The Kikamba passive construction: A challenge for the government and binding based analyses[1]

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Studies relating to the passive construction have focused on two main areas: 1) the universal characterisation of the construction, (Comrie 1977, Perlmutter and Postal 1983, Siewierska 1984 and Keenan 1985); and 2) the interested in the formulation of theories on the passive construction, (Chomsky 1965, 1981; Jaeggli 1986; Roberts 1987; Baker 1988; Afarli 1989, 1990; Perlmutter and Postal 1983; Postal, 1986). Recent Government and Binding based approaches analyse the passive morpheme as an argument of the verb which must receive the External Theta-role and the Structural Case assigned by the verb (Roberts 1987; Baker 1988; and Afarli 1989, 1990) . This paper describes the passive construction in Kikamba and examines the descriptive adequacy of the Government and Binding claims.

The passive in Kikamba

We will approach the grouping of passive structures from the point of view of verb types. This is because Kikamba forms passives by the use of what Keenan (1985) calls a strict morphological device. This involves the suffixation of the morpheme -w-2 which comes between the verb stem and the final vowel.

Verbs have traditionally been categorised in terms of the complement NPs into transitive and intransitive verbs. This classification is based on a verb's ability to subcategorize for an object (internal argument in GB). Other subtyping of verbs is based on their ability to require a thematic subject. This distinguishes two subtypes of the one place predicates: those that allow expletive subjects and those that do not. The distinctions are characterised differently in different theoretical frameworks but the underlying distinction is that in one type of intransitive verbs the subject has characteristics similar to those of transitive subjects while in the other subtype the subject behaves more like the object of transitives.

A fourth class of verbs consists of those verbs that need not have any thematic argument. Weather verbs are a typical example of this class.

We will examine the possible constructions using passive morphology, for each of the four types of verbs given below.

1. Transitive: two place predicates (for example kuna 'beat', osa 'take').
2. Intransitive 1: the intransitives whose subjects have the properties of a transitive subject' (for example neena 'talk').
3. Intransitive 2: intransitives whose subjects behave like transitive objects (for example enda 'go'). These verbs allow expletive subjects in non-passive sentences.
4. Weather Verbs: the class of verbs that require no thematic argument (for example tuka 'get dark').

The syntactic characteristics of these verbs, as far as the passive construction is concerned, can be summarised as follows. The transitives do not allow expletives in subject position in their non-passive form, i.e. without the passive morpheme. In their passive form they have the option of having a referential NP in the subject position and they readily admit the agent phrase.

The intransitive-1 differ from the transitives in that they have no option of having a referential NP in subject position in their passive form, unless in a multi-clausal construction in which the argument of an embedded verb is raised to the matrix subject. Neither the transitive nor the intransitive-1 verbs admit an expletive subject in their non-passive form.

Both the intransitive-2 and the weather verbs allow an expletive subject[4] in their non-passive form. The intransitive-2 verbs cannot occur with an expletive subject in their non-passive form without a following NP (see example 17d), while the weather verbs can occur in the non-passive form without a following NP and with an expletive subject (see examples 19 and 20 below). In the passive form the intransitive-2 verbs are better with an agent phrase. These characteristics will become clearer when we have gone through the examples below.

Passives of transitive verbs

Kikamba has a passive construction similar to the typical passive involving a transitive verb and the presentation of the patient argument as the subject while the agent argument is left out or introduced in a 'by phrase' (see examples 1–4) below).

1. K_vetì n_kyâk_ná känä.
   K_-vetì n_-k_-â-k_n-á ka-änä.
   7-woman FOC-7-TNS-beat-FV 12-child.
   The woman beat a/the child.

2. Känä n_kâk_nwá (n_ k_vetì)
   Ka-änä n_-ká-â-k_n-w-á (n_ k_-vetì)5.
   11-child FOC-11-TNS-beat-PAS-FV (by 7-woman).
   The child was beaten by a/the woman.

Example 1 is a transitive verb without passive morphology. When the passive morphology -w- is affixed the changes are shown in example 2. The same thing happens with the verb kwata 'arrest' in examples 3 and 4.

3. Asikal_ n_mákwátá k_vetì
   a-sikal_ n_-má-â-kwát-á k_-vetì.
   2-soldiers FOC-2-TNS-arrest-FV 7 woman.
   The soldiers arrested a/the woman.

4. K_vetì n_kyákwátwá (n_ asikal_)
   K_-vetì n_-k_-â-kwát-w-á (n_ a-sikal_).
   7-woman FOC-7-TNS-arrest-PAS-FV (by 2-soldiers).
   The woman was arrested by the soldiers

The object NPs in examples 1 and 3, without passive morphology, are the subject NP in examples 2 and 4, which have passive morphology and verb agreement with the patient subject.

Unlike many other languages, Kikamba also has a passive construction in which the patient remains an object and in which the subject is an expletive. This means transitive verbs allow at least two possibilities in the passive form, one with the patient as subject and the other with an expletive subject as in examples 5 and 6 below.

5. N_kwâk_nwá känä
   N_-k_-â-k_n-w-á ka-änä
   FOC-17-TNS-beat-PAS-FV 12-child
   Lit. there was beaten a child.

6. N_kwâkwátwá k_vetì
   N_-k_-â-kwát-w-á k_-vetì.
   FOC-17-TNS-arrest-PAS-FV 7-woman.
   Lit. there was arrested a woman.

Verbs like nénga 'give' and véna 'rob', which subcategorise for two objects have three possible structures with passive morphology. Either of the objects can become the subject, as in examples 8 and 9, or they can have an expletive subject with both objects remaining in their base positions (example 10).

7. M_tia n_wânénga känä m_káté.
   M_tia n_-_-â-néng-a ka-änä m_-káté.
   Mutia FOC-1-TNS-give-FV 12-child 3-bread.
   Mutia gave the child bread.

8. Känä n_kânéngwá m_kátë
   Ka-änä n_-ka-â-néng-w-á m_-kátë.
   11-child FOC-12-TNS-give-PAS-FV 3-bread.
   The child was given bread.

9. M_káté n_wânéngwá Känä
M_-káté n_-_-â-néng-w-á Ka-änä.
3-bread FOC-3-TNS-give-PAS-FV 12-child.
The bread was given to the child.

10. N_kwânéngwá Känä m_káté
N_-k_-â-néng-w-á Ka-änä m_-káté.
FOC-17-TNS-give-PAS-FV 12-child 3-bread
(lit. There was given a child bread).

The same pattern is observed with the verbs that subcategorise for direct objects and locative NPs in example 11. Each of the post verbal NPs has access to the subject position when the verb has the passive morpheme, and there is the option of retaining these NPs in their positions and using the non-referential class, examples 16 and 17, or pronouns as in example 14.

11. Mutua n_vandaa mbëmbä m__ndán_
Mutua n_-_-vanda-a m-bëmbä m_-_ndá-n_.
Mutua FOC-1-plant-FV 10-maize 3-farm-LOC.
Mutua plants maize in the farm.

12. Mbëmbä nivandawá muundán_
M-bëmbä n_-i-vanda-w-á mu-undá-n_
10-maize FOC-10-plant-PAS-FV 3-farm-LOC.
Maize is planted in the farm.

13. M__ndán_ n_vávandawa mbëmbä.
M_-_ndá-n_ n_-va-vanda-w-a mbëmbä.
3-garden-LOC FOC-16-panted-PAS-FV maize.
The farm is planted maize in (by Mutua)[6].

14. N_k_vandawá mbëmbä m__ndán_.
N_-k_-vanda-w-á m-bëmbä m_-_ndá-n_.
FOC-17-plant-PAS-FV maize 3-garden-LOC.
There is planted maize in the garden.

Passives of intransitive-1 verbs

In addition to passives of transitive verbs, Kikamba forms passives from intransitive verbs too. When the passive morpheme is affixed on these verbs, the only option open is to use the expletive pronouns as subject. As is expected in simple sentences[7] the passive morphology produces a typical example of what has been known as impersonal passive (examples 15b and 16b).

15a. K_vetì n_kyâvoyâ.
K_-vetì n_-k_-â-voy-â.
7-woman FOC-7-TNS-pray-FV.
The woman prayed.

15b. N_kwávoywá.
N_-k_-â-voy-w-â.
FOC-17-TNS-pray-PAS-FV.
Lit. Praying was done.

16a. Känä n_káínâ
Ka-ánä n_-ká-â-ín-â
12-child FOC-12-TNS-sing-FV.
The child sang.

16b. N_kwâínwâ
N_-k_-â-ín-w-â
FOC-17-TNS-sing-PAS-FV.
Lit. Singing was done.

Passives of Intransitive-2 verbs

Now we turn to passives of verbs that can have expletive subjects even when they are not in the passive form.

17a. K_vetì n_kyâvikâ
K_-vetì n_-k_-â-vik-â
7-woman FOC-7-TNS-arrive-FV
The woman arrived.

17b. N_kwâviká k_vetì
N_-k_-â-vik-á k_-vetì
FOC-17-TNS-arrive-FV 7-woman
There arrived a woman.

17c. N_kwâvikwá (n_ k_vetì)
N_-k_-â-vik-w-á (n_ k_-vetì)
FOC-17-TNS-arrive-PAS-FV (by 7-woman)
There was arrived by a woman/arriving was done by a woman.

17d. *N_kwâvikâ
N_-k_-â-vik-â
FOC-17-TNS-arrive-FV

17e. N_kwâvikwâ
N_-k_-â-vik-w-â
FOC-17-TNS-arrive-PAS-FV
Arriving was done

18a. kánä n_kâendâ
ka-ánä n_-ká-â-end-â
12-child FOC-12-TNS-go-FV
The child went.

18b. N_kwâendá kánä
N_-k_-â-end-á ka-ánä
FOC-17-TNS-go-FV 12-child
There went a child.

18c. N_kwâendwá (n_ kánä)
N_-k_-â-end-w-á (n_ ka-ánä)
FOC-17-TNS-go-PAS-FV (by 12-child)
There was gone by the child (going was done by the child)

18d. *N_kwâendâ
N_-k_-â-end-â
FOC-17-TNS-go-FV

18e. N_kwâendwâ
N_-k_-â-end-w-â
FOC-17-TNS-go-PAS-FV
Going was done

In examples 17a and 18a these verbs appear indistinguishable from the intransitive-1, but 17b and 18b set them off from the latter since intransitive-1 do not allow expletive subjects in their underived form. The (c) sentences show a passive construction from these verbs[8]. The difference between (b) and (c) is that in (c) the phrase containing the noun kana 'child' (18) or kiveti 'woman' (17), can be left out without the sentence becoming ill-formed when the verb has passive morphology (e), while these NPs are obligatory in the (b) sentences, without passive morphology, as shown by the ill-formedness of (d). The passive morpheme therefore seems to take the place of the NPs kiveti 'woman' and kana 'child' in examples 17e and 18e. We will come to this later.

Passive and the Weather Verbs

With the weather type verbs, we find an expletive subject even when there is no following NP as in 19 and 20.

19. N_kwâúâ
N_-k_-â-ú-â
FOC-17-TNS-rain-FV
It rained

20. N_kwâtúkâ
N_-k_-â-túk-â
FOC-17-TNS-darken-FV
It became dark.

Typically, this group of verbs does not take the passive morpheme. However, some verbs in this group also have an intransitive-2 use and in this usage they will take passive morphology. One example of these is the verb úa 'rain' as used in 21 below.

21a. N_kwâúá mbúa nënë
N_-k_-â-ú-á n-búa n-nënë
FOC-17-TNS-rain-FV 9-rain 9-big
there rained a big (heavy) rain

21b. N_kwâúwá (n_ mbúa nënë)
N_-k_-â-ú-w-á (n_ n-búa n-nënë)
FOC-17-TNS-rain-PAS-FV (by 9-rain 9-big)
Lit. There was rained by a big rain.

We need to assume that there are two verbs in the lexicon with the form ua, one is a weather type of verb and the other is an intransitive-2. The above examples give the following information about Kikamba passive:

1. Passive morphology gives basically transitive and intransitive-1 verbs the property of allowing non-referential subjects.
2. In verbs with more than one argument (transitive) this can (but need not) result in an argument other than the agent becoming the subject.
3. Each of the other arguments (the non-agents) of the

verb can be a candidate for the subject creating process, when the option of having a thematic subject is taken.

4. Weather verbs do not typically admit passive morphology.

Exceptions to passive morphology

There is a restricted group of verbs in Kikamba that have passive interpretation and can in fact take the agent phrase yet they do not carry the morpheme -w-. We refer to these verbs here as 'passive verbs without the passive morpheme -w-'. These verbs use the stative morpheme -e/_k- and in this form they are ambiguous between a passive and stative meaning. Consider the examples below.

22a. K_vetì n_kyóóná känä
K_-vetì n_-k_-â-ón-á ka-änä
7-woman FOC-7-TNS-see-FV 12-child
The woman saw the child.

22b. Känä n_kóóneká (n_ k_vetì)
Ka-änä n_-ká-â-ón-ek-á (n_ k_-vetì)
12-child FOC-12-TNS-see-STV-FV9 (by 7-woman)
The child was seen by the woman.

22c. N_kwóóneká känä (n_ k_vetì)
N_-k_-â-ón-ek-á ka-änä (n_ k_-vetì)
FOC-17-TNS-see-STV-FV 12-child (by 7-woman)
There was seen a child by the woman.

When the verbs are used with an agent phrase as in 22b and 22c, the only possible interpretation is passive. We therefore take this morpheme, in this usage, as a morphologically-conditioned allomorph of -w-10.

In constructions that are ambiguous between passive and stative reading this morpheme can not co-occur with -w-, e.g. example 23, but in pure stative readings co-occurrence is possible, e.g. example 25. The passive morpheme can co-occur with the stative in constructions that ask questions about the stative subject as in 25 below.

23. *N_kwóónekwá känä
N_-k_-â-ón-ek-w-á ka-änä
FOC-17-TNS-see-STV-PAS-FV 12-child
There was seen a child (by the woman).

24. M_omo n_wâvíngikâ
M_-omo n_-_-â-víng-ik-â
3-door FOC-3-TNS-close-STV-FV
The door closed.

25. Kwávíngikwa ni kyäu?
K_-á-víng-ik-w-a ni kyäu?
17-TNS-close-STV-PAS-FV by what.
there got closed by what?

The passive in GB11

The main difference between the GB analysis and that of early Transformational Grammar is that in GB, passive clauses are not derived from active clauses, rather passive verbs are represented at the D-Structure. Passive clauses are therefore defined by the characteristics of the passive verb. The main observation is that the subject NP in passives exhibits the selectional and subcategorization properties of a post-verbal NP in the corresponding active clause. This is accounted for by proposing that this NP is generated in a post verbal (assuming SVO word order) position at D-Structure. Thus 26 below is related to the D-Structure (example 27).

26. John was arrested.
27. was arrested John.

Intervening between 27 and the Surface Structure (26) is the Rule Move _ which moves the NP John leaving behind a coindexed NP trace as shown in 28 below.

28. Johni was arrested ti.

In GB the passive verb is claimed to have two essential properties:

1. It has no Theta-Role to assign to its subject.
2. It has no structural case to assign its object.

Thus passive morphology is said to suppress the external Theta-Role of the verb and to absorb the post-verbal case. The consequence of property 1 is that a verb with passive morphology does not place restrictions on the NP in its subject position. This means that this position can be empty at D-Structure (27), and can therefore be occupied by a

dislocated object or by the non-referential elements. A thetaless position serves as a landing site for NPs subject to Move _.

The consequence of property 2 is that the NP generated in the object position of a passive verb is analysed as having not received case and therefore must be moved to a position where it will receive case or the sentence will be ill-formed, because of the Case Filter which requires that overt NPs must have Case.

The derivation of passive clauses therefore involves an obligatory NP movement. The NP John in 27, for example, cannot surface in a post-verbal position because of the Case Filter and the non-thematic subject position provides a landing position for this NP. Here it will get the case assigned by Agreement in INFL. The initial impression one gets from this is that this analysis is designed to handle personal passives, and its apparent weaknesses of the analysis is linked with the reliance on Case. The requirement that a post-verbal NP must move, an object must become a subject, leaves the impersonal passives found in many languages unaccounted for. Chomsky (1981:331) proposes to deal with impersonal passives through the procedure of co-superscripting. The crucial idea in his proposal is that an expletive does not require case and therefore the case assigned to an expletive in subject position can be transmitted through co-superscripting to a post-verbal NP in languages that allow impersonal passives of transitive verbs. This will, of course, be followed by statements restricting this option to some languages since it is clearly not available to English. Thus in GB the passive construction is not given a special treatment but is handled within the general principles of the sub-theories.

Developments subsequent to the standard GB analysis (Chomsky 1981) have centred around analysing the passive morpheme as an argument of the verb and differed in their solutions on _role and Case assignment features associated with the passive morphology. Studies within this approach include Jaeggli (1986), Roberts (1987), Baker (1988) and Afarli (1989, 1990). We will briefly discuss three of these below.

The passive morpheme as an argument of the verb

The approaches in Roberts (1987), Baker (1988) and Afarli (1989, 1990) treat the passive morpheme as an argument of the verb. They also agree that the passive morpheme must invariably receive the external -Role assigned by the verb (the role typically received by the logical subject), but they differ in the methods each one proposes to ensure that this morpheme receives the external theta(_)-role and not any other role.

Roberts' (1987) proposal is that the passive morpheme is generated as a clitic, (en), in INFL. This clitic is then coindexed at D-Structure with the Empty Category (EC) in subject position. The external theta-Role assigned to the EC in subject position can therefore be received by the passive morpheme which is part of the chain (ei,eni). Roberts then proposes that, to get to its surface position, the passive morpheme has to undergo 'Affix Hopping'. He claims that the EC in subject position will follow[4] the passive morpheme in this movement thus creating a theta-free subject position as expected. This analysis creates two problems. The first is the unusual movement of the EC category and the second is to do with the Projection Principle (the subject position starts as a theta position at D-structure and ends up as a theta free position at surface structure). Roberts' proposal is to modify the Projection Principle so as to exclude the subject position from the requirement that the theta configurations remain the same through out the derivation of a sentence.

Similar to the analysis in Roberts (1987) Baker (1988) proposes to generate the passive morpheme in INFL but he argues that the passive morpheme is an argument in its own right and therefore it need not be part of a chain in order to be assigned the external theta-role. It is generated in INFL because this is a VP external position and in this position it can receive the external theta-Role without complications. The surface structure position of the passive morpheme, in languages like English, is accounted for by proposing a process that moves the verb to incorporate to INFL. This analysis faces problems with periphrastic passives in which an auxiliary already occupies the INFL position (see Baker 1988:311 for details on how he resolves this). Another problem is encountered in connection with Case

assignment. Although the passive takes the theta role associated with the thematic subject, it is not to be allowed to receive the case normally assigned to the nominal in the subject position because this would leave the subject position without case and disqualify it as a landing site for NPs moved by Move_ (the GB analysis of personal passives). Baker proposes that in languages where the passive morpheme must have case, this should not be the Nominative Case (the case assigned by INFL). This again is a complication considering the proposed base position of the passive morpheme.

Afarli's (1989) analysis is similar to the two analyses discussed above that the passive morpheme is an argument of the verb and as a result it requires a theta-Role. He also holds that it is of necessity that the passive morpheme gets the external theta- Role assigned by the verb. This predicts that verbs that do not assign external theta-Role (unaccusative verbs) will not co-occur with passive morphology ('if a verb does not assign an external theta-role then it cannot occur with passive morphology' (Afarli 1989:142) and he shows that this is so in Norwegian[13].

The difference between the analysis in Afarli (1989) on the one hand and that in Roberts (1987) and Baker (1988) is that Afarli proposes to generate the passive morpheme verb-internally and ensures that it gets the external theta-role by proposing the directionality in theta-role assignment quoted below.

Theta-roles may be assigned inside words [...] if a theta-role is assigned inside a word it is assigned in the opposite assignment direction of theta-roles assigned outside the word. Afarli (1989:121). This means that word-internal theta-role assignment is directionally the reverse of word-external theta-role assignment. Therefore the verb will assign its external theta-role either to the NP to its left or to a word-internal argument to its right (assuming SVO)[14]. He argues that this can be accommodated by the Projection Principle since 'nothing requires that the same role should be assigned to the same position at all levels. What is required is that it is assigned to an argument at all levels' Afarli (1989:131).

Afarli also addresses the issue of Case at some length. His analysis focused on Norwegian which has the phenomenon of impersonal passives, even in transitives, and therefore NP movement is not an essential part of passive clauses. Afarli (1989:147) claims that 'A verb has exactly the same inherent Case assignment capacity in actives and passives' and then proposes that the passive morpheme may or may not need Case. Case assignment to the passive morpheme is therefore a parameter which is set in different directions in different languages, according to Afarli. In English, and languages in this group, the passive morpheme must receive Case and this forces NP movement while in Norwegian the passive morpheme need not receive Case. This means that while in English passive clauses must have an obligatory NP movement this need not be so in languages in the Norwegian group[15]. In this way Afarli accounts for impersonal passives of both transitive and intransitive-1 verbs in Norwegian.

The sum predictions of the analyses in Chomsky (1981, 1982), Roberts (1987), Baker (1988) and Afarli (1989) are twofold:

1. That in all languages the passive morphology will co-occur with verbs that assign an external theta-role. This is because the passive morpheme as an argument of the verb requires a theta-role and it must get the external theta-role assigned by the verb.
2. Case assignment to the passive morpheme is not a universal principle but a parameter that can be set differently in different languages:

a. In some languages the passive morpheme must have Case. In such languages the passive morpheme can only occur with transitive verbs.
b. In languages where the passive morpheme need not have Case the passive morpheme can co-occur with both transitive and intransitive verbs, as long as there is an external theta role.

This leaves two aspects of Kikamba passives unaccounted for:

1. Since the passive morpheme is analysed as requiring and receiving the external theta role, and a verb with an external theta role cannot have an expletive subject in its underived form, then passives of intransitive-2 verbs in Kikamba are not accounted for in the above analyses.

2. The fact that when the choice is made to move a post-verbal NP to the subject position Kikamba does not seem to have the case predicted restrictions, i.e. move only the direct object.

Can the argument status of the passive morpheme be established outside the GB based analyses? We want to examine whether there are any processes in Kikamba that are sensitive to the presence of the inherent argument in passive constructions. We will draw evidence from the question construction. In Kikamba, as in most Bantu languages, question formation does not involve[16] what has come to be known as WH-movement, the question words occupy the position of the questioned argument. For example

29a. K_vetì kyâk_na __?
K_-vetì k_-á-k_na __
7-woman 7-TNS-beat who
Who did the woman beat?
Lit. The woman beat who?

29b. K_vetì kyóóka na_
K_-vetì k_-á-_ka na-__
7-woman 7-TNS-come with-who
Who did the woman come with?
Lit. The woman came with who?

In (a) the question word __ is in the position occupied by direct object while in (b) the question word in an object of the preposition and occupies that position. However, when the nominal questioned is the subject the question word cannot occupy the subject position. A subject is questioned either by use of the passive construction, the question word being the object of the agentive n_ or by use of a cleft construction with the question word preceded by the focus particle n_. If we examine question constructions focusing on the subjects of the different verb types we find that the passive verb distinguishes itself in that the question word referring to the subject can only be question in the manner expected of direct objects. In order to draw the distinction between transitive, intransitive-1 intransitive-2 and passive verbs we will use one example from each group.

30a. *__ _-a-néen-a
who 1-TNS-speak-FV
who spoke?

30b. *Kwanéena __
K_-a-néen-a __
17-TNS-speak-FV who

30c. Kwánéenwa n__?
K_-á-néen-w-a n_-__
17-TNS-speak-PAS-FV by-who

30d n__ wanéena?
n_-__ _-a-néen-a
FOC-who 1-TNS-speak-FV
who spoke?

The question in example 30 is about the subject of the clause and the examples show that the question word is not allowed in subject position (30a) or in object position (30b). The subject of an intransitive-1 verb therefore is questioned by use of the passive construction (30c) or by use of the cleft construction (30d).

Enda 'go', an intransitive-2 verb can have its subject questioned with the question word in object position as in 31b, as a subject, using the passive construction as in 31c or in cleft construction (31d).

31a. Känä n_kâenda
Ka-änä n_-ka-â-end-a
12-child FOC-12-TNS-go-FV
The child went

31b. Kwáenda __
K_-á-end-a __
17-TNS-go-FV who
who went

31c. Kwáendwa n__?
K_-á-end-w-a n_-__
17-TNS-go-PAS-FV by who
who went?

31d. N__ wáenda
N_-__ _-á-end-a.
FOC-who-1-TNS-go-FV
Lit. It is who that went?

On the other hand, the subject of kunwa 'be beaten', a passive verb, is questioned with the question word in object position (32b) or by use of the cleft construction (32c).

32a. Känä n_kâk_nwâ
Ka-änä n_-ka-â-k_n-w-â
12-child FOC-12-TNS-beat-PAS-FV
The child was beaten.

32b. Kwäk_nwa __?
K_-â-k_n-w-a __
17-TNS-beat-PAS-FV who
who was beaten?

32c. N__ wák_nwa
N_-__ _-á-k_n-w-a
FOC-who 1-TNS-beat-PAS-FV
Lit. It is who that was beaten?

32d. *Kwák_nwa n__
K_-á-k_n-w-a n_-__
17-TNS-beat-PAS-FV by-who

Thus in terms of question construction the subjects of transitive and intransitive-1 verbs have the typical subject properties (they cannot be related to a question word in object position), the subjects of intransitive-2 verbs have both subject and object properties (the question word can occupy the object position or the passive construction typical of subject questioning can be used) and the subjects of passives have only object properties. Our argument here is that the typical question construction used for questioning subjects is reserved for the most prestigious argument in a construction. Thus the subject of a passive construction is not the most prestigious argument since the passive morpheme takes the highest role assigned by the verb. The presence of the implied argument seems to prevent the subject of the passive verb from attaining the properties associated with the typical subject.

Now we turn to the question 'must the passive morpheme receive an external Theta-Role?' In order to answer this question we will need to examine closely whether the Intransitive-2 constructions are similar to those identified in GB as having no external theta role to assign. The test used in Afarli (1989) to determine which verbs have and which do not have an external theta role to assign, involves observing the syntactic behaviour of a verb in relation to the insertion of subject expletives. Verbs which do not assign external theta-role are expected to take expletive subjects even without passive morphology while verbs with an external theta-role to assign are ill-formed with expletive subjects in their underived form. Using this test the Kikamba verbs in examples 17 and 18 above, repeated here as 33 and 34, are seen to have no restrictions on the subject and therefore are not expected to co-occur with the passive morpheme.

33a. K_vetì n_kyâvikâ
K_-vetì n_-k_-â-vik-â
7-woman FOC-7-TNS-arrive-FV
The woman arrived.

33b. N_kwâvikâ k_vetì
N_-k_-â-vik-á k_-vetì
FOC-17-TNS-arrive-FV 7-woman
There arrived a woman.

33c. N_kwâvikwá (n_ k_vetì)
N_-k_-â-vik-w-á (n_ k_-vetì)
FOC-17-TNS-arrive-PAS-FV (by 7-woman)
There was arrived by a woman/arriving was done by a woman.

33d. *N_kwâvikâ
N_-k_-â-vik-â
FOC-17-TNS-arrive-FV

33e. N_kwâvikwâ
N_-k_-â-vik-w-â
FOC-17-TNS-arrive-PAS-FV
There was arrived.

34a. känä n_kâendâ
ka-änä n_-ká-â-end-â
12-child FOC-12-TNS-go-FV
The child went.

34b. N_kwâendá känä
N_-k_-â-nd-á ka-änä
FOC-17-TNS-go-FV 12-child
There went a child.

34c. N_kwâendwá (n_ känä)
N_-k_-â-end-w-á (n_ ka-änä)
FOC-17-TNS-go-PAS-FV (by 12-child)
There was gone by the child/going was done by the child.

34d. *N_kwâendâ
N_-k_-â-end-â
FOC-17-TNS-go-FV

34e. N_kwâendwâ
N_-k_-â-end-w-â
FOC-17-TNS-go-PAS-FV
There was gone.

The verbs vika 'arrive' and enda 'go' take expletive subjects in their non-passive form (examples 33b and 34b). Examples 33c and 34c show, contrary to the prediction, that these verbs can co-occur with the passive morpheme -w- and 33d and 34d indicate that these two verbs subcategorise for at least one argument in their non-passive form. To account for this phenomenon therefore the GB analysis of passives presented above needs modification. We will first briefly discuss the characteristics of these examples in terms of theta-role assignment. The examples in 33 and 34 show that the verbs vika 'arrive' and enda 'go' have at least one theta-role which must be assigned, as indicated by the ill-formedness of (d). The fact that these verbs admit an expletive subject further suggests that this theta-role is not an external theta-role in the sense of GB. The well-formedness of (e) therefore, without an overt NP, suggests that if the passive morpheme must receive a theta role as the GB approaches have claimed, then in this example it has received an internal theta role, otherwise the sentence would be ill-formed because of the theta-Criteria[17].

Weather verbs on the other hand do not co-occur with the passive morpheme as example 35b below shows.

35a. N_kwâtúkâ
N_-k_-â-túk-â
FOC-17-TNS-darken-FV
It became dark.

35b. *N_kwâtúkwâ
N_-k_-â-túk-wâ
FOC-17-TNS-darken-PAS-FV
It became dark.

The difference between the verb in 35 and those in 33 and 34 is that the latter have at least one theta-role, an internal theta-role. It seems therefore, that the presence of the passive morpheme in Kikamba correlates with the presence of at least one verb argument regardless of whether it is an external or an internal argument.

Towards an extension of GB analyses

How can the above analyses be modified to account for the passives of Intransitive-2 verbs in Kikamba? We are going to propose some modifications to the accounts discussed above, that would make the approach adequate for the Kikamba passive varieties in terms of theta Roles and which would predict that Kikamba does not form passives from verbs without any argument like the weather verbs. The proposals are made assuming the following:

1. Following Jaeggli (1986), Roberts (1987), Baker (1988) and Afarli (1989) that a verb with passive morphology has the same argument structure as the corresponding verb without the passive morpheme[18].
2. That in the lexicon verbs are listed in their simple forms and that derivational morphemes are listed separately with specifications on co-occurrence restrictions.[19]
3. That the passive morpheme is treated as an argument of the verb with which it co-occurs and therefore requires a theta- role.
4. That Case assignment to the passive morpheme is not a universal feature, and languages in which the passive morpheme need not receive case have two options of filling the theta-less subject positions — move another

nominal to this position or fill the position with an expletive (dummy subject).

As we have said above, observation of the Kikamba data suggests that the passive morpheme will co-occur with all verbs that have at least one theta-role (argument) to assign regardless of whether it is an internal or external theta-role. What we need to establish here is which theta-role the passive morpheme takes in structures where the verb has more than one theta-roles to assign[20]. We will consider transitives and intransitive-2 verbs only. This is because in the case of intransitive-1 only one theta-role, an external one, is assigned (thus passivizing according to the predictions) and weather verbs have no theta-role to assign and have been shown not to take the passive morpheme. Consider the following sentences:

36. K_vetì n_kyâk_ná känä.
K_-vetì n_-k_-â-k_n-á ka-änä.
7-woman FOC-7-TNS-beat-FV 12-child.
The woman beat a/the child.

We assume that in this sentence the verb kuna 'beat' has two theta-roles, an external theta-role (agent) assigned to the NP kiveti 'woman' and an internal one assigned to the NP kana. The expletive test shows that the verb has an external theta-role because an expletive subject produces ill-formedness as in example 37 below.

37. *N_kwâk_ná känä.
N_-k_-â-k_n-a ka-änä.
FOC-17-TNS-beat-FV 12-child.

However, in the passive form, an expletive can occupy the subject position. We therefore, conclude that the theta-role assigned to the subject position has been 'taken up'/ absorbed/received by the passive morpheme. This conclusion is further supported by the fact that the subject of the corresponding active cannot occupy the subject position when the verb is in passive form (see example 39).

38. N_kwâk_nwá känä
N_-k_-â-k_n-w-a ka-änä.
FOC-17-TNS-beat-PAS-FV 12-child
There was beaten a child.

39. *k_vetì n_kyâk_nwâ känä
k_-vetì n_-k_-â-k_n-w-â ka-änä.
7-woman FOC-7-TNS-beat-PAS-FV 12-child.

Example 38 shows that the internal theta-role of the verb has not been affected by the passive morphology — the fact that the NP kana 'child' can still occur in that position. The ill-formedness of example 39 can be explained in terms of the theta-Criterion. In this analysis 39 is an instance of a verb with two theta-roles to assign and three arguments that need theta-roles and this explains the ill-formedness. The passive morpheme takes the external theta-role assigned by the verb and thus the NP kiveti 'woman' has no theta-role, violating the theta-Criterion. In these examples the passive morpheme selectively receives the external theta role. Next, we are going to examine intransitive-2 with two arguments.[21]

40a. N_kwâviká k_vetì m__ndán_
N_-k_-â-vik-á k_-vetì m_-_ndá-n_
FOC-17-TNS-arrive-FV 7-woman 3-farm-LOC
There arrived a woman a woman at the farm.

40c. N_kwâvikwá m__ndán_
N_-k_-â-vik-w-á m_-_ndá-n_
FOC-17-TNS-arrive-PAS-FV 3-farm-LOC.
There was arrived at the farm (arriving at he farm was done).

40d. *N_kwâvikwá k_vetì m__ndán_
N_-k_-â-vik-w-á k_-vetì m_-_ndá-n_
FOC-17-TNS-arrive-PAS-FV 7—woman 3-farm-LOC.
There was arrived woman at the farm.

40e. *N_kwâvikwâ k_vetì
N_-k_-â-vik-w-â k_-vetì
FOC-17-TNS-arrive-PAS-FV 7-woman
There was arrived woman.

As we said above, 40a identifies the verb vika 'arrive' as a verb which does not assign an external theta-role. The two NPs in example 40a therefore receive internal theta-roles from the verb vika 'arrive'. In the passive form this verb seems to require only one NP, as is evidenced by 40c and the ill-formedness of 40d, and the NP required is of necessity be the Locative argument muundani 'farm' (the ill-formedness

of 40e. It seems therefore to be the case that the passive morpheme receives the theta-role assigned to the NP kiveti 'woman' in the corresponding non-passive, and not any other.

The two sets of examples considered here have shown instances where the passive morpheme must receive the external theta-role and others where it receives a particular internal theta-role. Can these two accounts be unified? We propose this can be done by use of the universal hierarchies[22], if the passive morpheme is analysed as receiving the highest theta-role assigned by the verb in the following hierarchy.

a. External > Internal.
   This means that in a clause where both external and Internal theta-roles are assigned, the passive morpheme must receive the external theta-role. The internal theta-roles will then be ranked according to the following hierarchy.

b. Theme > Gaol > Location.[23]
   If therefore, a verb does not assign an external theta-role, the passive morpheme will scan through the internal theta-roles and take the highest according to the above hierarchy. If this is done the analysis will account for the variety of passive constructions observed in Kikamba in terms of theta role assignment.[24, 25]

Finally one would want to ask why the passive construction is so popular in Kikamba and in Bantu in general. The following are some possible reasons.

1. The passive construction has a basic syntactic function in the language. It is the unmarked way of constructing questions focused on the subject. Thus the speakers of Kikamba need the passive construction to comprehend and produce questions.
2. There are a set of relationship verbs for which the passive construction is important. For example in English the subject of the active form of the verb 'marry' can be either a male or female human noun but in Kikamba only a male human noun can be the subject of active verb -twaa 'marry'. Thus if one wants to talk about marriage from the point of view of the female participant the passive form of the verb -twawa 'be married' is used.
3. Passives are preferred when the agent is lower in the person and animacy hierarchy than the patient. For example, 41b is preferred to 41a.

41a. Känä n_kâng_nâ
     Ka-änä n_-ka-â-n-k_n-â
     12-child FOC-12-TNS-1sg-beat-FV
     The child beat me.

41b. N_nâk_nwá n_ känä
     N_-n-â-k_n-w-á n_ ka-änä
     FOC-1sg-TNS-beat-PAS-FV by 12-child
     I was beaten by the child.

Conclusions

In this paper we have examined passive clauses in Kikamba. The description showed that Kikamba typically allows the passive morpheme to co-occur with all verbs, the only exception being weather verbs and already passive verbs[26]. It was shown that the claim that the passive morpheme is an argument of the verb has supporting evidence from the Kikamba question construction. We however, observed that the claim that the passive morpheme will only receive the external Theta-Role assigned by the verb has counter-evidence in the intransitive-2 constructions in Kikamba. Building on the analyses in Jaeggli (1986), Roberts (1987), Baker (1988) and Afarli (1989) a proposal was made on possible extensions of the GB passive account to embrace the variety of passive clauses observed in Kikamba. This involved the claim that the morpheme receives the highest theta-role assigned by the V(P)[27].

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Endnotes

1. It is not possible to provide a detailed account of the GB Theory in a paper of this size. Familiarity with the standard GB Theory (Chomsky 1981, 1982) is assumed.
2. It is possible that the underlying form of this morpheme is -u- which becomes a glide because of the verb final vowel. However because the passive morpheme is restricted to the position between the verb stem and the final vowel, this underlying form does not occur on the surface in Kikamba at all. We will therefore represent the passive morpheme as -w-.
3. In languages with case morphology this distinction is set out clearly in terms of the case marking on the nominals holding these positions, i.e some intransitive subjects receive the same case marking as that of transitive subjects while other intransitive subjects receive the case marking normally associated with the object of transitive verbs. In Kikamba however the distinction is not morphologically marked and therefore it is not easy to notice. Our classification has been influenced by the GB characterisation of the difference in terms of Theta Theory. In one type of the intransitive verbs the verb will select a thematic subject and therefore clauses with an expletive subject with such a verb in its underived form will be ill-formed. In the other type (intransitive-2), the verb selects no thematic subject and therefore the subject position can be occupied by a non-referential subject with well-formed result. Thus as we shall show shortly these verbs have characteristics similar to those of passive verbs. The distinction if further reflected in the question formation in the language, as we shall see later.
4. This practically refers to a dummy subject overt or covert.
5. The n_ phrase can be left out. We have only included it for the convenience of tracing the relationship between the active and the passive sentence.
6. One thing we need to make clear here is that we consider the locative marker as a noun class marker. Cross- linguistic evidence is derived form the fact that in some Bantu languages the locative marker is a prefix like the other noun class prefixes. There is language internal evidence that this marker is a noun deriving morpheme, it has the effect of deriving a locative NP from the nouns it affixes to. In accordance with our observations in Chapter 2, the last noun class affix is the one considered for agreement and thus here the verb takes class 16 concord rather than class 3 in agreement with the NP m__ndan_ 'farm'. Another interesting issue, for GB theory, in this example is to consider what assigns Theta-role to the locative NP m__ndan_ 'farm'. The assumption we have made here is that this NP receives its Theta-role from the verb. This assumption however has no consequence for the conclusions drawn in this

chapter because we have found no example in Kikamba of a verb whose only argument is a locative NP. If this was available we would have examined whether or not such a verb can take the passive morpheme, which according to our analysis receives the highest Theta-role assigned by the verb. It is important however to note that the locative NP in this sentence determines the subject verb-agreement. While in the impersonal constructions there is freedom to use either class 16 or class 17 agreement, there is a preference for class 16 in this example. Class 16 is the 'singular' of the two and carries the meaning of 'specific place'. Example 13 therefore is not a case of topicalised locative followed by an impersonal subject but rather a locative subject.

7. In complex structures the subject or object of an embedded clause can become the subject of the main clause.
8. If the locative nominal is overt it can occupy the subject position giving a construction similar to personal passives as in example 13. In the chapter on applicative we will present an argument on the possibility that the presence of the locative signals a different use of the verb and gives the verb features typical of transitive verbs.
9. We have used the gloss for stative morpheme because this is the general usage for this form. However as is clear from the interpretation, it is accorded passive usage here.
10. Other verbs that take the form -ka with passive interpretation are:
    a. . . . where is it?? . . .
    b. _w'a 'hear' _w'-_ka 'is heard'.
    c. manya 'know' many-ika 'is known'
    d. elewa 'understand' elew-eka 'be understood'.
11. In this sub-section we will mainly consider the standard analysis presented in Chomsky (1981:117–127).
12. The movement of the whole chain is also necessitated by Government issues. The passive morpheme is generated high in the tree so as to govern the EC in subject position and thus fulfil the proper requirement on clitics and their associated empty category. Therefore once the passive morpheme moves the EC will also move in order to retain the Government relation.
13. Afarli shows that ergative verbs, verbs that do not assign an external Theta-Role, are ill-formed with passive morphology.
14. It is not clear how this directionality principle would work in languages with basic word orders other than (SVO) and with the passive morpheme still as a suffix.
15. Another consequence of this, which is not explicitly stated in Afarli (1989) is that passive morphology in English will not co-occur with verbs that do not subcategorise for a following NP while languages like Norwegian allow this option.
16. Perhaps the GB theory will propose Wh-movement in the Logical Form (LF). What we mean here is that the question word on the surface occurs in the position usually reserved for the questioned argument.
17. The theta-Criteria states that every argument must receive one and only one Theta-role and every Theta-role must be assigned.
18. In languages without overt passive morphology Afarli (1989) assumes a morphologically abstract element which has overt syntactic effects similar to those of the overt passive morpheme.
19. This in effect means that the passive morpheme is inserted at d-structure and it is important in that the relationship between passive and active clauses is maintained. They differ in that the verb in the passive clause receives a different argument at d-structure. This line is present, though differently organised, in Afarli's analysis.
20. Afarli argues that the passive morpheme must take the external Theta-role because it is this Theta-role that is understood in passive clauses.
21. We are assuming that the verbs that subcategorise for following locative NPs assign Theta-roles to these NPs. Another possibility is that the locative morpheme assigns Theta-role to such NPs but as we noted earlier the absence of a verb with a locative argument only makes the decision, whichever way, to have no consequence for the analysis proposed here.
22. For details on these hierarchies see Comrie (1981), Givon (1975) and Allan (1982).
23. If theta-roles are to be equated to semantic role (a fact GB has not been very clear on) then the appropriate hierarch for Kikamba would be:
    Beneficiary > Recipient > Patient > Locative.
24. According to Afarli, Norwegian disallows passive morphology in ergative transitives. If our findings can be generalised, perhaps there is a possible reanalysis of the

Norwegian data or perhaps only the distinction between external and internal arguments operates universally.

25. The option of the passive morpheme receiving an Internal theta role does not seem to be available in all languages, especially those considered in the formulation of the GB theory. While we do not propose to be able to explain this fully, it is possible that in some languages syntactic processes recognise the hierarchy only in as far as the distinction between external and internal arguments is concerned while others like Kikamba make finer distinctions.
26. In the weather verbs passivization is blocked by the fact that there is no argument for the passive morpheme to receive while in already passive verbs the failure of passivization may be as a result of a restriction against two inherent arguments on one verb. That is, since the passive verb already has an inherent argument, it cannot receive another which would be the case in double passivization.
27. This is similar to the view held by Lexical Grammar proponents. Bresnan and Moshi (1990:169) say that 'the passive suppresses the highest role . . . of the verb . . . Suppression entails that the role is syntactically unexpressed; it nevertheless remains [the highest role] in the argument structure of a passive verb'.

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