli helped the sick person to drink water (by holding the cup to the patient's lips).'
- (16) a. *Mosea a-ath-ia ngangā.*  
 Mosea CL-shoot-PST guinea.fowl  
 'Mosea shot a guinea fowl.'
- b. *Mosiāmi a-ath-ethis-ia Mosea ngangā.*  
 Hunter CL-shoot-IS-PST Mosea guinea.fowl  
 'The hunter enabled Mosea to shoot a guinea fowl. (He loaded Mosea's bow for him and told him when to shoot.)'

In 13b and 16b the extended verb does in fact support an extra object, using Guthrie's formal definition of the term. But it is clear that the +O analysis does not account for all the sentences above in which /-is/ occurs on the verb. A description which is just as simple, and yet takes all the data into account, is: the extension /-is/ marks the addition of an agent argument in subject position.

How this additional agent will affect the argument structure of the verb depends on the semantic roles of the verb's lexical arguments. If the verb has a patient subject, this subject becomes an agent and the verb is capable of supporting a new patient argument. If the verb already has a subject which initiates the action, this argument moves into object position and the new 'enabler' goes in subject position. A patient argument may follow the agent or it may be left out. Table 2 summarizes the effect of the /-is/ extension on the semantic roles allowed by the verb.

Basic Verb		Verb + /-is/		
SUBJECT	OBJECT	SUBJECT	OBJECT 1	OBJECT 2
patient	oblique	agent	patient	—
agent	oblique	enabler	agent	—
agent	patient	enabler	agent	patient

TABLE 2. Semantic roles allowed by the /-is/ extension.

Interestingly, Lexical Functional Grammar has described a similar syntactic analysis of the function of the 'causative' verb suffix /-ase/ in Japanese. According to Sells (1985:163), 'The effect of causativization is essentially to add one argument, corresponding to the Agent of the causative action. This will be the subject of the new form, and with an intransitive verb the old subject is related to the new object.'

Now that we have examined the syntactic function of /-is/ we must consider the claim that it is a causative extension. Whiteley & Muli state that 'As the name suggests the Causative form [-is] is associated with "causing to do, making someone else do something"' (p. 84). As we have seen in the examples above, this summary is not always accurate. Often the enabler allows, helps, or motivates someone to do something. Guthrie recognizes that /-is/ can have the meaning 'help to' as well as 'cause to' but goes on to say 'As a conventionalized term such as causative is used to describe the meaning of extensions such as -is-, it can perfectly well cover this range of meanings which is wider than the English "cause to"' (p. 209).

The problem with this terminology, however, comes not in using the term 'causative' to cover a range meanings which may or may not be directly associated with causation, but in using one term to describe two very different syntactic constructions in the same language. Kamba has a causative construction which is directly analogous to the English one. It makes use of the verb *kontuma* 'to cause'.

- (17) a. *Ne-tum-ia a-ath-i.*  
 1SG-cause-RPST 3SG-go-INF  
 'I made him/her go.'
- b. *A-tum-a ne-ia.n-a.*  
 3SG-cause-CONT 1SG-be.happy-CONT  
 'S/he makes me happy.'
- c. *A-tum-ia ne-ee-w-a ne motowe.*  
 3SG-cause-PST 1SG-eat-W-CONT by head  
 'S/he caused I am eaten by head. (S/he gave me a headache.)'
- d. *Ne-tum-ia Mosea a-sam-a suu.*  
 1SG-cause-PST Mosea CL-taste-CONT soup  
 'I made Mosea taste the soup.'
- e. *Sucale wa-tum-a ka.wa ka-sam-a ne.sa.*  
 sugar CL-cause-CONT coffee CL-taste-CONT good  
 'Sugar makes coffee taste good.'

This construction can even be used with the same verbs which allow the /-is/ extension. Compare 13b-c to 18 and to 19a-b:

- (18) *Mosia a-tum-ia Kavoli a-semb-ia mono.*  
 Mosia CL-cause-PST Kavoli CL-run-RPST much  
 'Mosea made Kavoli run a lot/fast.' (Mosea is a track coach.)
- (19) a. *Mosea a-tum-ia evuku ye-valok-a.*  
 Mosea CL-cause-PST book CL-fall-INF  
 'Mosea caused the book to fall.'
- b. *Mosea a-valok-il-ia evuku.*  
 Mosea CL-fall-IS-PST book  
 'Mosea dropped the book.'

A great deal more research would be required to determine whether a consistent semantic difference between the two 'causative' forms exists, or whether the choice of forms is governed by discourse factors. But since Kamba has a syntactic pattern which makes use of a verb meaning 'to cause', we can avoid confusion by reserving the term 'causative' for the two-verb construction.

5. THE PASSIVE EXTENSION /-w/. The Bantu verb suffixes /-w/ and /-k/ are described by Guthrie as 'extensions involving one object less'. He explains: 'Under this heading will be considered those cases where the simplex verbal can support a direct object but the extended verbal cannot' (p. 206). Where the '-O' extensions are involved, it appears as though Guthrie has succeeded in correctly stating how an extension affects the number of post-verbal arguments.<sup>7</sup> But whether such a categorization is useful is another matter. A verb which normally takes one object, takes no objects when suffixed with /-w/. The object of the basic verb becomes the subject of the extended verb. The subject of the basic verb can optionally take an agent phrase involving the preposition *ne*.

- (20) a. *Mosea a-ath-ia nganga.*  
Mosea CL-shoot-PST guinea.fowl  
'Mosea shot a guinea fowl.'  
b. *Nganga the-ath-iwe ne Mosea.*  
guinea.fowl CL-shoot-W+PST by Mosea  
'The guinea fowl was shot by Mosea.'  
c. *Nganga ne-the-ath-iwe.*  
guinea.fowl NE-CL shoot-W+PST  
'The guinea fowl was shot.'

A verb which normally takes two objects takes only one when the /-w/ extension is added.

- (21) a. *Siana i-nerg-ia nama Kavoli.*  
children CL-give-PST meat Kavoli  
'The children gave the meat to Kavoli.'  
b. *Kavoli a-neng-iwa nama ne siana.*  
Kavoli CL-give-W+PST meat by children  
'Kavoli was given the meat by the children.'

When we examined the '+O' extensions we found that the semantic roles of the arguments of the basic verb affected the number of objects the verb had in its extended form. However, when /-w/ is added to a verb the 'one object less' rule seems to hold irrespective of the semantic roles involved. In 22a we have an agent subject and a distance object. In 23a we have an agent subject and an experiencer object, and in 24a an agent subject and a location object. All of the corresponding b examples lack a postverbal argument.

- (22) a. *Kavoli a-semb-ia mili omwe.*  
Kavoli CL-run -PST mile one  
'Kavoli ran a mile.'  
b. *Mili omwe mo-semb-iwe ne Kavoli.*  
mile one CL-run-W+PST by Kavoli  
'A mile was run by Kavoli.'  
(23) a. *Evuku yakwa ne-yo-le-ile.*  
book mine NE-CL-forget-PST  
'My book "forgot".'  
'My book was forgotten.'  
b. *Ne-no-le-iluwe ne evuku yakwa.*  
1SG-PST-forget-W+PST by book mine  
'I was forgotten by my book.'  
'I forgot my book.'  
(24) a. *Kavoli a-na-kel-ile eima.*  
Kavoli CL-PST-go.over-PST hole  
'Kavoli jumped over the hole.'

- b. *Eima no-na-kel-iuwe.*  
hole NE-PST-go.over-W+PST  
'The hole was jumped over.'

It is important to note that the /-w/ extension cannot be added to a verb which does not take an agent argument in its basic form. Examples 25a and 26a have patient subjects while 27a has an experiencer subject.

- (25) a. *Kavoli a-uwa-ia mala:ia.*  
Kavoli CL-get.ill-PST malaria  
'Kavoli became ill with malaria.'  
b. *\*Mala:ia ma-uwa-iwe ne Kavoli.*  
Malaria CL-get.ill-W+PST by Kavoli  
'Malaria was gotten ill with by Kavoli.'  
(26) a. *Mosia a-thok-ia tene.*  
Mosia CL-spoil-PST long.ago  
'Mosia turned evil long ago.'  
b. *\*Tene u-thok-iwe ne Mosia.*  
long.ago CL-spoil-W+PST by Mosia  
'Long ago it was turned evil by Mosia.'  
(27) a. *Kavoli o-on-ia Mosia.*  
Kavoli CL-see-PST Mosia  
'Kavoli saw Mosia.'  
b. *\*Mosia o-on-iwa ne Kavoli.*  
Mosia CL-see-W+PST by Kavoli  
'Mosia was seen by Kavoli.'

This brings us to the next issue concerning the /-w/ extension. Is it true that, as Whiteley & Muli state 'The passive form of the verb is formed by the extension -w- to the root'? (p. 87) This, of course, depends on one's definition of 'passive.' Kimenyi (1978:126) writes 'Passivization is the process that promotes direct objects to subject status... When passivization applies, the suffix -w- is added to the verb immediately preceding the aspect marker.' As we have seen, the object of the basic verb does become the subject of the /-w/ extended verb. However, as we shall see in examples 28-31, the direct object of the basic verb also becomes the subject of a verb extended with /-k/. Thus, if /-w/ is simply a passivization marker, then /-k/ must be too, and Kamba has two different verbal extensions performing the same function. As this is unlikely, we shall ignore, for the moment, this purely syntactic description and look once again toward to the semantic roles of the arguments involved. A fundamental difference between the Kamba /-w/ construction and the English passive construction can be found in which type of semantic roles the arguments of the uninflected verb must take in order to undergo passivization. In English, only verbs which take patient objects can be passivized. This is easily illustrated by comparing 'pseudopassives' which involve the same verb, 'go', followed by different prepositions and different types of objects.

- (i) *The accountant went over the papers.*  
*The papers were gone over by the accountant.*  
(ii) *Chris went in the house.*  
*\*The house was gone in by Chris.*  
(iii) *Chris went by bus.*  
*\*Bus was gone by by Chris.*

In (i) 'the papers' are a patient. The accountant ruffles through them, affecting them via the action 'go over', so passivization is allowable in (i). In (ii) 'house' is a location, unaffected by Chris and in (iii) 'bus' is a means, also unaffected, so (ii) and (iii) can not be passivized.

But, as shown in 22-24, Kamba verbs can take the /-w/ extension regardless of the semantic role of the object of the basic verb. The restriction on the use of /-w/, as shown in 25-27, is that the subject of the basic verb must be an agent. The English and Kamba 'passive' constructions are compared in Tables 3 and 4.

Transitive Verb		Verb with Passive Morphology		
SUBJECT	OBJECT	SUBJECT	OBJECT	'BY' PHRASE
agent	patient	patient	—	agent

TABLE 3. Semantic roles allowed by English passive morphology.

Basic Verb		Verb + /-w/		
SUBJECT	OBJECT	SUBJECT	OBJECT	'NE' PHRASE
agent	non-agent	non-agent	—	agent

TABLE 4. Semantic roles allowed by /-w/.

English passive morphology indicates that the action of the verb affects the subject and that the object of the by-phrase, if any, is the agent of this action. The Kamba extension /-w/ indicates that the subject is not the agent; i.e. does not initiate the action of the verb, and that the object of the *ne*-phrase, if any, is the agent. Thus, English passive morphology reflects the semantic role of the subject of the passive clause, whereas Kamba /-w/ does not, and the term 'passive', at least when it is understood in terms of the English passive construction, is misleading when applied to the Kamba extension.

6. THE 'STATIVE' EXTENSION /-k/. The /-k/ extension is similar to the /-w/ extension in that, as Guthrie states, a verb suffixed with /-k/ has one object less than the basic verb. The distinction between /-k/ and /-w/, which is not easily illustrated syntactically, is that a /-w/ clause has an implied agent, whether or not it appears in a *ne*-phrase, while a /-k/ clause has no agent, implied or otherwise. Examples 28-30 show how /-k/ is used to indicate the spontaneous occurrence of an action.

- (28) a. *Kavoli newa-ving-a moango.*  
Kavoli NE+PST-close-PST door  
'Kavoli has closed the door.'  
b. *Moango newa-ving-ek-a.*  
door NE+PST-close-K-PST  
'The door has closed.'
- (29) a. *Mosea a-tol-ila kebunga.*  
Mosea CL-break-PST machete  
'Mosea broke the machete.'  
b. *Kebanga ke-tol-ik-ia.*  
machete CL-break-K-PST  
'The machete broke (due to its weakness).'
- (30) a. *Keseve ke-nw-ia etunda.*  
Wind CL-fell-PST fruit  
'The wind caused the fruit to fall.'  
b. *Etunda the-nw-ek-ia kuma moti-ne.*  
fruit CL-fell-K-PST from tree-in  
'The fruit fell from the tree (when it became ripe).'

A /-k/ clause can take a *ne*-phrase if the object of that phrase is not the agent of the action, for example, in 31b where Kavoli is an experiencer. (Review 3a for another example of an experiencer in a *ne*-phrase).

- (31) a. *Kavoli o-on-ia Mosia.*  
Kavoli CL-see-PST Mosia  
'Kavoli saw Mosia.'  
b. *Mosia new-on-ak-ia ne Kavoli.*  
Mosia NE+PST-see-K-PST by Kavoli  
'Mosia was seen by Kavoli.'

Many verbs in Kamba have acquired the /-k/ extension as part of the basic verb, meaning that no corresponding non-extended verb exists. In such cases, an agent can be added using the extension /-is/ as shown in examples 32-33.

- (32) a. *Saa ne-ya-val-ok-a.*  
watch NE-CL-drop-K-PST  
'The watch just dropped.'  
b. *a-val-oc-a saa.*  
3SG-drop-IS+K-PST watch  
'S/he just dropped the watch.'
- (33) a. *Kavoli a-ah-ek-a Mosia.*  
Kavoli CL-laugh-K-PST Mosia  
'Kavoli (spontaneously) laughed at Mosia.'  
b. *Kavoli a-ah-ec-a Mosia.*  
Kavoli CL-laugh-IS+K-PST Mosia  
'Kavoli made Mosia laugh.'

A good illustration of the absence of an agent in clauses involving the /-k/ extension is the following comparison.

- (34) a. *Kavoli newa-ling-o-a ekanda.*  
Kavoli NE+PST-wind-REV-PST rope  
'Kavoli unwound the rope.'  
b. *Ekanda nea-ling-o-k-a.*  
rope NE+PST-wind-REV-K-PST  
'The rope came unwound (over time).'
- c. *Nzoka ne-ye-a-ling-o-a.*  
Snake NE-REFL-PST-wind-REV-PST  
'The snake unwound itself.'
- d. *Nzoka nea-ling-o-k-a.*  
Snake NE+PST-wind-REV-K-PST  
'The snake came unwound.'

In 34a the action has an agent and the verb appears in its basic form. In 34b the action occurs spontaneously and the extension /-k/ appears on the verb. In 34c the snake is the agent of the action, unwinding itself. The clause given in 34d can only be used if one is talking about a dead snake which died in a wound position and unwound over time, like the inanimate rope. The function of /-k/ is summarized in Table 5.

Basic Verb		Verb + /-k/		
SUBJECT	OBJECT	SUBJECT	OBJECT	'NE' PHRASE
any role	non-agent	non-agent	---	non-agent

TABLE 5. Semantic roles allowed by /-k/.

Concerning the derived verb formed with /-k/, Whiteley & Muli write 'As the name [Stative] implies, this form connotes the practicability of a particular state of affairs: thus, "this food is eatable," "the fence is broken, the road will be passable, the bicycle cannot be repaired"' (p. 106). Here they are not describing /-k/ clauses like those above (which they never discuss), but a particular construction in which the /-k/ extension is used with present tense, habitual aspect verbs:

- (35) a. *Moango no:-ving-ik-a:..*  
 door PRES+CL-close-K-HAB  
 'The door is closeable (its in working condition).'  
 b. *Mothoa no:-om-ek-a:..*  
 termite PRES+CL-bite-K-HAB  
 'The termite is biteable (its shell isn't too hard).'  
 c. *Ngowa noe-tum-ik-a:..*  
 Shirt PRES+CL-mend-K-HAB  
 'The shirt is mendable.' (The fabric isn't too worn.)

But is there any reason to believe that the /-k/ extension is the source of the stative meaning in the above clauses? For one thing, the stative meaning disappears if we change the tense and aspect.

- (36) *Moango newa:- ving -ik -a .*  
 door NE+PST close K PST  
 'The door has closed.'

For another, a very similar construction can be formed using the /-w/ extension.

- (37) a. *Ose o-ing-ek-a: ne Mosia.*  
 river CL-cross-K-EAB by Mosia  
 'The river is crossable by Mosia (due to its size).'  
 b. *Ose o-ing-w-a: ne Mosia.*  
 river CL-cross-W-HAB by Mosia  
 'The river is crossable by Mosia (due to his ability).'

The only semantic difference between 37a and 37b is whether the state described by the verb is a result of some aspect of the object of the *ne*-phrase or some aspect of the argument in subject position. Earlier in this paper I defined agent as 'the initiator of the action of the verb'. This definition needs to be broadened to include the initiator of the state described by the verb. Under this definition Mosea is an agent in 37b, hence the /-w/ extension, and not an agent in 37a, hence the /-k/ extension. If we look back to 35a-c we can see that there is no initiator of the state described by the verb. We can conclude that the function of /-k/ in the stative construction is the same as the function of /-k/ in any clause: it indicates the lack of an agent. Thus, the term 'stative extension' in no way describes the morpheme /-k/. 'Stative Construction' should be reserved for those clauses with present habitual verb morphology and either the /-k/ or /-w/ extension, and not applied to other sorts of clauses involving /-k/.

7. CONCLUSION. We have seen that Guthrie's attempt at correlating the function of extensions with their capacity to support a certain number of objects fails in the case of the extensions /-e/ and /-is/. Although the description of /-w/ and /-k/ as capable of supporting one object less is accurate, we must ask whether it is a particularly useful one. The advantage of Guthrie's categorization is that it describes all of the extensions in the same terms and reduces the differences and similarities between them to a single factor. Unfortunately, the number of objects the extended verb can support is never a relevant factor to the syntactic or semantic functions of an extension. The most relevant factor is the semantic roles of the subject and object of the verb in its basic and extended form. We have also seen the problems with Whiteley & Muli's (and others) terminology, which categorizes Bantu verbal extensions in terms of Indo-European morphology with sometimes similar, but never identical, functions. Table 6 summarizes the functions of the extensions in this paper and suggest some more accurate, if less convenient, labels.

It is clear that both Guthrie's +/- O description and Whiteley & Muli's terminology are based on their observation of prototypically transitive verbs with agent subjects and patient objects. In the cases where Kamba verbs have such inherent arguments the effect of adding extensions to the verb appears to be very similar to the effect of adding a preposition, causative verb, or passive morphology to an English verb. But as we have seen, uninflected Kamba verbs can have arguments with any of a number of different semantic roles in subject and object position and the effect of the extensions, or even whether a particular extension can be added to a verb, will vary according to the nature of these roles. This paper has shown that one can not accurately analyze the function of verbal extensions without an understanding of the type of arguments allowed by the basic verb.

EXTENSION	FUNCTION	NEW TERM
/-e/	indicates the change of the inherent oblique object of a verb to a benefactor or locative, or the addition of a ben/loc object to a verb with an inherent patient argument.	goal extension
/-is/	indicates the addition of an agent to the subject position of a clause. If the basic verb already has an agent, /-is/ marks the addition of an enabler	enabler extension
/-w/	indicates that the argument in subject position of a clause is not the agent and that an agent for the action described by the verb does exist	non-agent subject extension
/-k/	indicates that there is no agent for the action described by the verb	zero-agent extension

TABLE 6. The functions of Kamba verbal extensions.

## APPENDIX: NOTES ON TRANSCRIPTION AND GLOSSING

TRANSCRIPTION. For convenience, I have used an alphabetic rather than a phonetic transcription: [θ] and [ð] are represented by *th*; [i] and [ɪ] are represented by *i*; [e] and [ɛ] are represented by *e*. Tones are not marked.

GLOSSING OF KAMBA CLAUSES. The extensions discussed in this paper each have a variety of forms. Whiteley & Muli 1962, Guthrie 1962, and Farnsworth 1957 all state that this variation is phonological. For purposes of simplicity, I have used the most common form of each extension in references to that extension and in glosses of its allomorphs. Since the goal of this paper is to determine the function of the verbal extensions, I did not feel it appropriate to give the extension morphemes functional glosses (for example, glossing /-w/ as passive). Therefore, I have glossed extension morphemes with capital letters which stands for the yet to be determined function of the

morpheme. Since the function of the verbal prefix /ne-/ is unknown, it is also glossed with NE. Table 7 summarizes my glossing conventions for the extensions and /ne-/ Table 8 summarizes the abbreviations I have used in glossing Kamba clauses.

REFERENCE FORM	MORPHEME GLOSS	MORPHEME VARIATIONS
/-e/	E	-el, -i, -il
/-is/	IS	-isi, -i, -il, -ithis, -ethis, -eth
/-k/	K	-ek, -ik, -ok, -ak
/-w/	W	combines with tense/aspect suffixes
/ne-/	NE	ne-, n-, no-

TABLE 7. Glossing of verbal extensions and the *ne-* prefix

1SG	first person singular	INF	infinitive
2SG	second person singular	PRES	present
3SG	third person singular	PST	past
ASP	aspect	REFL	reflexive
CL	noun class marker	REV	reversive
CONT	continuous	R.PST	recent past
HAB	habitual		

TABLE 8. Abbreviations used in glossing

morpheme gloss attached to another morpheme gloss by a plus sign indicates that the two morphemes have assimilated into one phoneme. For example: a syllable glossed W+PST contains both the *w* extension and a past tense morpheme.

## NOTES

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<sup>1</sup>Kamba, also referred to as Kikamba, is a central Bantu language spoken in areas south-east of Nairobi. It has approximately three million speakers.

<sup>2</sup>In Relational Grammar, the term 'unergative' refers to intransitive verbs with agent subjects, 'unaccusative' refers to transitive verbs with patient subjects, and 'semi-transitive' refers to transitive verbs which lexically require an oblique argument.

<sup>3</sup>A categorization according to a transitivity scale, such as Hopper & Thompson 1980 propose, is also inadequate for the purposes of analyzing Kamba extensions, since the extensions affect verbs not according to the amount of transitivity involved in the clause, but according to the particular semantic case roles of the arguments.

<sup>4</sup>See the appendix for an explanation of glossing and transcription conventions used in this paper.

<sup>5</sup>I am using the term 'agent' in a syntactic sense here. In 3a, Kavoli is a semantic experiencer, not a semantic agent.

<sup>6</sup>I am including malefactive in the benefactive category. It is interesting to note that in the English translation of (9) c. the malefactive argument is preceded by the locative preposition *at*, just as English benefactives (of the recipient variety) are often preceded by the locative preposition *to*. This is one example of locatives and benefactives forming a grammatical class in a non-Bantu language.

<sup>7</sup>That is, I have no data that contradict this statement.

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