CHAPTER 3

EKEGUSII ARGUMENT STRUCTURE MORPHOLOGY

In this chapter, the focus is on the derivational suffixes, also termed "extensions", of the Bantu verbal system. Some of these affixes have been the mainstay of research in recent developments in linguistic theory. They include the causative, applicative, reversive, passive, stative and reciprocal.

Following Beard (1998), among others, a distinction will be maintained between inflectional and derivational morphology in this study. Derivational morphology is considered a purely morpho-lexical process while inflectional morphology is a syntactically-motivated operation.

A further distinction between both types of morphology lies in their syntax. Derivational morphemes occur closer to the verb stem while inflectional affixes prefer peripheral positions. To illustrate, the Japanese causative morpheme /-sase/ precedes the perfect marker as in (1):

1 (Japanese, Aronoff and Fudeman 2005:161)
   tabe-sase-ta
   eat-CAUS-PERF
   'made eat'

Preference by derivational morphemes of the position contiguous to the stem is also evident in many other languages. The Russian example in (2) corroborates this view:

2 (Russian, Beard 1998:45)
   lët-aïk-a
   fly-AGENT-GEN
   'the flyer's (pilot's)

Bearing in mind the fact that inflectional morphemes include such categories as tense, aspect, mood, number, gender and case, it is incontestable that the Japanese PERF in (1) is an inflectional morpheme. Similarly, in (2), the Russian agentive suffix /-cik/, which is derivational, precedes the genitive case marker, /-a/, thereby lending
credence to the view that these suffixes occur in predictable structural positions. As Aronoff and Fudeman (2005) observe, "derivational affixes occur closer to the root or stem than inflectional affixes."

Besides the foregoing criteria, the basic assumption in this research, though not uncontroversial, is that derivational morphology alters the word class of a lexeme or its sense, at least. A further peculiarity of some derivational affixes is that they license predicate arguments.

It is in the light of this conceptual framework that section 3.1 of this chapter proceeds to analyze Bantu verbal morphology.

### 3.1 BANTU ARGUMENT STRUCTURE CHANGING MORPHOLOGY

In view of the fact that Bantu languages exhibit a highly agglutinative system in which clause constituents hinge on the verb, an analysis of the morphology of the verb to the exclusion of clausal syntax is impracticable. This is because tense, aspect, mood, agreement and argument structure changing suffixes attach to the verb stem. Following Meeussen (1967; Good 2005), it is assumed that the Proto-Bantu (PB) verb stem, excluding tense and agreement morphology, has the following structure, as reflected in its daughter languages:

(3) (adapted from Good 2005:11)

```
(3) (adapted from Good 2005:11)
      Stem
         mood
           -a- -e-
        extended root
          Voice IND SBJ
            *-i- *-u-
        root extensions
          TRANS PASS
            *-ic- *-id- *-an-
            CAUS APP REC
```
Considering that tense, aspect and mood (TAM) morphology is addressed in chapters 4 and 5, the focus of this chapter is on the derivational suffixes labeled 'extensions' and 'voice' in figure (3), in accordance with traditional Bantuistics. As already noted, under this category are subsumed the causative, applicative, reversive, passive, stative and reciprocal suffixes.

3.1.1.1 THE BANTU CAUSATIVE

Perhaps no other derivational morpheme has received more attention in research than the causative affix and its syntax and semantics. The suffix has been reconstructed in PB as */-ic/ (Good 2005; Schadeberg 2006). It can attach to transitive as well as intransitive verbs. Traditionally, the causative has been described as a valence-changing morpheme which introduces the causer or agentive argument into a non-causative construction. To illustrate, the unergative verb seka 'laugh' in Chichewa can undergo causativization as below:

4 Chichewa, Mchombo 2004:76)
(a) Chi-gawênga chi-ku-šêk-a  
7-terrorist 7SM-prs-laugh-fv
'The terrorist is laughing.'

(b) Kalulu a-ku-sek-ets-a chi-gawênga  
1a-hare 1SM-pres-laugh-caus-fv 7-terrorist
'The hare is making the terrorist laugh.'

5 (Chichewa, Baker 1988:10)
(a) Mtsuko u-na-gw-a  
3.waterpot 3-PST-fall-fv
'The waterpot fell.'

(b) Mtsikana a-na-gw-ets-a mtsuko  
1.girl 3S-PST-fall-CAUS-FV 3.waterpot
'The girl made the waterpot fall.'
In the non-causative verb *seka* in 4 (a), for example, the DP *chigawenga* is the agent in the construction. To derive the causative counterpart of 4 (a), the suffix */-ets-*/ is attached to the verb to usher in the new agent DP, *Kalulu*.

Some languages make a distinction between direct and indirect causation morphologically. Notable examples of such languages are Nkore, Nyoro and Korekore (Bastin 1986; Good 2005). In direct causation, the causer and the agent are the same since no additional argument is introduced. In such a construction, the suffix is considered a transitivizer. On the other hand, some languages make a formal distinction between direct and indirect causation since the causer need not be the agent of the action (Good 2005). For example, Korekore marks the distinction between transitivization and causativization by distinct morphemes:

6  
(Korekore, Good 2005:23)

va-n-di-ga-dz-is-a  
3PL-SUBJ.1S-OBJ-sit.TRANS-CAUS-FV 9.Pot on.7.fire

They made me place the pot on the fire.'

Although the transitive suffix */-dz/* is no longer productive in Korekore, it is apparent from (6) that it is distinct from the causative suffix, */-is/.*

The rarity or absence of the transitivizing suffix in causative constructions in modern Bantu languages indicates that direct causation is the type of causative semantics which obtains in these languages.

3.1.1.2 THE EKEGUSII CAUSATIVE

The causative suffix in EkeGusii is */-i/*. Like the causative affix in cognate languages, the suffix licenses an agent termed the causer into a non-causative construction. To illustrate, (7) contains unergative verbs which, needless to state, are non-causative:

7  
(EkeGusii)

(a)  
Omw-ana a-ga-sek-a  
1-child 1SM-NARR-laugh-FV

'The child laughed.'
7 (a) to (c) can be causativized as in (8) in the same language:

8 (a) Omo-leri a-ga-sek-i-a omw-ana.
    1-maid 1SM-NARR-laugh-CAUS-FV 1-child
    'The maid made the child laugh.'

(b) Omo-leri a-ka-rok-i-a omw-ana.
    1-maid 1SM-NARR-vomit-CAUS-FV 1-child
    'The maid made the child vomit.'

(c) Omo-leri a-ga-asimor-i-a omw-ana.
    1-maid 1SM-NARR-sneeze-CAUS-FV 1-child
    'The maid made the child vomit.'

Apparently, the unergative verbs in (7) can be causativized by introducing the agentive DP, *omoreri*, with the aid of the suffix /-i/ as in (8). Considering that EkeGusii, like many of the Bantu languages, does not have a transitivizer, the language can be described as having the type of causation termed 'direct causation.'

3.1.2.1 THE BANTU APPLICATIVE

The Bantu applicative construction is akin to the English dative object construction since both involve double objects. It is for this reason that the applicative is termed the dative, prepositional and directive construction in the literature. Among others, the applicative construction has been studied in Chichewa (Alsina & Mchombo 1993; Marantz 1993; Mchombo 1998, 2004), Kichaga (Bresnan & Moshi 1993), Chishona (Harford 1993) and Chingoni (Ngonyani & Githinji 2006). With exemplification from Chingoni, Ngonyani and Githinji report that the applicative
suffix "licenses an additional object" on a non-applicative construction. The new object, also termed the applied object, can have such roles as beneficiary, recipient, instrumental, goal, location and reason. As Alsina and Mchombo (1993) have also maintained, the beneficiary can only be derived from transitive verbs. Peterson (1999: 120) states that the Bantu applicative historically "made intransitive verbs transitive and transitive verbs 'supertransitive' in that they had two objects." The applied object exhibits 'primary object' syntactic properties in some Bantu languages, in which case both objects behave alike when subjected to these diagnostics. The three properties are object order, passivization and object marking. Languages in which either object occurs adjacent to the verb, can be passivized and also marked on the verb for agreement are said to be symmetric. In other words, even the applied object passes the diagnostics of primary objecthood. Examples of this type of languages are Kinyarwanda, Kihaya, Kimeru, Kichaga, Kikuyu, and Oluluyia (Bresnan and Moshi 1993: 47; Ngonyani & Githinji 2005: 32).

Conversely, in asymmetrical languages such as Kiswahili, Chimwi:ni, Chichewa, Chingoni, only one of the objects conforms to the 'primary object' diagnostics, that is, passivizability, object agreement and adjacency to the verb. */-il/ has been reconstructed as the PB applicative suffix. Its reflexes in some daughter languages are shown in the (b) parts in 9 below:

9 (Chingoni; Ngonyani & Githinji 2006:1)

(a) Kuku i-geg-a li-gela.
1grand pa 1SM-carry-FV 5-hoe
'Grandpa is carrying a hoe.'

(b) Kuku a-ku-va-geg-el-a va-jukulu li-gela
1grand pa 1SM-PR-20M-carry-AP-FV 2-grand child 5-hoe
'Grandpa is carrying a hoe for the grand children.'

10 (Chichewa; Bresnan & Moshi 1993: 18)

(a) Chi-tsuru chi-na-gul-a mphâtso
7-fool 7-S-PST-buy-FV 9-gift
'The fool bought a gift.'
(b) Chi-tsuru chi-na-gul-il-a atsikana mphátsó
7-fool 7S-PST-buy-AP-FV 2-girl 9-gift
'The fool bought a gift for the girls.'

11 (Kichaga; Bresnan & Moshi 1993: 79)
N-a-i-ly-a k-élyā
Foc-1S-PR-eat-FV 7-food
'He/She is eating food.'

12 (Kiswahili; Mchombo 2004: 79)
(a) Mwalimu a-li-pik-a ndizi.
1-teacher 1SM-PST-cook-FV 10-bananas
'The teacher cooked bananas.'

(b) Mwalimu a-li-pik-i-a watoto ndizi
1-teacher 1SM-PST-cook-APPL-FV 2children 10bananas
'The teacher cooked the children some bananas.'

In these languages, the applicative suffix in (b) makes the clauses double object constructions by introducing another object into the mono-transitive structures in (a). For example, in 9 (b), the suffix /-ell/ licenses the occurrence of the DP va-jukulu 'grandchildren' which the non-applicative verb in (a) does not allow.

3.1.2.2 THE EKEGUSII APPLICATIVE

The applicative suffix in EkeGusii has two phonologically conditioned allomorphs, namely, /-et/ which is the default form, and /-er/, which occurs if the stem contains a mid-low vowel in the first syllable. As is the case in other Bantu languages, the applicative suffix ushers in an object argument which functions as the locative, instrumental or beneficiary in EkeGusii. For example, (13) contains mono-transitive verbs and, therefore, the clauses are not applicative constructions:

13 (EkeGusii)
(a) Omo-leri a-ka-gor-a ri-toke.
1-maid 1SM-NARR-buy-FV 5-banana
'The maid bought a banana.'
(b) Omo-reri a-ga-it-a omw-ana.
1SM-maid 1SM-NARR-beat-FV 1-child
'The maid beat the child.'

(c) Omo-reri a-ka-girek-a.
1SM-maid 1SM-NARR-faint-FV
'The maid fainted.'

13 (a) to (c) can be applicativized with the suffix /-er/ as in (14):

14 (Ekcgusii)

(a) Omo-reri a-ka-gor-er-a omw-ana ri-toke.
1-maid 1SM-NARR-buy-APPL-FV 1-child 5-banana
'The maid bought the child a banana.' (beneficiary)

(b) Omo-reri a-ga-it-er-a omw-ana eke-burugo.
1-maid 1SM-NARR-beat-APPL-FV 1-child 7-cooking stick
'The maid beat the child with a cooking stick.' (instrumental)

(c) Omo-reri a-ka-girek-er-a ge-tanda.
1-maid 1SM-NARR-faint-APPL-FV 7-bed
'The maid fainted on bed.' (locative)

Since the applicative suffix licenses a new DP in each example in (14), it is said to be a valence increasing affix, as opposed to, for example, the passive, stative and reciprocal, which reduce the number of arguments in a construction.

3.1.3.1 THE BANTU STATIVE

The stative has also been labeled neuter, neuter-passive, quasi-passive, neuter-passive, metastatic-potential and descriptive passive (Satyo 1985; Mchombo 2004; Schadeberg 2006). Schadeberg reconstructs the PB stative suffix as */ik/*ik/. Its reflexes in modern Bantu are /-ek/, /-ik/ and /-k/ (Mchombo 2004). The suffix licenses the object DP as the subject, thereby eliminating the agent and making the construction intransitive as in example (15) from Chichewa:
(Chichewa, Mchombo 2004:95)

(a) Mbidzi zi-na-pind-a maúta.  
10-zebra 10SM-PST-bend-FV 6-bows  
'The zebras bent the bows.'

(b) Maúta a-na-pind-ik-a.  
6-bows 6SM-PST-bend-STAT-FV  
'The bows got bent.'

It has been argued that the minimal distinction between the stative and the passive is that the subject of the transitive verb in (a) cannot co-occur with the stative suffix (Mchombo 2004). If elimination of the subject is the hallmark of the stative, it begs the question of the precise difference between the stative and the passive. As Mchombo further reasons, the stative does not co-occur with the 'by phrase' which contains the subject as an oblique. Additionally, the passive allows non-patient or non-theme DPs such the instrumental and benefactive in subject position while stativization deletes the agent DP and fills the vacated subject DP position with a DP which has patient/theme role.

3.1.3.2 THE EKEGUSII STATIVE

As Mchombo (2004: 95) has observed, the stative "denotes the result state of the base verb" in which "the object becomes the subject and the former subject is not expressible, not even as an oblique function." This observation holds true for EkeGusii as the data below show:

16 (EkeGusii)

(a) Prudence a-ga-at-a eke-rasi.  
Prudence SM-NARR-break-FV 7-glass  
'Prudence broke the glass.'

(b) Prudence a-ga-sar-i-a e-nsa.  
Prudence SM-NARR-spoil-TRANS-FV 9-watch  
'Prudence spoilt the watch.'
In these sentences, the agentive DP, Prudence, is expressed and the occurrence of the object DPs makes the constructions transitive. However, the use of the stative suffix as in (17) alters their syntax:

17  (EkeGusii)
    (a) Eke-rasi ke-ga-at-ek-a.
        7-glass 7-SM-NARR-break-STAT-FV
        'The glass broke.'
    (b) E-nsa e-ga-sar-ek-a.
        9-watch 9-SM-NARR-spoil-STAT-FV
        'The watch got spoiled.
    (c) E-chae e-ga-it-ek-a.
        9-tea 9-SM-NARR-spill-S'JAT-FV
        'The tea spilled.'

(17) shows that the stative suffix /-ek/ licenses the occurrence of the object DPs namely, eke-rasi, ensa and echae in subject positions. The morpheme makes it possible to drop the subject DP, Prudence, in (16) so as to pave the way for the object DP to move to this position. The resulting event in a stative construction is seen as occurring without the involvement of an external agent, thereby making stative constructions behave like unaccusatives.

3.1.4.1 THE BANTU REVERSIVE

The reversive suffix does not alter the valence of the verb to which it attaches. It is said to be neutral with regard to argument structure as the following examples show:
As is evident from 18 (b), the Chichewa reversive suffix is /-ul/. It means doing the opposite of the denotation of the base form. Quite obviously, 18 (a) and (b) have the same argument structure despite the use of /-ul/ in (b).

3.1.4.2 THE EKEGUSII REVERSIVE

Whiteley notes that the reversive suffix in EkeGusii occurs in a small set of verbs. It expresses the "opposite of the simple form" (Whiteley 1960: 77). Guthrie (1962) considers that the suffix is neutral with respect to argument structure because it does not alter the valence of the base form to which it attaches. (19) and (20) attest to this observations:

19 (EkeGusii)
(a) Atandi o-ø-sib-a chi-mbori.
   'Atandi tied the goats.'

(b) Bosibori o-ø-ring-a ri-chambe.
   'Bosibori folded the mat.'

(c) Sinclair o-ø-simek-a omo-te.
   'Sinclair planted a tree.'
The sentences in (19) are transitive. They remain transitive even after the addition of the reversion suffix as in (20):

20 (a) Atandi  o-ø-sib-or-a  chi-mbori.  
     Atandi  3SG-PST-tie-REV-FV  10-goat  
     'Atandi untied the goats.'

(b) Bosibori  o-ø-ring-or-a  ri-chambe.  
     Bosibori  3SG-PST-fold-REV-FV  5-mat  
     'Unfold the mat.'

(e) Sinclair  o-ø-sim-or-a  omo-te.  
     Sinclair  3SG-PST-plant-REV-FV  3-tree.  
     'Sinclair uprooted a tree.'

As already noted, the valence of the verb does not change in spite of the presence of the reversion suffix in (20). This explains why the affix has been termed neutral in the discussion of argument structure changing morphology.

3.1.5.1 THE BANTU RECIPROCAL

This suffix, also termed associative occurs in the form /*-an/ in PB as well as its reflexes in modern Bantu languages. Schadeberg (2006) notes that the reciprocal suffix requires more than a single agent and that both agents are "mutual patients of their actions." Reciprocity is expressed in this way by a single plural subject DP or a co-ordinate DP structure as in:

21 (Chichewa; Mchombo 2004: 102)

(a) makángó  i-ku-phwány-an-a.  
     4-lions  4SM-pres-smash-recip-fv  
     'The lions are smashing each other.'

(b) Mbúzi  ndi  nkhôsa  zi-ku-mény-an-a.  
     10-goats  and  10-sheep  10SM-Pres-hit-recip-fv
Since the reciprocal suffix makes it possible to express only the subject DP which doubles as the patient, the treatment of this morpheme as an argument structure changing affix seems tenable.

3.1.5.2 THE EKEGUSII RECIPROCAL

As happens in other languages, the reciprocal suffix /-an/ occurs in constructions expressing an event in which the action of two or more entities impact on one another. The construction involves a plural subject DP or co-ordinate DPs with different referents. (22) contains plural subject DPs in a reciprocal expression.

22  (EkeGusii)
   (a) Aba-ana  ba-a-ram-an-a.
       2-child  2SM-PST-insult-REC-FV
       'The children insulted each other.'

   (b) Chi-ombe  chi-a-ak-an-a.
       10-cows  10SM-PST-hit-REC-FV
       'The cows hit each other.'

   (c) Chi-sese  chi-a-rom-an-a.
       10-dog  10SM-PST-bite-REC-FV
       'The dogs bit each other.'

Admittedly, the verbs rama, aka and roma require object DPs as they are transitive. This notwithstanding, the occurrence of the reciprocal suffix blocks object lexical DPs from occurring with the verbs because the putative object is realized in the plural subject DP.

3.1.6.1 THE BANTU PASSIVE

The passive suffix is an argument structure reducing morpheme. Its reconstructed forms in PB are /*-u/ which occurs after consonants and /*-ibu/ after vowels (Schadeberg 2006). Syntactically, the suffix prefers the final position as shown in the Gikũyu examples below:

23  (Ngonyani & Githinji 2006:38)
From (23), it is apparent that the passive suffix /-w/ reorders the arguments in (a), making the benefactive DP, ciana, the subject in (b) while mūgeni, which is the subject in (a) is assigned oblique function by the preposition nī.

3.1.6.2 THE EKEGUSII PASSIVE

The EkeGusii passive suffix is /-u/. The occurrence of this morpheme moves the object DP of a construction to subject position while assigning the subject NP optional oblique object status governed by a preposition. (24) shows the status of the arguments before passivization:

24 (EkeGusii)

(a) Atandi a-ga-sek-i-a omw-ana
Atandi SM-NARR-laugh-CAUS-FV 1-child
'Atandi made the child laugh.'

(b) Atandi a-ka-agur-i-a omw-ana
Atandi SM-NARR-crawl-CAUS-FV 1-child
'Atandi made the child crawl.'

(c) Atandi a-ga-keend-i-a e-rongori
Atandi SM-NARR-cool-CAUS-FV 9-porridge
'Atandi cooled the porridge.'

The sentences in (24) can be passivized as in (25):
As is apparent, the external argument, Atandi, in (24) can be dropped in the passivization process as in (25) and its subject position filled by the internal arguments, omwana and erongori.

In conclusion, this section has surveyed the derivational morphology of Bantu. In it has also been presented a sketch of the morphology and syntax of the same suffixes in the verbal complex in EkeGusii, which reflects the general pattern in Bantu. That the suffixes identified are relevant to argument structure has been established. A detailed analysis of the syntax of some of these suffixes, namely the causative, applicative and reflexive is the concern of section 3.2.

Further, inflectional and derivational morphology does not exhaust the full range of affixes which gravitate to the verb stem. For example, the subject as well as object marker are integral parts of the simple Bantu clause. These are addressed in Chapter 6 which focuses on the agreement morphology of EkeGusii.

3.2 THEORY OF ARGUMENT STRUCTURE

This section analyzes the syntax of causatives, applicatives and reflexives within the basic architecture of the GB theory. Section 3.2.1 draws upon Pykkänen's (2002) account of causatives and posits that EkeGusii is a non-Voice bundling and phase-selecting language. The analysis of the Bantu applicative construction in section 3.2.2 adopts Marantz's (1993) and Ngonyani & Githinji's (2006) vP shell structure of double object constructions, first proposed in Larson (1988), to suggest that the applicative in EkeGusii is amenable to this theory. The analysis of reflexives...
in section 3.2.3 is modeled on the Case and binding postulates in Lidz & Williams (2005).

3.2.1.1 CAUSATIVES

Causativization in traditionally defined as a derivation which alters the valence of the verb by introducing a non-core argument termed the 'causer' into a non-causative construction. Examples (26) to (31) exemplify this phenomenon from typologically dissimilar languages:

26  (English, Pylkkänen 2002:73)
(a) Non-causative
   The window broke.
(b) Causative
   Lisa broke the window

27  (Japanese, Pylkkänen 2002: 73)
(a) Non-causative
   Yasai-ga kusa-tta
   vegetable-NOM rot-PAST'
   'The vegetable rotted.'
(b) Causative
   Taroo-ga yasai-o kusa-ase-tta
   Taroo-NOM vegetable-Acc rot-CAUSE-PAST
   'Taroo caused the vegetable to rot'.

28. (Chichewa, Mchombo 2004:76)
(a) Chiga-wenga chi-ku-sek-a
   7-terrorist 75M-pres-laugh-fv
   'The terrorist is laughing'
(b) Causative
Kalulu a-ku-sek-ets-a chigawenga
1a-have 15M-pres-laugh-cause-fv 7-terrorist
'The hare is making the terrorist laugh.'

29 (Hindi, Richa, (in progress))
(a) Somi hōsta ḥe
Somi laugh-3PSG be-PRES
'Somi laughs'

(b) Somi Vanka-ko hōsata ḥe
Somi Vanka-ACC laugh-TRANS-3PSG be-PRES
'Somi makes Vanka laugh.'

(c) Somi Runa-se Vanka-ko hōswata ḥe
Somi Runa-INSTR Vanka-ACC laugh-CAUS-3PSG be-PRES
'Somi makes Vanka cause Runa to laugh.'

30 (Kiswahili)
(a) Non-causative
Wa-nafunzi wa-li-chek-a
2-student 2-PST-laugh-FV
'The students laughed'

(b) Causative
Mwa-alimu a-li-wa-chek-esh-a wa-nafunzi
1-student 1SM-PST-20M-laugh-TRANS-FV 2-student
'The teacher made the students laugh'

31 (EkeGusii)
(a) Non-causative
Aba-ana ba-ʊ-sek-a
2-student 2SM-PST-laugh-FV
'The students laughed.'
(b) Causative

Omw-orokia o-ø-sek-i-a aba-ana
1-teacher 1SM-PST-laugh-TRANS-FV 2-student
'The teacher made the children laugh.'

Apparently, causativization is a function of affixation in all the languages in (26) to (31), barring English. While Japanese, Kiswahili, Chichewa and EkeGusii use one morpheme to express causativization, Hindi formally distinguishes transitivization from causativization by the use of distinct morphemes, thereby establishing division of labour.

To account for such cross-linguistic variation, Good (2006) observes that causatives occur in two types. On one hand is direct causation involving a transitive affix which simultaneously "conveys... causative semantics wherein the causer of the action is also the agent of that action (and therefore, no new causer argument is introduced)" (Good 2006: 8). The unergative verb in (32) is an exemplar of direct causation:

32. (EkeGusii)
    Omo-nyamosira o-ø-asimor-i-a omw-ana.
    1-witch doctor 1SM-PST-sneeze-TRANS-FV 1-child
    'The witch doctor made the child sneeze.'

(32) shows that the external argument is the causer as well as the agent of the action, hence an instance of a direct causation since it involves no new argument.

On the other hand, in indirect causation, the causer of "the action is not necessarily the agent of the action" (Good 2006: 8). To exemplify this phenomenon are examples (33) and (34) from two Bantu languages, Nyoro and Korekore:

33 (Nyoro, Good 2006: 8, Bastin 1986: 116)

<table>
<thead>
<tr>
<th>STEM</th>
<th>GLOSS</th>
<th>TRANSLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>og-a</td>
<td>'bath-FV&quot;</td>
<td>&quot;bath&quot;</td>
</tr>
<tr>
<td>og-y-a</td>
<td>'bathe-TRANS-FV&quot;</td>
<td>&quot;wash&quot;</td>
</tr>
<tr>
<td>og-is-a</td>
<td>'bathe-CAUSE-FV&quot;</td>
<td>&quot;make wash&quot;</td>
</tr>
</tbody>
</table>

53
Considering the fact that there are languages like Nyoro in (33), Korekore in (34) and Hindi in (29), on one hand, which distinguish transitivization from causativization, and EkeGusii, Chichewa and Kiswahili, on the other, in which this distinction is not maintained, it is logical to posit the existence of direct and indirect causation as the point of variation between both types of languages. In a nutshell, causativization in a language like EkeGusii is encoded by the transitivizing suffix /-i/ as further exemplified in (35):

35  (EkeGusii)

(a) Aba-ana  ba-o-tag-or-a  eki-age. (Transitive)
   2-child  3PL-PST-demolish-REV-FV 7-granary.
   'The children demolished the granary.'

(b) Omo-gambi  o-o-tag-or-i-a  aba-ana  eki-age.
   1-chief  3SG-PST-demolish-TRANS-FV 2-child 7-granary
   'The chief made the children demolish the granary.'

(c) Keruboo-o-iter-a ama-bere. (Transitive)
   Kerubo 3SG-PST-spill-FV 6-milk
   'Kerubo spilled the milk'.

(d) Bosibori  o-o-iter-i-a  Kerubo ama-bere. (Transitive)
   Bosibori 3SG-PST-spill-TRANS-FV Kerubo 6-milk
   Bosibori made Kerubo spill the milk.'

(e) Bosibori  o-o-teeny-i-a Kerubo chi-nko.
   Bosibori 3SG-PST-collect-TRANS-FV Kerubo 10-firewood
   'Bosibori made Kerubo collect firewood.'
The use of the transitive suffix in 35 (b), (d) and (e) aids in the introduction of the causer-cum-agent DP into the zero-transitive constructions in 35 (a) and (c).

A further peculiarity of some of the Bantu languages is that causativization does not discriminate between unaccusatives, unergatives and transitives, which corroborates Pylkkänen’s (2002) prediction about non-Voice bundling phase-selecting causes as is shown in (36):

36 (EkeGusii)

(a) Chi-ngeni chi-a-rigis-a.  (unaccusative root)
10-vegetable 10-PST-burn-FV
‘The vegetables burnt’.

(b) Bosibori o-ø-ri-gis-i-a chi-ngeni.
Bosibori 3SG-PST-burn-TRANS-FV 10-vegetable
‘Bosibori made the vegetable burn’.

(b) Omw-ana a-ko-rer-a.  (unergative root)
1-child 3SG-PROG-cry-FV
‘The child is crying’.

(d) Atandi a-ko-rer-i-a omw-ana.
Atandi 3SG-PROG-cry-TRANS-FV 1-child
‘Atandi is making the child cry’.

(e) Omw-ana o-ø-kir-ir-e  (unergative root)
1-child 3SG-PST-keep.quiet-PFCT-FV
‘The child has kept quiet’.

(f) Bosibori o-ø-kir-ir-i-e omw-ana
Bosibori 3SG-keep.quiet-PFCT-TRANS-FV 1-child
‘Bosibori has made the child keep quiet’.
(g) Prudence o-ø-kor-ir-e chi-sahu (Transitive root)
Prudence 3SG-PST-do-PFCT-FV 10-mathematics
‘Prudence has done mathematics.’

(h) Sinclair o-ø-kor-i-e Prudence chi-sahu.
Sinclair chair 3SG-PST-do-PFCT-TRANS-FV prudence 10-mathematics
‘Sinclair has made Prudence do mathematics.’

Unlike English which does not permit causativization of unaccusatives, unergatives and transitives, Bantu languages are not constrained by this restriction. This is one phenomenon on which the cross-linguistic typology of causative constructions is based. Secondly, Bantu causatives display adverbial scope ambiguities which English-type causatives do not. Pylkkänen (2002) reports that adverbial scope ambiguity does not obtain in English but it does in Bantu languages. To illustrate, in English, the adverbial phrase modifies the action of the causer while in Venda (Bantu), for example, the adverbial phrase may modify the action of the causer as well as the causee as in (37):

37 (Venda, Pylkkänen, 2002: 75)
Muuhambadzio-rengi-is-a Katonga modoro nga dzangalelo.
salesman 3SG.PST-SC-buy-CAUS-FV Katonga car with enthusiasm
(i) ‘The salesman eagerly made Katonga buy the car.’
(ii) ‘The salesman made Katonga buy the car eagerly.’

As Pylkänen suggests, such adverbial modification below CAUSE as in the case of Venda, which also obtains in EkeGusii as in (38), is an indication that both languages could be phase selecting causatives:

38 (EkeGusii)
(a) Omw-orokia o-ø-riik-i-a aba-ana buya.
1-teacher 3SG-PST-write-TRANS-FV 2-child well
‘The teacher made the children write well.’
The properties of phase-selecting causatives and the architecture of the EkeGusii causative construction is the focus of section 3.2.1.2.

3.2.1.2 EKEGUSII CAUSE IS INDEPENDENT OF $\theta_{\text{EXT}}$

Mention of a few theoretical underpinnings central to the analysis of causatives is in order at the outset. First, causation is a universal semantic feature realizing the eventuality which causes the eventuality described in the VP complement it selects (Pesetsky 1995). Secondly, the external argument ($\theta_{\text{EXT}}$) is introduced by the syntactic head Voice and is, therefore, not a true argument of the verb (Kratzer 1996). Further, the causative morpheme introduces an event but not necessarily an external argument (Pylkkänen 1999, 2000b).

Following Pylkkänen, the main supposition in this study is that CAUSE and Voice can occur either independent of each other or ‘bundled’ together in a single syntactic head. To illustrate, whereas the English zero-causative depends on Voice for its realization, CAUSE and Voice are distinct heads in, for example, Japanese. Accordingly, English is said to be a Voice ‘bundling’ language while Japanese is non-Voice bundling. This parametric variation may be conceptualized as in (39):
VARIATION: VOICE BUNDLING (Pylkkänen 2002: 76).

Non-voice bundling causative
(e.g. Japanese, Finnish)

Voice-bundling causative (e.g. English)

To illustrate, a Voice-bundling causative like ‘Mary broke the glass’ has the representative in (40):

(40) VoiceP

\[ \begin{array}{c}
\text{Mary} \\
\text{Voice'} \\
\text{[CAUSE, } \theta_{\text{EXT}}] \\
\text{break} \\
\text{glass}
\end{array} \]

Pylkkänen’s prediction is that Bantu language are non-Voice bundling in which case a sentence like (41) has the simplified underlying structure in (42).

41 (EkeGusii)

\begin{align*}
\text{Ongarora} & \text{ 0-0-sek-i-a omw-ana.} \\
\text{Ongarora 3SG-PST-laugh-TRANS-FV 1-child} \\
\text{‘Ongarora made the child laugh.’}
\end{align*}
A further characterization of causatives postulated by Pylkkänen into which the EkeGusii causative construction seems to fit includes the possibility of occurrence of the following:

(i) unaccusative causative

(ii) causativization of unergatives, unaccusatives and transitives

(iii) intervention by verbal morphology between root and CAUSE and

(iv) adverbial modification below CAUSE.

Pylkkänen characterizes causative constructions which exhibit these properties as phase-selecting and cites Luganda and Venda as notable examples of Bantu languages in which the phenomenon occurs. Although Pylkkänen notes that the Voice-bundling properties of Bemba, Luganda and Venda remain unknown and inconclusive, EkeGusii causatives may be categorized as phase-selecting because the
typological properties advanced by Pylvkkanen obtain in the language. (43) contains examples of constructions illustrating these properties:

43 (EkeGusii)

(a) Ongarora o-ø-som-i-a aba-ana chi-sabu (transitive)

Ongarora 3SG-PST-learn-TRANS-FV 2-student 10-mathematics

‘Ongarora taught the students mathematics/made the students learn mathematics.’

(b) Bonuke o-ø-rer-i-a aba-ana. (unergative)

Bonuke 3SG-PST-cry TRANS-FV 2-student

‘Bonuke made the students cry.

(c) Jerusha o-ø-teer-i-a aba-ana na amagombo (modification below cause)

Jerusha 3SG-PST-Sing-TRANS-FV 2-child with sorrow.

‘Jerusha made the children sing with sorrow.’

(d) Jerusha o-ø-teer-er-i-a aba-ana eke-rasi ime (applicative between root and CAUSE)

Jerusha 3SG-PST-sing-APPL-TRANS-FV 2-child 7-class room inside CAUSE

‘Jerusha made the children sing in the class room’

If compliance with these properties is reliable a diagnostic for phase-selecting causatives, then the EkeGusii morphological causative belongs to this category of causatives. As Pylkkänen suggests, a phase-selecting CAUSE has the structure in (44):

(44)
The structure in (18) shows that a phrase-selecting CAUSE selects as its complement a constituent with an external argument in its specifier position. In view of the foregoing, EkeGusii can be characterized as a non-Voice bundling and phase-selecting CAUSE. In a non-Voice bundling causative, CAUSE and \( \theta_{\text{EXT}} \) are introduced by distinct syntactic heads because CAUSE introduces the caused event while \( \theta_{\text{EXT}} \) relates the causing event to CAUSE. This scenario is encoded in (45) whose proposed structure is (46):

45 (EkeGusii)
Dennis o-\( \emptyset \)-sek-i-a omw-aana.
Dennis 3SG-PST-cry TRANS-FV 2-child
'Dennis made the child cry.'

46

The diagnostic for supposing that CAUSE and \( \theta_{\text{EXT}} \) are distinct phenomena in EkeGusii can be based on passivization. In (45), for example, the external argument
can disengage from the construction since $\theta_{\text{EXT}}$ can be absorbed in the process of passivization as in (47):

47 \hspace{1em} (EkeGusii)
\hspace{1em} Omw-ana o-ø-sek-i-bw-a.
\hspace{1em} 1-child FOC-3SG-PST-laugh-TRANS-PASS-FV
\hspace{1em} 'The child was made to laugh.'

The possibility of severing the external argument from the construction indicates that the $\theta_{\text{EXT}}$-bearing DP is not a true argument of the verb and, more importantly, that CAUSE is not yoked to Voice in EkeGusii.

As (48) shows applicative morphology can intervene between the root and CAUSE as is expected of phase-selecting causatives:

48 \hspace{1em} (EkeGusii)
\hspace{1em} M-Monyangi o-ø-sek-er-i-a \hspace{1em} aba-geni omw-ana.
\hspace{1em} FOC-Monyangi 3SG-PST-laugh-APPL-TRANS-FV 2-visitor 1-child
\hspace{1em} 'Monyangi made the child laugh for the visitors.'

The object of the foregoing analyses was to show that CAUSE and $\theta_{\text{EXT}}$ are distinct syntactic heads in EkeGusii and that causatives in the language may be classified as phase-selecting. In section 3.2.2, the focus shifts to the syntax of EkeGusii applicatives.

### 3.2.2 APPLICATIVES

As noted in section 3.1 and further exemplified in (49), the benefactive in EkeGusii is introduced by the morpheme /-er/:

49 \hspace{1em} (EkeGusii)
\hspace{1em} (a) Omo-gambi o-ø-it-a e-mbori.
\hspace{1em} 1-chief 3SG-PST-slaughter-FV 9-goat
\hspace{1em} 'The chief slaughtered a goat.'
The possibility of either object raising to subject position in the process of passivization in 49 (a), for example, repeated here as (50), is an attestation that EkcGusii is a symmetrical language:

50  (a)  E-mbori  y-á-it-er-w-a  abarai.
     9-goat         9-PST-slaughter-APPL-PASS-FV  2-leader
     'A goat was slaughtered for the leaders.'
In contrast to Bantu, the English double object construction does not permit raising of the lower object to subject position as shown in (51):

(51) (a) Agatha based Alicia a cake.
(b) Alicia was baked a cake. (McGinnis, to appear)
(c)* A cake was baked Alicia. (McGinnis, to appear)

The difference between Bantu and English double object constructions, which is represented in (52), lies in semantics. The Bantu applicative denotes a relation between an event and an individual, hence it is a 'high' applicative, while English-type double object constructions involve a relation between two individuals (Pylkkänen, 2001; McGinnis, to appear).

Structurally, the Bantu ApplH consists of a VP complement and a DP specifier but the English APPLL contains a DP in specifier position and another as complement. To account for the constituent structure of Bantu applicatives, analyses of the kind proposed in Marantz (1993) and Ngonyani & Githinji (2006), among others, suffice. Following Larson's (1988) theory of vP shells, Marantz (1993) and Ngonyani & Githinji (2006) propose that the Bantu applicative be analyzed as a
containment relation in which the higher vP selects and contains the lower VP.\(^1\) It is on the basis of this theoretical standpoint that Ngonyani & Githinji (2006) reject a ternary branching of the applicative construction as represented in (53):\(^2\)

(53)

\[
\text{IP} \\
\downarrow\text{Spec} \downarrow \\
\text{I'} \\
\downarrow \\
\text{VP} \\
\downarrow \\
\text{V} \quad \text{DP} \quad \text{DP}
\]

In a ternary branching analysis, a sentence like (54) has the structure in (55).

(54) Omo-gambi o-\~o-it-er-a aba-rai e-\~mbori.

1-chief 3SG-PST-slaughter-APPL-FV 2-leader 9-goat

'The chief slaughtered a goat for the leaders.'

(55)

\[
\text{IP} \\
\downarrow \text{Omogambi} \\
\downarrow \\
\text{I'} \\
\downarrow \\
\text{VP} \\
\downarrow \\
\text{o-it-er-a} \quad \text{aba-rai} \quad \text{e-mbori}
\]

Considering that a ternary branching structure of the kind suggested in (55) is not theoretically sound, Larson's (1988) postulate of vP shells is of persuasive authority in the resolution of puzzle. Therefore, the D-structure of (54), repeated as (56), can be represented as (57):

1 Unlike Larson (1988) in which an applied DP moves from a complement position to the Spec position of vP, Marantz (1993) argues that double objects are projected at D-structure, and therefore, movement is unmotivated.

2 Since the diagnostics Ngonyani & Githinji (2006) run to reject ternary branching have universal applicability, this reasoning holds for EkeGusii.
Since the verb in the lower VP precedes the applicative affix in overt syntax while both objects occur adjacent to each other, Ngonyani & Githinji (2006) propose a movement account for this phenomenon. Prompted by Chomsky (1995), both argue that the verb in the lower VP raises in a successive head-to-head movement operation motivated by Attract F in the affix to the left of which it attaches to derive the post-syntactic linear order. The resultant structure of a derivation of this kind for sentence (56), repeated here as (58), is shown in (59):

\[
\begin{array}{cccc}
\text{(56)} & \text{Omo-gambi} & \circ-\circ-\text{-it-er-a} & \text{aba-rai} & \text{e-mbori.} \\
\text{1-chief} & \text{3SG-PST-slaughter-APPL-FV} & \text{2-leader} & \text{9-goat} \\
\end{array}
\]

'The chief slaughtered a goat for the leaders.'
The movement in (59) aids in the explanation as to why the verbal complex precedes the double objects of a Bantu applicative construction in overt syntax.

### 3.2.3 Reflexives

The prototypical reflexive anaphor is a nominal element whose binder is a c-commanding antecedent as in (60):

(60) Lucie prais[ed herself](Reinhart & Reuland) 1993:185).

In this example, the polymorphemic reflexive anaphor 'herself', which is a -R variable, is co-referential with the nominative DP, Lucie.

In Bantu languages, the reflexive morpheme is pro-clitic on the host verbal complex. (61) is an example from Chichewa.

---

4 The syntax of the reciprocal is similar to that of benefactive morphology; so, it is not pursued here.
Whereas English uses 'x-self' for reflexivization, the Bantu languages use pre-verbal mono-morphemic elements, for example, /-ee/ in the case of EkeGusii, to encode the same. Since the transitivity of the verb is retained in the four languages, it seems logical to consider that the anaphorical element does not reduce the valence of the verb because it is one of the co-arguments of the verb. The referential dependency between the subject antecedent and the reflexive has led to the analysis of the latter as an anaphoric argument incorporated onto the verbal complex. For Matsinhe (1994), the reflexive prefix suppresses the θ-role of the object and reduces the valence of the verb. However, if the reflexive and its antecedent are considered as co-arguments as...
in Reinhart and Reuland (1993), the analysis of the reflexive as a valence reducing
prefix is not tenable.

Further, EkeGusii does not permit reflexive morphology on the verb in a
double object construction in which the applied object usually precedes the direct as
shown in (62):\(^5\)

62 (EkeGusii)

(a) Oma-gambi o- ø-it-er-a aba-ana e-mb ori.
1-chief 3SG-PST-slaughter-APPL-FV 2-child 9-goat

‘The chief slaughtered a goat for the children.’

(b) *Oma-gambi o- ø-ee-it-er-a aba-ana e-mb ori.
1-chief 3SG-PST-REF-slaughter-APPL-FV 2-child 9-goat

*‘The chief slaughtered a goat for himself for the children.’

(c) Moraa o- ø-karang-er-a aba-ana ama-gena.
Moraa 3SG-PST-fry-APPL-FV 2-child 6-egg

‘Moraa fried eggs for the children.’

(d) *Moraa o- ø-PST-REF-karang-er-a aba-na ama-gena.
Moraa 3SG-PST-REF-fry-APPL-FV 2-child 6-egg

*‘Moraa fried eggs for herself for the children’.

(62) shows that reflexive benefactives are not permissible in EkeGusii.
However, reflexive and applicative morphology can be marked on the verbal complex
simultaneously when the agent DP doubles as an applied object, that is, the applied
object is a reflexive anaphor as in (63):

\(^5\) A plain double object construction as in (a) is different from a di-transitive with benefactive
morphology as in (b):

(a) Atandi o- ø-rut-a Kerubo ri-toke.
Atandi 3SG-PST-throw-FV Kerubo 5-banana

‘Atandi threw a banana at Kerubo.’

(b) Atandi o-rut-er-a Kerubo ri-toke.
Atandi 3SG-thew-APPL-FV Kerubo 5-banana

‘Atandi threw a banana for Kerubo.’
(EkeGusii)

(a) Omo-gambi o-ø-ee-it-er-a e-mbori.
1-chief 3SG-PST-REF-slaughter-APPL-FV 9-goat
'The chief slaughtered a goat for himself.

(b) Moraa o-ø-ee-karang-er-a ama-gen.
'Moraa fried eggs for herself.

That reflexive benefactives are underivable is a cross-linguistic phenomenon. For example, Lidz & Williams (2005) note that a derivation involving benefactive morphology and a reflexive indirect object in Kannada crashes due to the clash of locality conditions. First, the applied object anaphor must be locally bound. Secondly, in compliance with the locality condition on case, the direct object must be adjacent to its Case licensor. In the case of EkeGusii, this means that the reflexive anaphor must occur in a local relation with its antecedent for the binding condition to be satisfied since the anaphor is subject oriented.

While the grammaticality of the reflexive in (64), for instance, can be accounted for straightforwardly using the locality requirement on binding, the ungrammaticality of reflexive di-transitives of the sort in (65) call for a more articulated theory:

64 (EkeGusii)
Kemuma o-ø-ee-it-a.
Kemuma 3SG-PST-REF-hurt-FV
'Kemuma hurt herself.'

65 (EkeGusii)
*Omo-gambi o-ø-ee-nyeny-er-a aba-rai e-mbori
1-chief 3SG-PST-REF-slaughter-APPL-FV 2-leader 9-goat

As Lidz and Williams (2005) suggest, in a sentence like (64), the antecedent and the anaphoric element are clause-mates and, therefore, compliance with the locality condition occurs as is the case in (66) which is represented in (67):
Since the applicative which introduces the applied object is higher than the VP containing the direct object, its introduction will intervene between the antecedent subject DP and the reflexive anaphor, thereby violating the locality condition on binding. Therefore, benefactive morphology cannot co-occur with a reflexive ditransitive of the structure in (67).

This restriction simultaneously ensures that the direct object remains in a local relation with its licensor as no argument is licensed in its stead. In this way, the grammaticality of (66) is accounted for within the theory of case and binding.