Transforms in Lubukusu: Morphosyntactic Operations

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Abstract

This paper examines transforms as morphosyntactic operations in Lubukusu language. This is a Luyia dialect of Bantu language that is spoken in the Western parts of Kenya. The paper argues that when transformations take place in Lubukusu, an interface between morphology and syntax is observed. Structures under consideration are those of the passive, causative, possessor raising, question, stative and the applicative morphology. The paper has argued that for most of these structures, when the TRs are applied on the D-S, the structure of the verb as well as that of the entire sentence is affected. The exception is with question morphology where, in the most natural way of interrogative structures, the interrogative word doesn't move. This contrasts with what happens for instance in a language like English. The data used was collected from five native speakers of Lubukusu as well as on the author's own intuition in the language. Specific rules, both phrase structure rules (PSRs) and TRs have been formulated to account for specific cases of morphology-syntax interface.

Introduction

The paper seeks to show that transformational processes in Lubukusu language are morphosyntactic. This argument is based on the fact that when transformations take place, both morphology as well as syntax is affected. Specifically, the morphology of the verb does determine the entire syntactic structure. It starts by analysing the passive morphology and argues that when passivisation takes place in this language, an interaction between morphology and syntax is observed. First of all, the verb is affected by the passive morphology; the same in turn influences the entire sentence structure in terms of the linguistic elements to occur and the syntactic position in which to occur. What is unique about Lubukusu is that the NP in the subject position of the passivised construction has to agree with the verb that follows in terms of gender, number and (person). It has also argued that in Lubukusu, it is not always the case that in passivised constructions, the object moves to occupy the subject position. Contrary to this, the object can still remain in its base-generating site and yet be passive. This is in contradiction to what happens in most languages. Nonetheless, even in such constructions, interface between morphology and syntax is observed. This is possible because of the fact that Lubukusu allows subject incorporation in the agreement features of the verb (See Schroeder 2004).

Concerning question morphology, the paper has argued that in the more unnatural way of asking questions, movements do occur when TRs are applied on the underlying structures. In such cases, a morphosyntactic process is observed. This is because both morphology as well as syntax is affected. However, contrary to this, the paper also argues that in the more natural/ usual way of interrogating, no element moves. This contrasts with what happens in most languages, where the interrogative word has to move.

The causative morphology in Lubukusu has also been investigated. The paper has argued that when causativisation takes place, interface between morphology and syntax is observed. Specifically, the morphology of the verb changes and it in turn alters the structure of the entire sentence by triggering the movement of elements as well as adding new ones;

namely, a causer as well as a second verb. Unlike languages like English, which only has lexical marking of the causative, Lubukusu allows both lexical as well as morphological marking. Either way, the paper demonstrates that causativisation in Lubukusu is a morphosyntactic process. The same argument goes for the applicative, stative and possessor raising transforms. For each type of transform, interface between morphology and syntax is observed. However before giving the analysis of each, a brief inventory of the sound system of Lubukusu (especially consonants) is given for clarification of the orthographic forms used in the paper.

Lubukusu Consonants

The phonology of Lubukusu includes sounds that are not found in languages such as either English or Kiswahili. Some of these unique sounds are:

(i)   Voiced bilabial fricative [β] as in Lubukusu / luβukusu/. The sound [β] is used instead of the voiced bilabial plosive [b], which is lacking in Lubukusu. Consequently, in cases where [b], would have occurred, either the voiced bilabial fricative [β] is used or the voiceless bilabial plosive [p] as in /papa/ 'father'.

(ii)   Voiceless velar fricative [x] as in ekhafu /ɛxafu/ 'a cow'

There are sounds that are not found in the phonology of Lubukusu. Such sounds include:

(i)   Voiced bilabial plosive [b]
(ii)   Voiced labiodental fricative [v]
(iii)   Voiced alveolar fricative [z]
(iv)   Voiced palatal fricative [·]

The Passive Morphology

The passive voice refers to a sentence clause or verb form where the grammatical subject is typically the 'recipient' or 'goal' of the action denoted by the verb. The passive contrasts with the active, which attributes the action of the verb to the person or thing from which it logically proceeds. Whereas the active construction forms the D-S, the passive forms the S-S; and the two are related through movements. In Lubukusu passive morphology, the passive participle form is the responsibility of a syntactic rule, because it has repercussions for the syntactic organisation of the entire sentence; that is, it is the passive morphology that triggers movement; and of course either the addition or deletion of elements in the structure.

During passivisation in this language, the NP in the object position at the D-S moves from the VP- internal position to the subject position of the sentence at the S-S, leaving behind a trace. On the other hand, the NP in the subject position at the D-S is demoted to a by-phrase; hence it moves to occupy the object position. The preposition *ne/ nende* 'by' is introduced to head the prepositional phrase. Being an optional element, the PP, which is an agentive, can as well be omitted. Likewise, the passive marker *-w-* is marked on the verb; this is what triggers movement. New agreement features are also marked on the verb at the S-S so that there is concord between the subject at the S-S and the verb. A trace is introduced at the S-S in order to mark the position of the moved NP; this is in line with the projection principle which demands that whatever that is specified in the lexicon, be syntactically represented. The trace has to occur at the S-S in order to satisfy the argument structure of the verb. Based on this analysis it is argued that passivisation in Lubukusu is a morphosyntactic process. This is because, on the one hand, the passive morphology affects the word (in this case the verb which is transformed from being active to passive). On the other hand, the passivised verb in

turn influences the entire syntactic structure by reducing the valence of the verb, introducing new linguistic elements and rearranging the elements at the S-S. Below are illustrations:

(1) D-S Mai   alikha- kul- a chi- nyenyi.

       Mother 3SG,PRES- buy-   PRES- PL- vegetable

       "Mother is buying vegetables."

       S-S Chi- nyenyi$_i$ khe- .chi- kul- w- a t$_i$ (ne mai).

       PL- vegetable PRES- AGRs- buy- PASS- PRES t$_i$ by mother

       "Vegetables are being bought (by mother)."

As can be observed from the constructions in (1) above, first the morphology of the verb has been changed. Specifically, the verb bears the passive marker -w- as well as the subject agreement morpheme -chi. This verb has in turn affected the entire sentence structure in that the object has been forced to move to subject position; the initial subject (at D-S) now occur as an adjunct and trace has been introduced in the structure. Interface between morphology and syntax is observed in that the former has influenced the later. Below is the grammar that accounts for the structures in (1):

       D-S → NP+ AGRs + T+ V+ NP$_2$

       S-S → NP+ T+ AGRs + V+ PASS+ t$_i$+ (PP)

       PP→ P+ NP$_1$

Where:

       NP$_1$→ first noun phrase

       NP$_2$→Second noun phrase

       PASS → Passive marker

From the grammar given, we see that there is total structural change both in terms of morphology as well as syntax. One of the constraints observed by passives in Lubukusu is the Shortest Movement Principle (Radford, 1997:271). The principle states that: Each application of A (argument) movement should move the relevant constituent into the next highest subject position in its containing structure. The implication here is that, linguistic elements don't just move anyhow, but rather there are specific syntactic positions in which they move to; in this case it has to be the next highest subject position (IP), that is empty. However, the paper argues that as much as the above constraint is observed, passive morphology in this language can also trigger NP movement across S-boundary (sentence boundary), especially if the second NP is in subject position of a lower non-finite clause. The following illustrates this:

(2) D-S Daudi a-   bhon- a [IP Mariko khu- bha omu- silu].

       David 3SG- see- PRES Mark GER- be SG-   stupid

       "David sees Mark to be stupid."

       S-S Mariko$_i$ a- bhon- w-   a   t$_i$ khu- bha omu- silu (ne Daudi).

       Mark 3SG- see- PASS- PRES- t$_i$ GER- be   SG- stupid

       "Mark is seen to be stupid (by David)."

Based on the structure in (2) at the S-S, the verb -bhon- 'see' has been passivised, hence changing its morphological structure; which in turn has influenced the whole syntactic structure. Specifically, the NP in the subject position of the subordinate clause has moved to the subject position of the matrix clause; the moved NP is the infinitival complement of the predicate -bhon- 'see'. The preposition ne 'by' is also introduced in order to govern the demoted NP at the S-S, that is, the one in the object position. Therefore, we see morphology-syntax interface that is triggered by the passive morphology. Movement across an S-boundary in Lubukusu is only possible if the lower clause is non- finite but not if it is finite.

Unlike most languages, a unique feature of Lubukusu is that it is not always the case that when passivisation takes place, the subject is demoted while the object is promoted to subject position. Contrary, it is possible in this language to suppress the subject without

necessarily promoting the object in a passivised construction. In other words, the object can still remain in place and be case-marked as a direct object, even when the verb is passivised. The following are illustrations:

(3) D-S Neli alikha-   som- a   si- tabhu.
         Neli 3SG,PRES- read- PRES SG- book
         "Neli is reading a book."
         S-S Ekhe- si- som- w-   a   si- tabhu.
         SG- AGRo- read- PASS- PRES- SG- book.
         "The book is being read."

Despite the fact that the direct object has not been promoted at the S-S in the structure above, the process is still morphosyntactic. The argument is based on the fact that the morphology of the verb as well as the whole syntactic structure has been altered. Specifically, we see that the verb has acquired passive a marker -w- as well as new object agreement features. The very verb has in turn influenced the sentence structure by having now occupied the subject position. A structure such as the one at the S-S of (3) above is only possible if we assume that the agreement prefix on the verb occur as the incorporated object; that is, that the object is incorporated in the verb (Schroeder 2004)[1]. Based on the assumption adapted so far, we can as well do away with the object without affecting the grammaticality of the structure. Consequently, the S-S of the structure in (3) would occur as below:

S-S Ekhe- si-   som- w-   a.
       SG- AGRo- read- PASS- PRES.
       "It is being read."

It is argued that this structure is also morphosyntactic. This is because on the one hand, the morphology of the verb (word) has been determined by the passive marker. However, on the other hand, the passivised verb has in turn determined the entire sentence structure; that is, the one word sentence. As we have argued above, passive morphology in Lubukusu is a valence reducing operation. This is not only the case with underived verbs (as in the preceding examples) but also with derived ones as observed below:

(4) D-S Nekesa a- kul- il-   e Nelima e- kalamu.
         Nekesa 3SG- buy- APPL- PAST Nelima SG- pen
         "Nekesa bought a pen for Nelima."
         S-S Nelima$_i$ a-   kul- il- w- e t$_i$ e- kalamu (ne Nekesa).
         Nelima 3SG- buy- APPL- PASS- PAST t$_i$ SG- pen by Nekesa.
         "Nelima was bought for a pen (by Nekesa)."

In the S-S of (4) above, the verb's morphology is altered by the addition of the passive marker -w-. This triggers movement of the elements in the structure and their consequent distribution. In other words, the syntactic structure is as well affected.

The examples given are to the effect that whether passives are derived from the basic or the derived form of the verb, the process is morphosyntactic in Lubhukusu, it affects both morphology and syntax.

Question Morphology.

Interrogatives in Lubukusu include words like nanu 'who', sina/ si 'what 'or 'which', and the suffix -li 'which'/ 'who'. A unique feature about interrogatives in Lubhukusu is that in the natural way of asking questions, interrogative words do not move but rather they remain in the same syntactic position. Below is an illustration:

(5) Ewe kha- we- ny- a sina?
       2SG- PRES- AGRs- want- PRES what

"What do you want?"

In (5) above, the interrogative word *sina* 'what', doesn't move.

However, in the less natural way of asking questions, the interrogative word is lexically inserted in the object of the verb or object of the preposition position at the D-S. The paper argues that when TRs are applied on the D-S, the verbal morphology as well as the entire syntactic structure is affected. Specifically, the interrogative lexeme moves from the object of the verb position (within the inflectional phrase, henceforth IP) at the D-S, to the specifier complementizer phrase (Spec CP) position at the S-S. Likewise, new agreement features are introduced in the structure. Therefore, we see that this brings about change in the word and sentence structure, a demonstration of the interface between morphology and syntax. Unlike in passives, where the moved element occupies the Spec IP position, which is an argument position, the moved interrogative lexeme in this language occupies the Spec CP position, which is a non- argument position, that is, an A' position. Consider the following illustrations:

(6) D-S O-   mwana alikha-   ke- ny-   a   sina?

　　　SG- child   3SG,PRES- AGRs- want PRES- what

　　　Lit. The child wants what?

　　　"What does the child want?"

　　　S-S Sina$_i$ nisio o- mwana   alikha-   ke- ny- a   t$_i$?

　　　What does SG- child - 3SG,PRES- AGRs- want PRES- t$_i$

　　　"What does the child want?"

Based on the examples in (6), the paper argues that in the more unnatural way of interrogating, question morphology in Lubukusu is a structure changing operation. What happens is that when TRs are applied on the D-S, the syntactic distribution of the elements change and at the same time, the verbal morphology is altered in the sense that an auxiliary verb is introduced in the structure. Consequently, we see that question morphology in Lubukusu has repercussions on the verbal morphology as well as syntax. Below is the grammar that accounts for the structures in (6) above:

　　　D-S: NP+ AGRs+ T+ V+ T+ NP$_{INT}$

　　　S-S: NP$_{INT}$+ AUX+ NP+ AGRs+ T+ V+ T+ t$_i$

Where:

　　　NP$_{INT}$→ Interrogative pronoun

It is also argued that question morphology in Lubukusu obeys the structure dependency principle. This is because when an interrogative word occur with a dependent element, the entire phrase moves to the Spec. CP position and not a part of it; and as this happens, both morphology and syntax are affected. Consequently, we see interface between morphology and syntax being manifested. This is demonstrated below:

(7) D-S Maria a-   bhon- e   si- chiko si?

　　　Maria 3SG- see - PAST. SG- spoon which

　　　Lit. Mary saw spoon which?

　　　"Which spoon did Mary see?"

　　　S-S Si- chiko   si nisio Maria a- bhon- e?

　　　SG- spoon which do Mary 3SG- see   PAST

　　　"Which spoon did Mary see?"

In (7) above, an auxiliary verb has been introduced in the verbal structure. Likewise, there is syntactic structural change in the sense that elements have moved from their initial syntactic position to some other position. Specifically, the NP *sichiko si* 'which spoon' has moved to occupy the Spec CP position. Therefore, we see that the entire phrase has moved and of-course, question morphology has influenced the word (verb) as well as the entire sentence structure.

Causative Morphology

The causative is a word (specifically, a verb) that is used to express causation. Causation is a device for creating a verb form meaning 'to cause X to verb' from a form 'X verbs'.(Spencer, 1991: 24). In Lubukusu, causation is realised both morphologically as well as lexically. This is unlike languages like English where it is only lexically realised. Regardless of how it is marked, the paper argues that causation is a morphosyntactic process in this language. This argument is based on the fact that the process does have effect on the word (verb) as well as the entire syntactic structure.

Unlike passivisation, which reduces the argument structure of the predicate in Lubukusu, causation is a process that increases the number of arguments required by the predicate. When TRs are applied on the D-S to generate the S-S, the following happens; the structure of the verb changes due to the addition of the causative marker -isi (if morphologically marked) or the addition of a new lexical item -khol-, that marks causation. Appropriate agreement features are also marked on the verb; these are determined by the type of argument in the subject position. There also occurs total structural change in which case the external argument at the D-S moves to occupy the D.O position, hence functioning as an internal argument. The direct object on the other hand moves to occupy the indirect object position. The valence of the verb increases by one because of the introduction of the *causer*, which now functions as an external argument at the S-S. The semantic roles are also altered in the sense that the initial external argument at the D-S, with the theta role of AGENT, receives the theta role of EXPERIENCER or BENEFICIARY at the S-S. However, the initial internal argument at the D-S retains its theta role of THEME. The changes that take place within the word as well as within the sentence structure are an illustration of the interface between morphology and syntax. Below is an example

(8) D-S Mulongo alikha-   lim- a   kumu- kunda.
　　　Mulongo 3SG,PRES- plough- PRES SG- land
　　　"Mulongo is ploughing the land."
　　　S-S Mukhwana alikha-   lim-   isi- a   Mulongo kumu- kunda.
　　　Mukhwana 3SG,PRES- plough- CAUS- PRES   Mulongo SG- land
　　　"Mukhwana is causing Mulongo to plough the land."

The same argument applies when the causative lexical item -khol- 'cause' is used at the syntactic level; there occurs morphology-syntax interface. Below is an illustration that is based on the structures in (8) above:

(9) D-S Mulongo alikha-   lim- a   kumu- kunda.
　　　Mulongo 3SG,PRES- plough- PRES- SG- land
　　　"Mulongo is ploughing the land."
　　　S-S Mukhwana alikha-   khol-   a Mulongo a-   lim- e   kumu- kunda.
　　　Mukhwana 3SG,PRES- CAUS- PRES Mulongo 3SG- plough – PRES SG- land
　　　"Mukhwana is causing Mulongo to plough the land."

In (9), the morphology of the verb as well as the entire sentence structure has been altered after the application of the causative rule. First the application of the causative rule has changed the structure of the verb *lim-* 'plough'. Secondly, a new verb bearing the causative lexical item *khol-* has been introduced. Thirdly, a new argument *Mukhwana* has been introduced in the subject position and finally, the distribution of the initial arguments at the D-S has been altered. Therefore we see that morphological change has triggered syntactic change; an illustration of the interface between the two levels of grammar. The structures in (9) is accounted for based on the following grammars:

$$D\text{-}S \rightarrow NP_1 + AGR_s + T + V + T + NP_2$$
$$S\text{-}S \rightarrow NP_N + AGR_s + T + V + CAUS + T + NP_1 + NP_2$$

Where:

$NP_N \rightarrow$ a new argument

$AGR_S \rightarrow$ subject agreement marker

Applicative Morphology

Applicatives result from prepositional incorporation. Therefore, in applied verb constructions, the applicative affix on the verb functions in the same way as the preposition in the analytic construction. This implies that the applicative affix and the preposition have the same argument structure. It is argued that just as the causative, the applicative is a valence changing operation in Lubukusu. Specifically, the applicative morphology increases the valence of the verb by adding a new argument (usually the BENEFICIARY) that was not in the function structure of the verb at the D-structure.

Investigations in to the applicative morphology shows that when the applicative rule, which is transformational, is applied on the D-S in Lubukusu, the following happens: the structure of the verb changes due to the addition of the applicative marker, which is either -*il* or -*el*. Likewise, movement occurs in the structure as the BENEFACTOR is introduced. The new argument (BENEFACTOR) occupies the direct object position as the initial argument in the object position, that is, at the D-S, moves to occupy the indirect object position. The paper argues that the entire process is morphosyntactic in Lubukusu. This argument is based on the fact that when the applicative morpheme is added on the verb, it does influence the verb, which in turn influences the entire syntactic structure. The following is an illustration:

(10) D-S Mulongo alikha-   som- a   si- tabhu.

Mulongo 3SG,PRES- read- PRES SG- book

 "Mulongo is reading a book."

S-S Mulongo alikha-   som- *el*-   a   Juma si- tabhu.

Mulongo 3SG,PRES- read- APPL- PRES Juma   SG- book

"Mulongo is reading a book for Juma."

In (10) above, there is total structural change in the S-S of the word as well as the sentence on the application of the TRs on the deep structure. The principles that account for the above structures are as follows:

D-S$\rightarrow$ NP$_1$+AGRs+ T+V+ T+NP$_2$

S-S$\rightarrow$ NP$_1$+AGRs+ T+ V+ T+ APPL+ NP$_N$+ NP$_2$

As it can be observed above, there is morphological as well as syntactic change in the structure. Specifically, it is the morphology of the verb that triggers syntactic change. Consequently, it is argued that interface between morphology and syntax is observed when the applicative rule is applied in Lubukusu. The applicative is subject to parametric variations across languages. For instance, whereas in English it is lexically marked, in Lubukusu, the applicative is morphologically marked. This explains why the applicative is a syntactic aspect in English, whereas in Lubukusu, it is mophosyntactic.

Stative Transforms.

The stative verb is used to express a state or condition, it signals a stationary condition or a state of being without reference to the agent or actor. It is argued that when the stative rule, which is also transformational is applied on the deep structure in Lubukusu, the structure of the word as well as that of the entire sentence is affected. At the S-S, the AGENT in the subject position (at the D-S) is deleted. This brings about reduction in the verb's argument structure by one. Likewise, the argument in the object position, which is assigned the theta role of THEME at the D-S; moves to the subject position at the S-S. Besides the syntactic change,

the verbal morphology is also altered because of the addition of the stative marker *-kh-* as well as new agreement features; that are based on the nature of the argument in the subject position at the S-S. The morphological as well as the syntactic change is an illustration of the interface between morphology and syntax, which is triggered by the stative verbal morphology. Below is an illustration of the morphosyntactic process that results from the application of the stative rule on the D-S in Lubukusu:

(11) D-S O- mwana a-   li- le   si- akhulia.
      SG- child   3SG- eat- PAST SG- food
      "The child ate food."
      S-S Si-akhulia$_i$ si-   li- khi- *kh-*   e t$_i$
      SG- food   AGRs- eat- PAST- STAT- PAST ti
      "Food was eatable."

The above structures are accounted for based on the following grammars:

$$D\text{-}S \rightarrow NP_1 + AGR_s + V + T + NP_2$$
$$S\text{-}S \rightarrow NP_2 + AGR_s + V + T + STAT + T + t_i$$

These principles are proof to the fact that stative morphology is morphosyntactic. As can be observed, the two structures are so distinct both in terms of morphology as well as syntax. Apart from the stative marker *-kh-*, Lubukusu also makes use of the stative marker *-khan-,* which function in the same way as the former; it does influence the morphology of the verb, which in turn influences the entire syntactic structure. Below is a demonstration of this:

(12) D-S Musa a-   nyol- ile   chisendi mu- si- tanda.
      Moses 3SG- find- PAST money   under- SG- bed
      "Moses found money under the bed."
      S-S Chisendi chi- nyol- e-   *khan-* e   mu- si- tanda.
      money AGRs- find- PAST- STAT- PAST under- SG-   bed
      "Money was found under the bed."

Lubukusu language is unique in the sense that there is no equivalent translation of the above S-S structures in English. As we can see, the S-S translation in English occur as a passive construction and not as a stative. In (12) above, the morphology of the verb is altered at the S-S by the addition of the stative marker *-khan-* as well as a new agreement feature *chi-*, which is determined by the argument in the subject position. The syntactic structure is also altered, with the external argument having been deleted at the S-S. The THEME has been moved from the direct object position at the D-S to the subject position at the S-S, while the locative, which initially occupied the indirect object position at the D-S, now occupies the direct object position at the S-S. There is total morphological as well as syntactic change after the application of the stative rule, which is transformational. In other words we see the morphology of the verb influencing syntax; an illustration of morphology-syntax interface.

Possessor Raising Transforms.

These are raising constructions in which the possessor is raised from the indirect object position to the direct object position on the application of transformational rules in Lubukusu. The paper argues that possessor raising is a morphosyntactic process that alters the morphology of the verb as well as the entire sentence structure in Lubukusu. Basically, what happens is that when the applicative affix *-el- / -il-* is added onto the verb, it alters its structure; and as this happens, the entire sentence structure is affected. Specifically, a new argument bearing the semantic role of PATEINT is created, which occupies the direct object position. This is the position that is initially occupied by the argument bearing the theta role of THEME at the D-S, which function as the head, with the possessor as its modifier. The head of

the initial NP in object position at the D-S, now becomes a secondary object occupying the indirect object position. As this happens, the genitive particle -*A* of relationship is deleted at the S-S. There occur, both morphological as well as syntactic changes when NPs move in possessor raising constructions. This is an illustration of the interface between morphology and syntax. The following example demonstrates this:

(13) D-S Makokha a- bhukul- e   kumu- bhano kwa Yohana.
       Makokha 3SG- take- PAST SG- knife POSS John
       "Makokha took John's knife."
       S-S Makokha a- bhukul- il- e Yohana kumu- bhano.
       Makokha 3SG- take- APPL- PAST John SG-   knife
       "Makokha took the knife for John."

Whereas the verb at the D-S has a valence of one, that is, the NP *kumubhano kwa Yohana* 'John's knife', the one at the S-S has a valence of two, that is, the NPs *Yohana* 'John' and *kumubhano* 'knife'. This change is as a result of the NP (possessor) having been raised to occupy the direct object position. Consequently, the number of arguments required by the verb has increased by one. As we can see from the illustrations, there is morphological change within the verb, which has in turn triggered syntactic change. This is an illustration of the interface between morphology and syntax. Below is the grammar that accounts for the constructions in (13):

$$D\text{-}S \rightarrow NP_1 + AGRs + V + T + NP_2$$
$$S\text{-}S \rightarrow NP_1 + AGRs + V + APPL + T + NP_{N1} + NP_{N2}$$

Where:

$NP_{N1} \rightarrow$ First new argument
$NP_{N2} \rightarrow$ Second new argument

Conclusion

The paper has argued that the passive, question, causative, stative, the applicative and possessor raising morphology are processes that are morphosyntactic in Lubukusu. This is in spite of the fact that structurally, Lubukusu differs from other languages. As it has been illustrated in the discussion, when specific TRs are applied on the D-S, the resultant structure of the verb is altered; and this change influences the entire syntactic structure. Specifically, it has been observed that the application of transformational rules on the D-S in Lubukusu first brings about change in the morphology of the verb. This also triggers the addition of new elements, the deletion of some elements, or both; and of course, a change in the distribution of elements within the sentence structure. This is with the exception of question morphology where, in the more natural way of interrogating, the interrogative word doesn't move. Based on the discussion, the paper concludes that transforms are morphosyntactic processes in Lubukusu.

Notes.

[1]. Schroeder speaks of subject incorporation in the agreement features on the verb. In this piece of work, the assumption is that there is also object incorporation in the verb.

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