THE VERB PHRASE IN KIHEMA

BY

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Declaration

I, the undersigned, hereby declare that:

THE VERB PHRASE IN KIHEMA is my own work both in conception and execution. I declare that all the sources used have been indicated by means of complete reference, and also that I am responsible for the ideas expressed and examples given in this study.

John M.Mugisa

Abstract

"The Verb Phrase in Kihema" investigates a wide range of three different constructions, which have all been termed 'Grammatical Function Changing Processes (GFCP)' by Linguists, using data from Kihema (a Bantu language spoken in the northeastern district of Ituru). It focuses on those GFCPs, namely the causative, the applicative and the passive.

On the one hand, Kihema causative constructions are the result of extending the verb by means of a derivational affix. This process has an impact on the argument structure of the verb. On the other hand, Kihema applicative constructions are the outcome of moving the preposition out of a prepositional phrase and incorporating it in the verb that governs it. Lastly, Kihema passive constructions result from the base verb losing its ability to assign accusative case and its failure to assign an external thematic role. Consequently, in passives, the former direct object moves to the syntactic subject position, where it receives nominative case. The thematic subject can only be realized inside a prepositional phrase.

In these constructions, the verb bears morphemes such as -is- (for causatives), -ir- (for applicatives), and -w- (for passives). Causative and applicative morphemes have the ability to turn an intransitive verb into a transitive verb and a transitive verb into a ditransitive verb.

The study provides data of different objects that appear with the verb in the Kihema verb phrase. It examines the syntactic properties exhibited by those objects. As a result, Kihema is classified as a 'symmetrical' language, since all postverbal objects in causative and applicative constructions exhibit direct object properties. However, the basic object in locative applicatives has some restrictions.

In this research, I analyze causatives, applicatives and passives in Kihema within the

framework of the Principles-and-Parameters theory (Chomsky, 1981; 1986a, 1986b) in particular, the following two theories have proven useful in my study: (i) Baker's (1988) analysis of causatives in terms of verb incorporation and his treatment of applicatives as preposition incorporation and (ii) Jaeggli's (1986) and Baker, Johnson and Roberts' (1989) theories of the passive. My study shows how these theories account for the three Kihema Grammatical Function Changing Processes.

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Abbreviations

APPL: Applicative

ASP: Aspect

DP: Determiner Phrase

CAUS:Causative

COP: Copula

FV: Final Vowel

INST: Instrument

INF: Infinitive

OCP: Object Clitic Pronominal

PASS: Passive

PL: Plural

PRES: Present Tense

PRS: Person

RC: Relative Concord

RS: Relative Suffix

SL: Singular

SP: Subject Prefix

SUBJ: Subjunctive

UKZN: University of KwaZulu-Natal

LE DISTRICT DE L'ITURI, 1956.

Source : DE SMEET, R., Carte de densité ..., 1962

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UGANDA

LAC ALBERT

BOMBOI

BANDAKA

BABOMBI

WALESE DESE

WALESE KARU

MAMBASA

BAKWANZU

WALESE

KILU

BANAKI

BUNIA

DJUGU

MAHAGI

NDO

KALIKO

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MAP 25.1 THE INTERLACUSTRINE LANGUAGES

General introduction

This part provides a general introduction of the research study of my thesis. It is divided into five sections: Section 0.1 deals with the outline of the topic. Section 0.2 gives the reasons why I chose to do research on this topic. Section 0.3 lists a few of the difficulties, which I faced while providing Kihema data. Section 0.4 describes the geo-linguistic situation of the language. Finally, Section 0.5 provides an overview of the thesis.

0.1.   Outline of the research topic

The aim of this thesis is to provide a detailed study of the Kihema verb phrase (VP) by describing the syntax of various constructions with morphologically complex intransitive, transitive, and ditransitive verbs in Kihema. Particular attention will be paid to constructions such as (2)-(4), where the extension of the verb by means of a derivational affix has an impact on the argument structure of the verb:

(1)   Omuseija a-ka-cumb-a   enyama   (basic transitive verb)
        man   SP-PAST-cook-ASP meat
        'The man cooked the meat'

(2)   Yohaana a-ka-cumb-is-a   omuseija enyama   (causative)
        Yohaana SP-PAST-cook-CAUS-ASP man   meat
        'John made the man cook the meat'

(3)   Omuseija a-ka-cumb-ir-a   nyina   enyama   (applicative)
        man   SP-PAST-cook-APP- ASP his-mother meat
        'The man cooked the meat for his mother'

(4)   Enyama e-ka-cumb-w-a   (n'omuseija)   (passive)
        meat   SP-PAST-cook-Pass-ASP (by man)
        'The meat was cooked' (by the man)

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In sentence (1), the verb *cumba* is transitive. It expresses an event in which the agent *omuseija* performs an action on the patient *enyama*. In sentence (2), the causative suffix -*is*- is attached to the verb, and introduces a new NP subject *Yohaana*. What was the subject in (2) has become the object of the causative verb whereas the original object has become the second object. The verb in sentence (3) appears with the applicative suffix -*ir*- and is followed by two NPs. The first NP *nyina* is a newly introduced object argument (a beneficiary); the second NP *enyama* is the original patient argument of the base verb. In the last example (4), the passive morpheme -*w*- is attached to the main verb, and the object of the corresponding active sentence has become the subject of the passive construction. An oblique PP headed by the preposition *na* realizes the agent of the event.

In my thesis, I will examine how morphologically and thematically complex predicates are derived by grammatical function changing processes such as the causative, the applicative, and so on. My goal is to provide a systematic description of Kihema data that illustrate those grammatical function changing processes. As the theoretical framework to describe the Kihema data, I use the *Theory of Incorporation* developed in Baker (1988) and the passive theories developed in Jaeggli (1986) and Baker, Johnson, and Roberts (1989).

0.2.   Reasons for choosing the topic

There are three main reasons that impelled me to choose this topic. First, Kihema is underresearched since no study has yet been conducted on the syntax of that language. Language is one of the cultural tools that identify a given ethnic group, and it is obvious that any attempt to study the linguistic properties of a language would contribute to the cultural struggle of that particular ethnic group. Therefore, describing my language is part of the struggle that might enable the Bahema minority people to maintain their culture as well as the non-linguist Kihema speakers to learn the system of some of the rules that underlie the sentences of this language.

Second, as a language teacher, my thesis will serve as course material for Congolese

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students after my return to the Democratic Republic of the Congo (DRC). At present, Congolese lecturers are still using older textbooks based on outdated models of syntax. With my work, I intend to introduce students in the DRC to more recent approaches to the study of language and grammar.

The last reason is purely theoretical in the sense that, as mentioned earlier, Kihema is an underresearched language. Therefore I want to apply syntactic analyses which have been proposed under the umbrella of Chomsky's (1965, 1981, 1986b) theory of Universal Grammar (UG), according to which, fundamental principles of sentence structure are innate and therefore universal. This theory predicts that, despite syntactic differences between languages, there are also structural parallels.

I intend to study Kihema in order to test these predictions and other contemporary theories and to open doors for other researchers who would like to know more about the language.

0.3. Problems encountered

The main problem I encountered concerns the lack of documentation in Kihema. To my knowledge, there are no books written on or even in Kihema (at least not in the dialect of Kihema that I speak).[1] In order to make sure that the data provided in this study are not exclusively based on my own judgements, I regularly met with a colleague whose mother tongue (Rutooro) is very close to Kihema. His assistance was beyond reproach. Besides this assistance, apart from my competence in Kihema, I mostly relied upon my knowledge of the languages such as Lingala, Kinyarwanda, Kiswahili, Mashi and Runyooro-Rutotooro. The linguistic phenomena characteristic of these Bantu languages enabled me to select the data.

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[1] There is a dialectal variety of Kihema (Runyoro-Rutooro) that is spoken in the neighboring country (Uganda). Although some written work exists in that variety, I will not rely on it, since it is not representative of the variety I speak.

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0.4. Geo-linguistic situation of Kihema

Kihema is a Bantu language spoken in the northeastern district of Ituri. The number of its speakers is not easy to estimate for the following reasons: (i) the language is spoken in three different entities, i.e. Bahema Boga, Bahema Mitego, Bahema Sud, and in a small area of Bahema Banywagi. (ii) According to international organizations such as the UN, over a period of six years more than 60,000 people (mainly Bahema) were killed in the ethnic conflict with the Lendu over land and mineral resources. (iii) There are no statistical studies that have been carried out about Bahema people so far. Therefore, I presented some maps in order to situate the language in terms of its administrative boundary. So, the delimitation on the following maps aims at giving an idea of the dialectal extension and should be considered with some restrictions. My wish was to present a map detailing the extension of Kihema, but for lack of appropriate means, I will content myself with approximate maps (see pages (xi) and (xii) in the introductory part of this thesis).

0.5. Overview of the study

The purpose of this research work is to describe the main grammatical function changing processes that affect the structure of the verb phrase and the sentence in Kihema. The research work is divided into five chapters.

Chapter 1 provides an outline of Government and Binding (GB) theory and the Principles-and-Parameters framework, which derive from the theory of Universal Grammar (UG) discussed in Chomsky (1981, 1986a, 1986b). I introduce the main subcomponents of GB-theory and show how these interact in the characterization of the grammatical and ungrammatical sentences of a language. I also discuss the principles of X-bar theory in this chapter, which is the theory of sentence structure that characterizes Chomsky's generative approach (at least until the mid-90s). Furthermore, Baker's (1988) theory of incorporation and Jaeggli's (1986) and Baker, Johnson and Roberts' (1989) theories of the passive are also discussed in this chapter. The former will be used to

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discuss causatives and applicatives in Kihema, whereas the latter will be used to describe the passive construction in Kihema.

Chapter 2 provides a discussion of the various arguments that can occur in the Kihema verb phrase (VP). I provide data in which verbs appear with different objects (complements). I illustrate various possible objects that occur in the Kihema VP, such as, for example, NPs, PPs, and CPs (sentences). Furthermore, I examine which of the potential object NPs in Kihema has the properties of a direct (as opposed to an indirect) object. To this end, I introduce the main tests that have been proposed to examine whether an object is a direct object. These properties are passivization, pronominal cliticization (also referred to as "object marking"), relativization (or extraction more generally), theme deletion and adjacency to the verb.

Chapter 3 describes the causative construction in Kihema. In this chapter, I provide data that illustrate the two types of causative morphemes that exist in Kihema, and I demonstrate that causatives can derive from ditransitive, transitive and intransitive verbs. Finally, I discuss morphological causatives in Kihema in light of the theory of verb incorporation of Baker (1988). In this discussion, I test whether the objects of the causative verbs are true direct objects, and evaluate Baker's (1988) respective claims that verb incorporation has an impact on the argument structure of the causative verbs.

In Chapter 4, I describe the applicative construction in Kihema. I illustrate which verbs can be modified by an applicative morpheme and show that there are different types of applicatives in Kihema, depending on the thematic role of the argument that is introduced by means of the applicative morpheme. Finally, I offer a theoretical analysis of applicatives, which is again based on the theory developed by Baker (1988).

Chapter 5 discusses the construction of the passive in Kihema. First, I describe and discuss the general characteristic properties of the passive. Second, I examine the passive in Kihema in the light of these general characteristics. Finally, I apply the theories of

Jaeggli (1986) and Baker, Johnson and Roberts (1989) to the Kihema passive and evaluate them on the basis of the data discussed in this chapter.

Chapter 1. Theoretical background

In chapter 1, I present the theoretical background of the analysis of the verb phrase in Kihema. The chapter highlights the concept of Universal Grammar and articulates the theory of Principles-and-Parameters as discussed in Chomsky's (1981) theory of Government and Binding theory. Section 1 introduces X-bar theory in which Chomsky argues that the latter determines the architecture of every syntactic phrase, including the sentence. Section 2 presents principle theories relating to movement and levels of representation, that is, Theta theory, Case theory, D-Structure, and S-Structure and the Uniformity of Theta Assignment Hypothesis (UTAH). Section 3 deals with syntactic relations (C-command and Government). Section 4 introduces Baker's (1988) Incorporation Theory. Finally, section 5 casts light on the passive construction as discussed in Government and Binding Theory and the theories discussed in Jaeggli (1986) and Baker, Johnson and Roberts (1989).

1.   Principles-and-Parameters

There are many languages in the world, and so there are different grammars. By "grammar of a language", one has to understand rules and principles that organize the structure of the sentences of that given language. One has to bear in mind that, although there are many different grammars, certain rules and principles seem to be identical in those grammars.

Chomsky's (1965) theory of Universal Grammar is one of the most prominent and leading paradigms of the analysis of languages. It examines the commonality of different components in different languages. This framework is considered to be valid for all languages of the world. Chomsky (1981) suggests that fundamental *principles* of UG are genetically innate in humans. It means that humans have a genetic endowment that enables them to learn a language.

This internal grammar must be associated or connected with *parameters* that are fixed by the environment, or experience, or the context in which the child acquires the language. It means that a child who is born in a Kihema-speaking environment will only speak Kihema as its mother tongue rather than Zulu (a language that it is unfamiliar with). In other words, exposure to linguistic phenomena constitutes an essential flavor in the child's learning process. Through exposure, the child will learn the vocabulary, the words and their order in a sentence. For instance, it is sufficient for a child to hear a couple of transitive verbs in order to learn that an object follows the verb. Another child, born in another environment for example, Japanese-speaking environment absorbs a different concept, that is, the object goes before the verb. This means that the order of the words in a sentence varies crosslinguistically.

However, GB-theory is one of the most influential versions of this so-called Principles-and-Parameters approach. It deals with individual languages in that the rule systems of specific languages are said to be different instances of one and the same Universal Grammar (Webelhuth, 1995:28). GB-theory comprises seven modules that are largely autonomous and can apply independently to the linguistic entities to which they are relevant. Some of those modules will be discussed in this chapter in order to have a clear concept of the nature of this research object and the kind of *grammar* I envisage to analyze. It is important to mention that although there is the most recent syntactic framework: *The Minimalist Program* (Chomsky, 1995), I will work closely with GB-theory (Chomsky, 1981, 1986) because the theoretical framework for my description of Kihema is based on Baker's (1988) Incorporation theory, which was formulated on the basis of GB-theory.

1.1. X-bar theory

According to Chomsky (1986b), X-bar theory determines the architecture of every syntactic phrase, including the sentence. The core idea of this theory is that syntactic categories are projected from lexical items, which are the lexical heads. Constituents are hierarchically ordered in such a way that every category must have a head (see 1.2.1).

According to Chomsky (1986b), X-bar theory distinguishes two levels of projection:

(1) a. XP → ZP X'

    b. X' → X^0 YP

(1) states that YP combines with X° to form X' (1b), and that X' merges with ZP to form XP (1a), which is called the *maximal projection* of X. X^0 is called the *head* of XP; YP is called the *complement* of X^0, and ZP is the *specifier* of XP (SpecXP). X-bar theory requires every phrase to have a head; complements and (most) specifiers are optional. The tree diagram created by (1) is shown in (2):

(2)
$$\text{XP} \quad \begin{array}{c} \text{ZP} \qquad \text{X'} \\ \text{X}^0 \qquad \text{YP} \end{array}$$
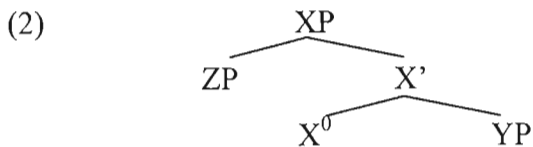
1.1.1. The phrase structure

The phrase structure illustrates the hierarchical structure for phrases and sentences, and shows how phrases are organized. Generally speaking, the phrase structure is represented as an upside-down tree. The tree diagram helps one to identify the structure of the phrase, and the entire sentence. Like a tree, the phrase structure has a *stem*, *branches*, and *junctions*. The latter are points where branches are joined together. These junctions are called *nodes*. According to Carnie (2002) each word that appears at the end of each branch is its *terminal element*. The X-bar format in (2) is the typical example of a phrase structure. One has to bear in mind that all syntactic categories can derive from (2). X^0 stands for all lexical heads, that is, N, V, P, and A. For example, if X = N, one derives the phrase structure rules (3a-b), which generate the noun phrase in (3c):

(3) a. NP → Det N'

    b. N' → N^0 PP

c.

```
              NP
         ┌─────┴─────┐
        Det          N'
         │      ┌─────┴─────┐
        the    N⁰           PP
                │      ┌─────┴─────┐
              book    on the table
```
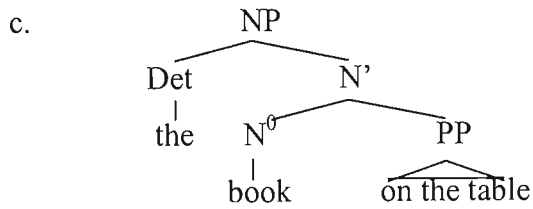
In (3c), the PP *on the table* is the complement of the noun *book*; the determiner *the* is the specifier of NP (SpecNP).

1.1.2. Inflection as a syntactic head

So far, I have been discussing the tree diagram of different syntactic categories. For instance, VP is known as the predicate phrase of a sentence. A subject phrase and a predicate phrase combine to form a full sentence. Subjects are usually NPs whereas predicates are VPs. However, NPs and VPs can be linked by another element called Inflection (I), which contains the following features: [+ Tense] and [+ AGR.]. Apart from the above features, Inflection can also contain [- Tense] and [- AGR.], or [+ Tense; - AGR.], and [- Tense; + AGR.]. Therefore, clauses containing [+ Tense; + AGR.] are known as *tensed clauses* whereas *infinitival clauses* lack tense marking and agreement. Inflection can be an auxiliary, or a past or present tense marker. It can also be a zero morpheme. Syntactically, inflection is realized by the non-lexical (= functional) head I^0.

1.1.3. The structure of the sentence

Chomsky (1986b) argues that the non-lexical categories of Complementizer (C) elements such as *that* or *if*), and Inflection (I) are also heads that form projections in accordance with (1). Thus, CP is the maximal projection of C, whereas IP is the maximal projection of I. The schema or format of X-bar theory can also be applied to C^0 and I^0, hence yielding the following structures:

(4) a. CP→ SpecCP C'

　　b. C' → C^0 IP

(5) a. IP → SpecIP I'

b. I' → I^0 VP

As (4) shows, IP is the complement of C^0. The structures derived by (4) and (5) can be used to give a syntactic representation of clauses and sentences, which is entirely built on the principles of X-bar theory. For example, the following clauses and their corresponding trees in (6) and (7) are formed by means of the rules in (4) and (5):

(6) a. [$_{CP}$ that [$_{IP}$ John has seen the dog]]

b. [$_{CP}$ what has [$_{IP}$ John t seen t]]

(7)

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(8)

```
                              CP
                      ╱              ╲
                  NP_i                C'
                   │            ╱          ╲
                   N'          C⁰            IP
                   │           │         ╱        ╲
                   N⁰          C⁰       NP          I'
                   │           │        │       ╱      ╲
                 what        has_j      N'     I⁰          VP
                                        │      │       ╱      ╲
                                        N⁰    I⁰      V⁰        t_i
                                        │      │       │
                                       John   t_j     seen
```
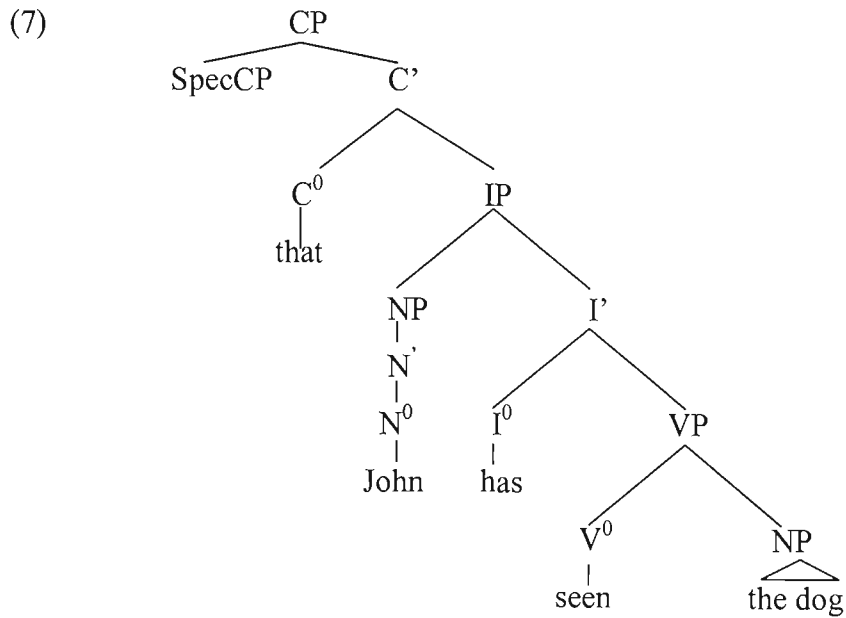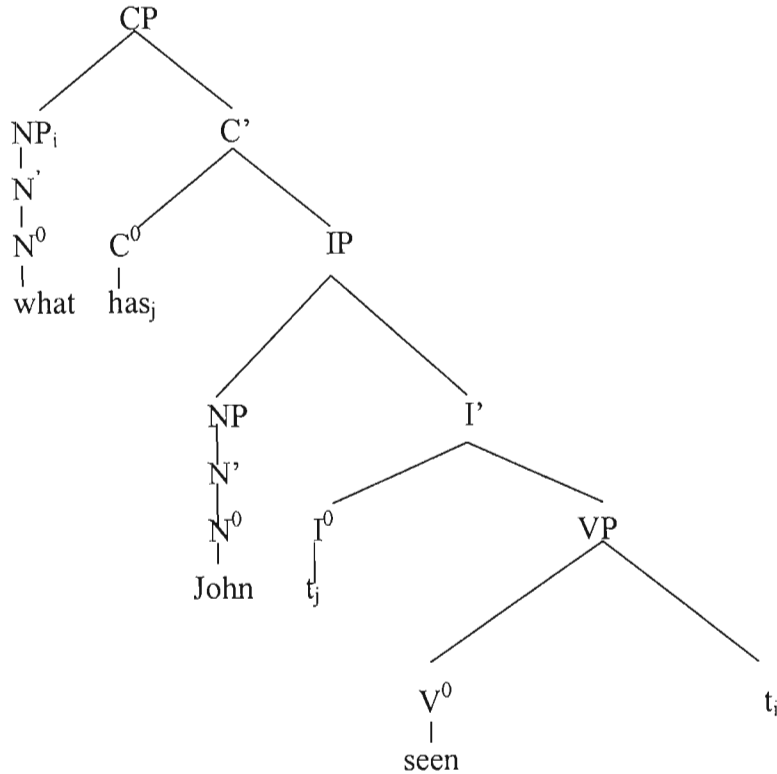
In the above trees, C combines with IP to form C'. C' in turn combines with its specifier (= NP_i = SpecCP) to form the maximal projection CP. The position [SpecCP] can serve as the landing site of wh-phrases in wh-questions such as (8). Considering the S-Structure of (8), t_i and t_j are traces which account for the presence of null elements left behind after the movement. t_i stands for *what* whereas t_j represents *has*. This means that, for example, *what* is the object of the verb *see* and it is in the VP at the D-Structure. At the S-Structure, *what* has moved to the beginning of the sentence in a wh-question (see also section 1.2.3). In this regard, Baker (1988: 34) states that: "categories moved by Move-Alpha often must leave a trace behind phonetically null copies, called TRACES." Furthermore, Baker (1988: 34) claims that: "the moved category (ANTECEDENT) and the trace constitute a unit that Baker calls CHAIN. Elements of a chain are related to one another by a particular type of coindexing, CHAIN COINDEXING." (See also Chomsky, 1986b).

1.2. Movement and levels of representation

1.2.1. Theta theory

Predicates and arguments are the major parts of a sentence. *Arguments* are constituents that identify individuals or things or abstract entities like ideas, whereas *predicates* attribute to the individuals, or entities, properties, processes, actions, relations or states. Katamba (1993:256) defines the two concepts as follows: "Predicates take referring expressions as their arguments. An argument, on the other hand is an individual, or an entity, or an item about which a predicate says something." For example:

(9) a. Peter screamed.

     b. The glass broke.

Considering sentence (9a), there is an individual by the name of *Peter* who produced a loud sound, maybe because he was hurt. Consequently, *scream* is the predicate that attributes the property of screaming to *Peter*. The same process happens in (9b) where the property of breaking is attributed to an entity *glass*. In other words, NPs are arguments and V or VPs are predicates, (Katamba, 1993).

However, Theta Theory identifies the semantic relations that exist between the predicate and its arguments. In other words, semantic relations are referred to as thematic roles or theta roles. For instance:

(10) John kicked the ball over the fence.

In sentence (10), the argument *John* in the subject position is the AGENT of the action of 'kicking', whereas the NP *ball* in object position is the PATIENT of the action. In other words, the NP *John* is the external argument since it is realized outside the VP and the NP *ball* is the internal argument because it appears with the verb within the VP. The verb is said to assign an *external* theta role to the subject and an *internal* theta role to the

object. Verbs theta-mark their arguments and theta theory regulates the assignment of thematic roles to arguments, (Haegeman, 1991).

As far as theta roles are concerned, the following roles can be distinguished:

(11) a. *Agent*: is the instigator or the doer of the action expressed by the verb.

b. *Patient*: is the person or the entity that undergoes the action or the process described by the verb.

c. *Theme*: individual or thing moved by the action of the verb.

d. *Benefactive/ goal/ patient*: person who gains from the action or the process described by the verb.

e. *Location*: place or direction of the event, state, or action identified by the predicate. For examples:

(12) a. Peter kicked the ball.

    Agent   patient

b. Jack sent Alice money.

    Agent   goal theme

c. Ann put the book on the shelf.

    Agent   theme   location   (Katamba, 1993)

One has to bear in mind that the identification of thematic role is not done randomly. It comes from the intuition of the native speaker of the language. Therefore the competence must specify the theta roles that the verb requires.

It is also important to mention that every thematic role of each predicate must be realized in the syntax. If the verb requires two thematic roles in its lexical entry, the latter must appear with the verb in the syntax. Otherwise the *Theta Criterion* is violated. According to Chomsky (1986a: 97), this principle states that:

(13)   *Theta criterion*

(14) a.   Each argument A appears in a chain containing a unique visible theta position

P, and each theta position P is visible in a chain containing a unique argument

A.   (Chomsky, 1986a: 97)

b.   A position P is visible in a chain if the chain contains a case-marked position.

(Chomsky, 1986a: 96)

(15) a.   *Peter likes.

b. *John kicked the ball the roof.

c.   John kicked the ball on the roof.

Both (15a-b) are ungrammatical since there is no one-to-one relation between syntactic arguments and theta roles assigned by the verb. This means that in (15a), there is no argument for the internal theta role of *likes*. In (15b), the verb only assigns two theta roles to two arguments, but there are three arguments in the clause. Sentence (15c) is grammatical since here the NP *the roof* is an argument of the preposition *on*.

1.2.2. Case theory

Case theory concerns the assignment of abstract case to overt NPs that are governed (see section 1.3.2) by case assigners. A transitive verb (V^0) is a lexical head that assigns ACCUSATIVE case to NP objects, whereas the tensed inflection (I^0) assigns NOMINATIVE case to the NP subjects in SpecIP. Prepositions assign OBLIQUE case to their complements.

Chomsky (1986a: 194) distinguishes two types of case assignment. (i) STRUCTURAL case assignment, which depends basically on government (see Section 1.3.2), and (ii) INHERENT case assignment that relies not only on government but also on theta role assignment: Chomsky states that if A is an inherent case assigner, then A assigns case to

an NP if and only if A theta-marks the NP. Consider the following example of a double object construction:

(16)   [IP Peter [VP gave Paul a shirt]]

In sentence (16), the tensed inflection assigns nominative case to the NP subject *Peter*. The verb assigns structural accusative case to the first NP object *Paul*, since it governs the position of this NP (Larson, 1988). The second NP object, *a shirt* receives inherent case because it is presumably closely linked to its theta role, Chomsky (1981: 171). Chomsky (1981:175) states that the *case filter* is a condition that licenses the occurrence of NPs:

(17)   *case filter*

(18)   Every overt NP must be assigned abstract case.

The case filter explains the ungrammaticality of sentences such as those in (19a-b):

(19) a.   *Him to smoke cocaine would be illegal.
     b.   *For he to smoke cocaine would be illegal.
     c.   For him to smoke cocaine would be illegal.

Since only tensed inflection assigns nominative case, the infinitive fails to assign nominative case to *him* in (19a). In (19b) the complementizer *for* is unable to govern into the IP (see Section 1.3.2.), therefore it cannot assign accusative case to the subject NP of the subordinate clause. This means, normally the complementizer *for* is an accusative case assigner and not a nominative case assigner, but the overt NP *he* needs nominative case rather than accusative case, therefore *for,* which is the head of CP is not able to govern into the lower clause to case-mark its subject as nominative. CP is a barrier to an outside governor (Haegeman, 1991: 158), (see Section 1.3.2). The overt NPs in (19a-b) violate the case filter. But in (19c) the complementizer *for* assigns accusative case to the

subject NP of the subordinate clause since *to* does not have the potential of assigning nominative case to *him*.

1.2.3. D-Structure, S-Structure, and syntactic movement

According to Baker (1988: 32), the D-Structure (Deep Structure) of a sentence is a formal syntactic level of representation at which the thematic relations among items and phrases are directly represented. On the other hand, S-Structure (Surface Structure) is a level that is derived from D-Structure by successive applications of the movement transformation Move-Alpha:

(20) a. [$_{IP}$ John [$_{VP}$ kicked [$_{NP}$ the ball [$_{PP}$ over the fence]]]]

    b. [$_{CP}$ What$_i$ did$_j$ John kick$_j$ t$_i$ over the fence]

As was mentioned before, in sentence (20a) the verb *kicked* assigns an external theta role to the subject NP *John,* and it assigns an internal theta role to the object NP *the ball* at D-Structure. In sentence (20b) the wh-constituent *what* is an internal argument of *kick*; it is a VP-internal argument at D-Structure. The auxiliary *did* is base-generated under inflection (Infl)[1]. First, at S-Structure *did* is moved to C^0 through head-to-head movement. Second, *what* is moved to the sentence-initial position SpecCP. The movement of *what* leaves a coindexed trace. A trace, usually represented by *t* is an empty category that encodes the base-position of a moved constituent Haegeman (1991: 285). The moved element is called the antecedent of the trace (see example (8) in Section 1.1.2. for more explanation on trace, movement and chain).

---

[1] Both Infl and I stand for Inflection.

(21)

```
                    CP
                   /    \
               what_i    C'
                        /    \
                      C⁰      IP
                      |      /    \
                    did_j   NP     I'
                            |     /    \
                          John   I⁰     VP
                                 |      |
                                 t_j    V'
                                      /      \
                                    V'        PP
                                   /    \    over the fence
                                 V⁰      t_i
                                 |
                                kick
```
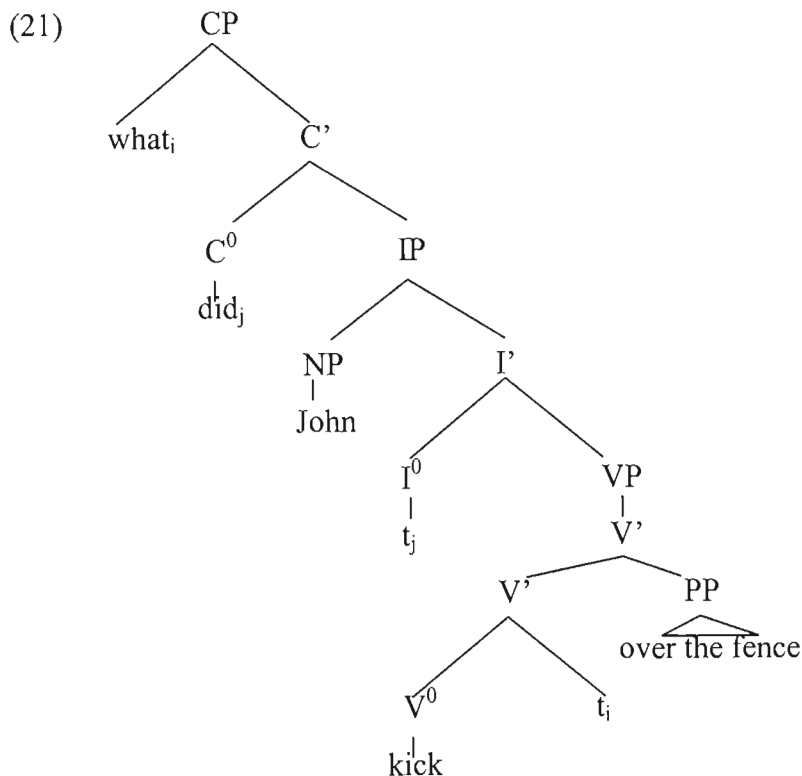
1.2.4. The Uniformity of Theta Assignment Hypothesis (UTAH)

Baker (1988) introduces the *Uniformity of Theta Assignment Hypothesis* (UTAH) that implies, among other things, that the subject of a passive is an object in VP at D-Structure:

(22)   *Uniformity of Theta Assignment Hypothesis* (UTAH)

(23)   Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure

(Baker, 1988: 46)

Baker (1988) observes that the UTAH can constrain linguistic analysis in a meaningful way. He illustrates the UTAH by describing so-called unaccusative verbs, (see Perlmutter, 1978; Burzio, 1981; 1986), certain non-agentive intransitive verbs whose sole argument is a structural object at D-Structure:

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(24) a.   Julia melted the ice cream into mush.

    b.   The ice cream melted into mush.

    a.   [$_{IP}$ Julia[$_{VP}$ melted [the ice cream] into mush]]

    b.   [$_{IP}$ e [$_{VP}$ melted [the ice cream] into mush]]

In the transitive causative example (24a) the verb *melted* assigns an internal argument to the NP *ice cream*. The UTAH predicts that this NP occupies the same syntactic position in the unaccusative example (b), since the thematic relationship between the NP *ice cream* and the verb *melted* is the same in (a) and in (b). Even though, the NP *ice cream* occupies the subject position at S-Structure in (24b), it is the object at D-Structure, according to Baker (1988) in (23), and has undergone movement. Similarly, as I have mentioned before subjects of passives are not in subject position [SpecIP] at D-structure.

The UTAH forms the basis of Baker's (1988) analysis of grammatical function changing processes such as the causative, the applicative and the passive. The example on causatives in Chichewa is a good illustration:

(25) a.   Mtsikana a-na-chit-its-a   kuti mtsuko   u-gw-e.

        girl   SP-PAST-do-cause-ASP that waterpot AGR-fall-ASP

        'The girl made the waterpot fall.'

    b.   Mtsikana a-na-**gw-ets**-a   mtsuko.

        girl   SP-PAST-**fall-made**-ASP waterpot

        'The girl made the waterpot fall.'   (Chichewa; Baker, 1988: 48)

According to the UTAH, *mtsuko* 'waterpot' and the verbal root *-gw-* 'fall' bear the same thematic relationships in both (25a) and (25b). Therefore, they are in the same structural relationship at D-Structure in both (25a) and (25b). According to the UTAH Baker suggests therefore that *-gw-* and *-ets-* are independent constituents at D-Structure as in both (25a) and (25b). Both D-Structures in (25) are in this case biclausal, with the NP

mtsuko 'waterpot' being the argument of an embedded verb *-gw-*. The complex verb *anagwesa* 'made fall' in (25b) is then derived through the process of incorporation (= head movement to the matrix verb), which will be discussed in section 1.4.

1.3.   Syntactic relations

C-command and Government are relevant principles that can determine syntactic relations between constituents:

1.3.1. C-command

Baker (1988: 36) defines C-command as follows:

(26)   *C-command*

(27)   A c-commands node B if and only if A does not dominate B and for every maximal projection C, if C dominates A then C dominates B.

(28)   John's story about Paris.   (Baker 1988: 35)

According to Baker (1988: 35), the NP *John's* c-commands the NP *Paris* but not vice versa. On the other hand, the NP *story* c-commands both, that is *John's* and *Paris*.

1.3.2.   Government

As I showed in Section 1.2.2, heads assign (structural) case to NPs if they govern them. For example, the verb in VP assigns accusative case to the NP adjacent to it. Whereas the preposition in PP assigns oblique case to its NP object, a tensed I^0 in IP assigns nominative case to an NP subject in SpecIP.

The theory of government provides a structural definition for the syntactic configuration in which a head governs an NP. This definition proposes that heads govern their complements, but also that I^0 governs the subject position SpecIP (recall that I^0 assigns nominative case to an NP in SpecIP). Baker (1988: 39) defines Government as follows:

(29) *Government*

(30) A governs B if and only if A c-commands B and there is no category C such that C is a barrier between A and B.

With respect to case assignment, it follows from (30) that a head governs every NP it c-commands and should be able to assign case to it, provided there is no barrier between the case assigner and the respective NP. But how exactly is a barrier defined?

Baker (1988: 56) defines barrier as in:

(31) *Barrier*

Let D be the smallest maximal projection containing A. Then C is a BARRIER between A and B if, and only if C is a maximal projection that contains B and excludes A, and either:

(i)   C is not selected, or

(ii) the head of C is distinct from the head of D and selects some WP equal to or containing B.

The notion of selection is defined as:

(32) *Selection*

A selects B if, and only if:

(i)   A assigns a theta role to B, or

(ii)   A is of category C and B is its IP, or

(iii)   A is of category I and B is its VP   (Baker, 1988: 57)

This means that IP, VP, and complements of verbs and prepositions are always selected and are therefore never barriers according to (32i), although they can be barriers according to (32ii). Baker (1988: 57), C^0 and I^0 do not select SpecCP and SpecIP, however.

Let me illustrate how the definition in (33) affects government and case assignment. Compare (33a) and (33b):

(33) a.   John believes [$_{IP}$ *her* to be a liar]

     b.   John promised [$_{CP}$ PRO to be a liar]

Sentence (33a) is an infinitive construction with the so-called exceptional case marking (ECM)-verb *believe*. ECM-verbs take IP-complements. In contrast, the infinitive selected by the control verb *promise* in (33b) is a full CP. In (33a), the subject of the infinitive is the NP *her*, which receives case from the matrix verb. This means that the verb *believe* must govern SpecIP of the infinitive. In contrast, the matrix verb *promise* in (33b) does not govern the SpecIP position of the infinitive, and therefore, only the covert pronominal category PRO is licensed in this position:

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(a)   ECM: (b)   Control:

(34a)   VP   (34b)   VP

                V⁰   IP   V⁰   CP

        government   C⁰   IP
                        SpecIP   I'
                                                    no government
                    ┄┄►NP   SpecIP   I'

                                                        ┄┄►PRO
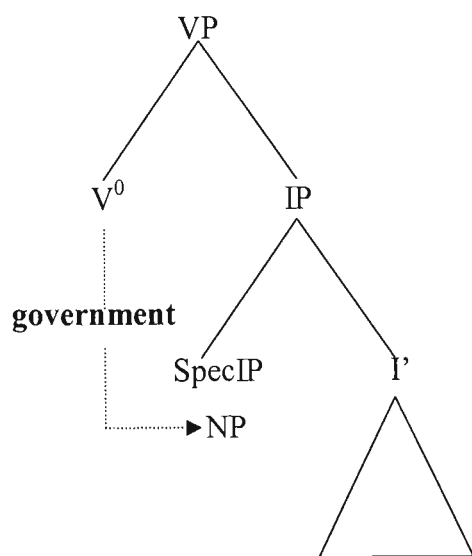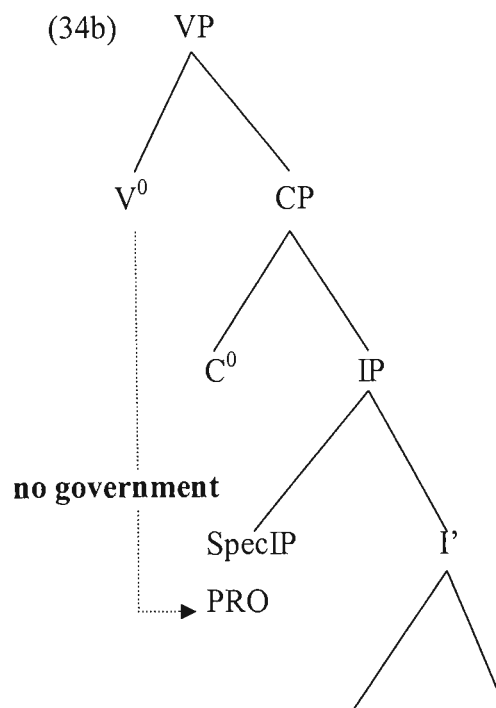
Importantly, government in (34b) is excluded because the CP is a barrier between the potential governor *promise* (= A) and the PRO in SpecIP (= B). This follows from (ii) in the definition in (31). The head of the CP (= C) is distinct from the head of VP (= D; the smallest maximal projection containing A = V⁰), and it selects IP, which in turn contains SpecIP. This makes CP a barrier between the verb *promise* and PRO. In contrast, IP is not a barrier in (34a): Although the head of IP is distinct from the head of VP, it does not select a phrase which is equal to or contains SpecIP. I⁰ selects VP, but SpecIP is not equal to or contained in VP, and it is not selected by I⁰.

Moreover, Government is also important for the licensing of traces. Baker (1988: 39) introduces the *Empty Category Principle*. This principle deals with the trace that is left behind once an element is moved.

(35)   *The Empty Category Principle* (ECP) stipulates that:

    (i)   Traces must be properly governed

    (ii)   A properly governs B if and only if A governs B, and A and B are coindexed.

Let me illustrate this principle by using Baker's (1988: 38) examples (15a)/(16a) and (15b)/(16b) that I repeat here as (36a)/(37a) and (36b)/(37b):

(36) a.   Who$_i$ [$_{IP}$ t$_i$ [$_{VP}$ fixed the car]]?

      b.   What did [$_{IP}$ Angelo [$_{VP}$ fix$_i$ t$_j$]]?

(37) a.   *Who do [you wonder [$_{CP}$ whether [t [$_{VP}$ fixed the car]]]]

      b.   ?What do [you wonder [$_{CP}$ whether [Angelo [$_{VP}$ fixed$_i$ t$_i$]]]]

The subject trace in (36a) is not governed by a theta-co-indexed element (since the external theta role is not assigned by I^0), but fulfills the ECP, since it is chain-coindexed with *who* which is in SpecCP and governs SpecIP. However, if the antecedent cannot govern the subject trace, because the intervening CP is a barrier, as in (37a), ungrammaticality results. In contrast, the trace in (36b) is governed by the verb and theta-coindexed with it, so the ECP is always fulfilled for an object, even in (37b), where the trace is not antecedent governed, but still licensed.

Finally, the section (ii) in definition (31) is also relevant for the ECP. Since a maximal projection C is always a barrier if it is not selected, it follows from the ECP that extraction of a non-theta-marked element out of an adjunct or out of a phrase in subject position is always excluded: adjuncts are never selected, and the subject position is not selected by I^0 either (see above).

1.4. Incorporation theory

In a highly influential study, Baker (1988) presents a syntactic theory of various grammatical function changing processes such as causatives, applicatives and passives. In these constructions, the relation between thematic arguments in a clause (Agent, Theme etc.) and the grammatical functions of these arguments (such as subject, direct object or oblique object) is changed. For example, as it will be shown in Section 1.4.3, the direct object of the active verb form is realized as the subject in a passive construction. Importantly, the change of grammatical function is usually accompanied by a change of the verbal morphology, brought about by the addition of a passive, applicative or causative morpheme.

The core idea behind Baker's proposal is to correlate the change of morphology with the change of grammatical functions by assuming that morphemes like e.g. causative or the applicative markers belong to lexical categories such as V or P and are represented as independent heads in syntax. As lexical elements, they have their own argument structures and realize their arguments within their own maximal projections at D-Structure. However, since causative or applicative markers are affixes, they are not licensed as independent elements at S-Structure, according to the following filter:

(38)   *Stray Affix Filter*:

> *X if X is a lexical item whose morphological subcategorization frame is not
> satisfied at S-Structure.   (Baker, 1988: 139)

Rather, the affixal head needs to combine with its host (the base verb) which is represented as a V^0 in the syntactic representation. In Baker's theory, this is achieved through the process of *incorporation*, a process, which combines the affixal syntactic head with the main verb through a syntactic process of *head movement*, illustrated in (39):

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(39)   a.   D-Structure: b.   S-Structure:

```
        XP = D                          XP
        /    \                         /   \
       /      \                       /     \
   X⁰₁ = A    YP = C              X⁰₂      YP
             /    \              /   \     /  \
            /      \          Y⁰ᵢ   X⁰₁  /    \
          Y⁰     ZP = B                tᵢ    ZP
               = WP
```
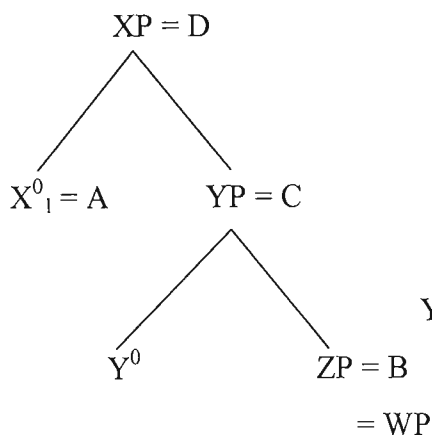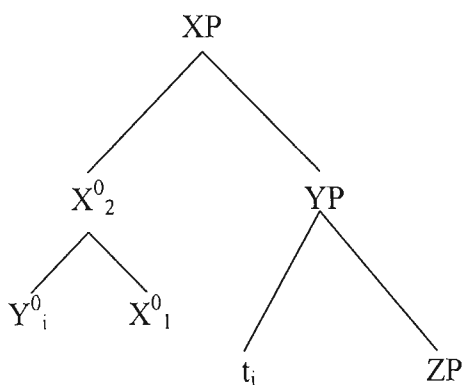
In (39b), the head Y^0 of the complement of head X^0_1 has undergone movement and adjoined to X^0_1 to form the complex syntactic head X^0_2; Y^0 has *incorporated* into X^0. In Baker's theory, either X^0 or Y^0 may be affixal (a causative or applicative morpheme, see below); head movement hence combines the affix with its host, thereby fulfilling (39).

It is an important consequence of incorporation that it changes the syntactic relations between heads and argument phrases in the syntax. In (39a), for example, ZP is governed by Y^0, but not by X^0, since due to the intervening head Y^0, YP creates a barrier between X^0 and ZP. This means that, referring back to (35ii), the head of C is distinct from the head of D and selects some WP equal to or containing B. In this regard, (XP = D), (X^0 = A), (YP = C). Clearly, the head of C (Y^0) is distinct from the head of D (X^0) and selects WP (ZP) equal to or containing B (WP). As a result, YP is a barrier between A and B. However, ZP is governed by X^0 in (39b). This follows from Baker's notion of the *distinctness* of two heads:

(40)   X is distinct from Y only if no part of Y^0 = head of C, Y^0 is distinct from X^0 (XP = D) and (X^0 = A) is a member of a (movement) chain containing X. (Baker, 1988: 64).

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Unlike in (39a), the potential barrier YP has as its head a trace whose antecedent is contained in the potential governor X^0_2; hence the heads are not distinct, and YP fails to be a barrier between X^0_2 and ZP. This means that X^0_2 comes to govern ZP by virtue of having incorporated the former governor of ZP. Baker explains why the barrier between X^0_2 and ZP is opened by introducing the *Government Transparency Corollary* (GTC).

(40)   *Government Transparency Corollary* (GTC)

(41)   A lexical category which has an item incorporated into it governs everything, which the incorporated item governed in its original structural position (Baker 1988: 64).

Since head movement changes the government relations between heads and phrases, it is not surprising that the grammatical functions of certain XPs may change as a result of incorporation. The following Sections 1.4.1 and 1.4.2 illustrate this with respect to Baker's analysis of causative and applicative constructions. Section 1.4.3 shows how Baker, Johnson and Roberts (1989) use the incorporation theory to analyze passive constructions.

1.4.1. Causatives

As already mentioned with respect to example (25), Baker assumes that all causative constructions are biclausal. The matrix verb in this biclausal structure is the causative suffix. This suffix selects an embedded clause whose verb is the main verb. As an affix, the matrix verb cannot appear on its own. In other words, Baker (1988: 165) states that: "The matrix verb must find a verb root to affix to in order to satisfy its morphological subcategorization frame at S-Structure." Therefore, the embedded verb must move and serves as a host to accommodate the causative suffix.

(42)

IP^2

NP — I'

Mtsikana

I^0 — VP

V — CP

V : gw$_i$

V : -itsa

C'

C^0 — IP

NP — I'

mtsuko

I^0 — VP

V : t$_i$
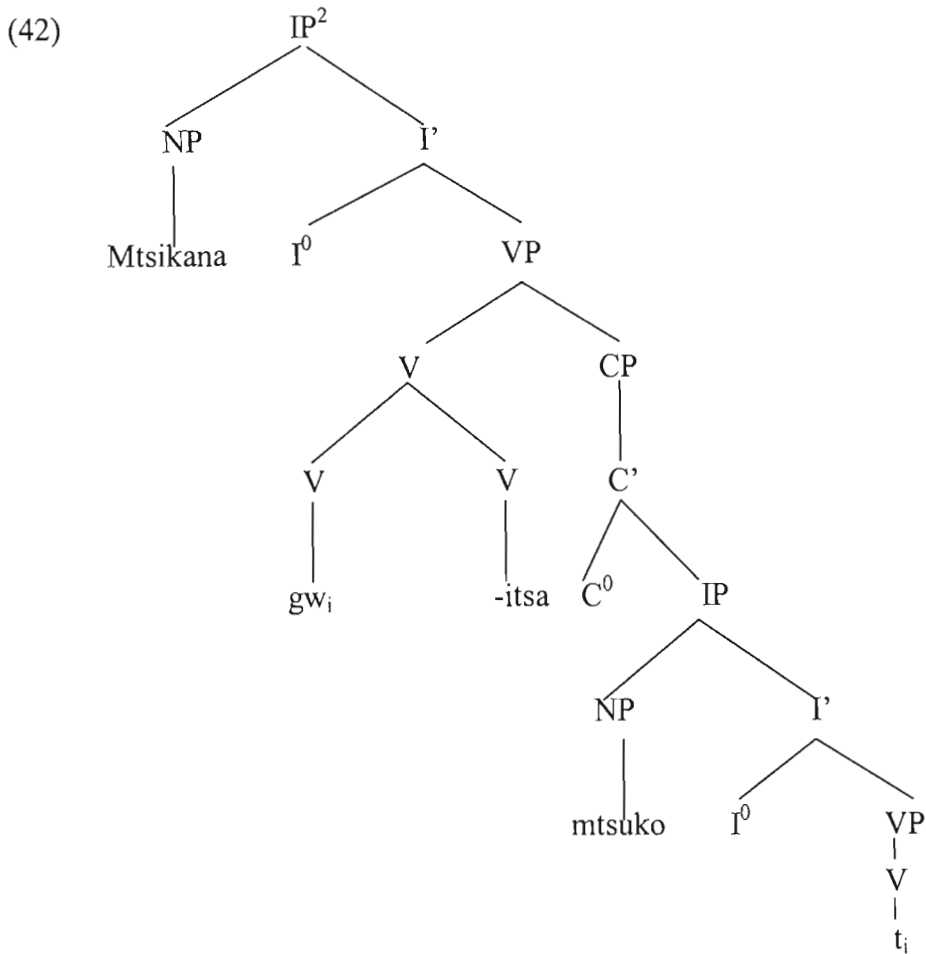
1.4.2. Applicatives

Consider Baker's example of an applicative in Chichewa:

(43) Mbizi zi-na-**perek**-a   msampha **kwa** nkhandwe

Zebras SP-PAST-**hand**-ASP trap   **to**   fox

'The zebras handed the trap to the fox'

(44) Mbizi zi-na-**perek-er**-a   nkhandwe msampha

Zebras SP-PAST-**hand-to**-ASP fox   trap

'The zebras handed the fox the trap   (Chichewa; Baker, 1988:229)

---

[2] The syntactic structure in (42) is adapted from Baker (1988:149) and IP is used instead of S.

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Baker (1988) states that the thematic relation between the verb and the applied argument *nkhandwe* in the V NP PP construction in (43) and in the applicative construction V+App NP NP in (44) are the same. Therefore, the UTAH (23) predicts that the applied object is generated as the object of a preposition in both examples at D-Structure. Therefore, Baker argues that the applicative morpheme is an element of category P that projects a PP at D-Structure. The applied object is the complement of this morpheme. However, since the applicative preposition is an affix, it needs a host. P-incorporation allows the affixal preposition to move out the prepositional phrase and incorporate into the verb that governs it. Before incorporation, the applied object would be governed by P. After incorporation, however, the verb complex governs the stranded NP (see above). The incorporee governs its trace by virtue of the Government Transparency Corollary (GTC), and the former object of P becomes the argument of verb complex.

1.5.   Passives

Baker, Johnson, and Roberts (1989) propose a theory of passives, which is based on Jaeggli's (1986) idea that the external theta role and accusative case are absorbed in passives because they are assigned to the passive morpheme. According to Baker, Johnson, and Roberts (1989), the passive morpheme is a clitic in Infl. As a clitic (i.e. a weak pronominal element), the passive morpheme needs a theta role and structural case. This means that the two standard properties associated with passive constructions do not have to be stipulated as part of the passive process, but follow from the presence of passive morphology.

To sum up this chapter, first, I discussed GB-theory and articulated the Principles-and-Parameters theory as discussed in Chomsky (1981). I explained X-bar theory. I showed that the X'-schema in (1) can be extended to the clausal constituents (CP and IP). I discussed two formal approaches known as Theta Theory and Case Theory. I explained that C-command and Government are structural relations that determine the syntactic relationships between constituents. Second, I summarized the theory of incorporation developed in Baker (1988). Baker uses head movement to derive morphologically

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complex words from more basic elements such as roots or affixes. He analyses causatives, applicatives, etc. in terms of head movement. Last, I presented the theories of the passive as discussed in Baker, Johnson, and Roberts (1989) and Jaeggli (1986). Baker, Johnson, and Roberts (1989) and Jaeggli (1986) assume that the passive morpheme is a pronominal argument that receives the theta role and the structural accusative case that are apparently absorbed in the passive transformation.

Chapter 2. The structure of the VP in Kihema

In this chapter, I discuss the structure of the VP in Kihema. In Section 2.1, I present possible objects that certain verbs occur with. In Section 2.2, I study their orders as they are adjacent to the verbs, and finally in Section 2.3, I examine whether they attest the properties of the direct object.

2.1. The complements of the verb

As was mentioned in Chapter 1, Section 1.2 predicates and arguments are the major parts of a sentence. Arguments identify individuals, things, and so on, whereas predicates attribute to individuals or things relations, actions, etc. The number of complements (objects) depends on the idiosyncratic property of the verb involved. To this end, (Nurse and Philippson, 2003: 130) state that: "The elementary syntactic structure of sentences can be understood as the main concern of the structural and syntactic subclassification of verbs. The number of arguments, usually NPs, is the first criterion to be considered, since they can appear with a given verb or class of verbs by virtue of the latter's inherent lexico-semantic properties, that is, their valencies. As a result, these valencies reflect a language-specific way of conceptualizing the class or processes denoted by a given verb."

The order of internal arguments (complements of the verb) varies crosslinguistically vis a vis the predicate. In some languages, the predicate precedes the object(s), namely VO-languages, whereas in OV-languages the object(s) precedes the predicate.

Kihema is a VO-language. That is, in Kihema, complements (objects) always come after the verbal predicate. However, some verbs (intransitive) do not take any complements. This means that they cannot assign accusative case (see 1.2.2).

In the following subsections, I will discuss complements of the three major categories of verbs, notably intransitive, transitive and ditransitive verbs.

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2.1.1. Complements of intransitive verbs

Burzio (1986), Haegeman (1991) and Spencer (1991) claim that there are two types of intransitive verbs, that is, unergative and unaccusative verbs.

The difference between unergative and unaccusative intransitive verbs can be illustrated by looking at the Kihema unergative verb *kora* 'work' and the unaccusative verb *hendeka* 'break.' The sentences in (1) have the D-Structure representations in (2):

(1) a. Yohaana a-ka-kor-a.

      John   SP-PAST-work-ASP

      'John worked.'

    b. Ekirahule ki-ka-hend-ek-a.

      glass   SP-PAST-break-ASP

      'The glass broke.'

(2) a.
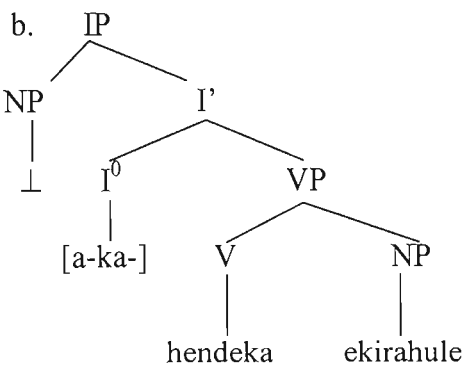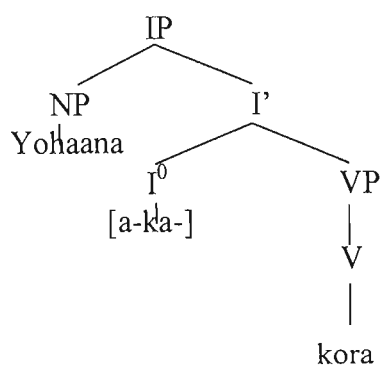
As has already been discussed in Section 1.2.4., the assumption is that only the argument of an unaccusative intransitive verb is thematically an object and therefore realized inside the VP at D-Structure. This is the case in (2b). This means that the verb in (2b) has no external argument. Burzio (1986: 178-9; 184) states that: "A verb which lacks an external argument fails to assign accusative case and a verb which fails to assign accusative case fails to theta-mark an external argument." Since unaccusative verbs fail to assign an

external theta-role, they therefore fail to assign structural case to an object position. Consequently, in (2b) *ekirahule* 'glass' will fail to be assigned case unless it moves to the subject position where it will receive nominative case from the I^0. The subjects of unergative verbs are underlying subjects with an external theta role, whereas the subjects of unaccusative verbs are underlying objects that have moved to SpecIP at S-Structure.

Intransitive verbs in Kihema can appear with a prepositional phrase (PP), (VP → V, PP):

(3) a. Munyalizi a-ka-zin-a   ha mkoro.

    Munyalizi SP-PAST-sing-ASP at ceremony

    'Munyalizi sang at the ceremony.'

   b. Maria a-ka-iruk-a   n'   omwaana.

    Mary SP-PAST-run-ASP with child

    'Mary ran with the child.'

   c. Omugenyi a-ka-rar-a   ha mulyango.

    visitor   SP-PAST-sleep-ASP in living-room

    'The visitor slept in the living-room.'

   d. Omukama a-ka-ikaar-a   ha nsi.

    king   SP-PAST-sit-ASP on ground

    'The king sat on the ground.'

   e. Enzangu e-ka-zaar-a   ha mkenka.

    cat   SP-PAS-deliver-ASP on mat

    'The cat delivered on the mat.'

f. Ameizi ga-ka-rab-a   omu   madzu.

water   SP-PAST-past-ASP through houses

'The water passed through the houses.'

2.1.2. Complements of transitive verbs

If a VP has a transitive verb as its head, the verb must take an NP-complement.

Kihema attests transitive verbs that require obligatorily an NP-complement; (VP → V, NP):

(4) a. Paulo a-ka-samb-a   omupira.

Paul   SP-PAST-kick-ASP ball

'Paul kicked the ball.'

b. Kabona a-ka-ang-a   omukazi-we.

Kabona SP-PAST-devorce-ASP wife-his

'Kabona divorced his wife.'

c. Yohaana a-ka-ib-a   esente.

John   SP-PAST-steal-ASP money

'John stole the money.'

The sentences in (5) are ungrammatical, since the verbs appear without complements. Considering their classifications, complements are obligatory:

(5) a. *Abala a-ka-samb-a.

Abala SP-PAST- kick-ASP

'Abala kicked.'

b. *Ateenyi a-ka-aang-a.

Ateenyi SP-PAST- divorce-ASP

'Ateenyi divorced.'

c. *Akiiki a-ka-ib-a.

Akiiki SP-PAST- steal-ASP

'Akiiki stole.'

However, transitive verbs can also allow the occurrence of a PP; (VP → V, NP, PP):

(6) a. Paulo a-ka-tung-a   esente omu kitunga.

Paul SP-PAST- find-ASP money in   basket

'Paul found money in the basket.'

b. Zonobia a-ka-nag-a   amagita ha rugudo.

Zonobia SP-PAST- throw-ASP oil   on road

'Zonobia threw oil on the road.'

c. Temanya a-ka-bon-a   omuseija-we ha irwaro.

Temanya SP-PAST- see-ASP husband-her at hospital

'Temanya saw her husband at the hospital.'

2.1.3. Complements of ditransitive verbs

Verbs like -*ha* 'give,' -*tuma* 'send,' -*oleka* 'show,' -*kaguza* 'ask' are double-object verbs (ditransitive), that is, they require two NP object complements, and the rule that derives the respective VP is, VP → V, NP, NP:

(7) a. Kente a-ka-h-a   Komunkemba ekisembo.

Kente SP-PAST- give-ASP Komunkemba gift

'Kente gave Komunkemba the gift.'

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b. Paulo a-ka-tum-a   omukazi ameizi.

   Paul SP-PAST- send-ASP woman   water

   'Paul sent the woman the water.'

c. Engo   a-ka-olek-a   ente abanaku.

   leopard SP-PAST- show-ASP cow poor

   'The leopard showed the cow the poor.'

d. Omuseija a-ka-kaguz-a   omutabani ebikaguzo.

   man   SP-PAST- ask-ASP his-son   questions

   'The man asked his son the questions.'

Moreover, in transitive applicative constructions (by which I mean applicative constructions derived from a transitive base verb), the derived ditransitive verb can now take two NP object complements (see, however, the theoretical analysis of the applicative construction which I discuss in more detail in Chapter 4. Here, I merely illustrate the properties of ditransitive verbs in Kihema derived by means of the applicative):

(8) a. Kyaligonza a-ka-gu-ur-a   nyina   engoyi.

      Kyalingonza SP-PAST-buy-APP-ASP his-mother clothes

      'Kyaligonza bought his mother clothes.'

   b. Embwa e-ka-cumb-ir-a   enkoko ebihimba.

      dog   SP-PAST-cook-APP-ASP hen   beans

      'The dog cooked the beans for the hen.'

   c. Empunu e-ka-gemu-ur-a   empisi ebicoli.

      pig   SP-PAST-offer-APP-ASP hyena maize

      'The pig offered the maize to the hyena.'

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With certain ditransitive verbs, the second complement is a PP instead of an NP;
(VP → V, NP, PP):

(9) a. Omukazi a-ka-t-a   ebyokulia ha meza.
         woman SP-PAST-put-ASP food   on table
         'The woman put food on the table.'

    b. Omwaana a-ka-nag-a   omupira ha rusu.
        child   SP-PAST-throw-ASP ball   on roof
        'The child threw the ball on the roof.'

    c. Enkende e-ka-sees-a   ameizi omu nzu.
        monkey SP-PAST-pour-ASP water in   house
        'The monkey poured water in the room.'

Since the applicative can also be formed from ditransitive verbs in Kihema, some Kihema
verbs can allow up to three complements. In the following examples, the second NP and
the PP are complements of the base verb, whereas the first NP is the applied object NP
introduced by the applicative, (VP → V, NP, NP, PP):

(10) a. Petero a-ka-he-er-a   Kaboyo esente mu nkomo.
         Peter SP-PAST-give-APP-ASP Kaboyo money in jail
         'Peter paid the bail in the prison for Kaboyo.'
         Lit.: 'Peter gave the money in the prison for Kaboyo.'

     b. Ananiya a-ka-twek-er-a   omukazi-we engoyi   mw' irwaro.
         Ananiya SP-PAST-send-APP-ASP wife-his   clothes in   hospital
         'Ananiya sent the clothes to his wife in the hospital.'

c. Engo   e-ka-tek-er-a   embuzi esombe   omu kisika.

   leopard SP-PAST-put-APP-ASP goat   cassava-leaves in   bedroom

   'The leopard put the cassava-leaves in the bedroom for the goat.'

The Kihema applied verb *heera* 'give on behalf of someone' (I will use 'give for') can also take a third NP complement; (VP → V, NP, NP, NP):

(11)   Omuseija a-ka-he-er-a   omukazi omwaana omubazi.

   man   SP-PAST-give-APP-ASP woman   child   medicine

   'The man gave for the woman to the child the medecine.'

In Kihema, adjectival phrases (AP) are rare in postverbal position. Only the verb 'to be' allows such a construction; (VP → V, AP):

(12) a.   Yonesani a-li   mkoto.

   Yonesani S/PRES-be big/fat/tall

   'Yonesani is tall.'

   b.   Kamwiima a-li   mgufu muno.

   Kamwiina S/PRES-be short very

   'Kamwiima is very short.'

   c.   Nyangoma a-li   murungi muno.

   Nyangoma S/PRES-be beautiful very

   'Nyangoma is very beautiful.'

In most cases, what is expressed by means of an adjectival complement in languages like English is often expressed in Kihema by means of stative verbs that are lexical items. For instance, *-reiha*, 'to be tall', *-gufahara* 'to be short' and *-semera* 'to be beautiful' correspond to the adjectives *mkoto* 'tall/fat/big', *mgufu* 'short' and *murungi* 'beautiful.'

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(13) a. Yonesani a-ka-reih-a.

       Yonesani SP-PAST-be/tall-ASP

       'Yonesani is tall.'

    b. Kamwiima a-ka-gufahar-a.

       Kamwima SP-PAST-be/short-ASP

       'Kamwiima is short.'

    c. Nyangoma a-ka-semer-a.

       Nyangoma SP-PAST-be/beautiful-ASP

       'Nyangoma is beautiful.'

In a very limited number of cases, adverb phrases (AdvP) appear with the verb within the verb phrase in Kihema. Kihema has a rule of morphological reduplication that turns adjectives into adverbs. AdvP can be preceded by an NP; VP → V, (NP) AdvP:

(14) a. Yohaana a-ka-zin-a   bwango bwango.

       John   SP-PAST-sing-ASP quick   quick

       'John sang quickly.'

    b. Kabarole a-ka-lim-a   omusiri mpora mpora.

       Kabarole SP-PAST-plough-ASP field   slow   slow

       'Kabarole ploughed the field slowly.'

The next category of complements that appear with the verb in Kihema verb phrases is the sentential or clausal complement (CP). The latter can appear with both transitive and intransitive verbs; VP → V (CP), S:

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(15) a. Zadoki a-ka-gamb-a   ngu   abaana ba-ka-fw-a.
Zadoki SP-PAST-say-ASP that   children SP-PAST-die-ASP
'Zadoki said that the children died.'

   b. Tibasima a-ka-rwaan-a   a-himb-ir-e   ensaho.
   Tibasima SP-PAST-fight-ASP SP-carry-APP-SUBJ sac
   'Tibasima fought while he was carrying the sac.'
   Lit.: 'Tibasima fought he is carrying the sac for himself.'

   c. Bezo a-ka-fw-a   a-gwedzeg-ir-e.
   Bezo SP-PAST-die-ASP SP-deep-asleep-APP-SUBJ
   'Bezo died while he was deep asleep.'
   Lit.: 'Bezo died he is deep asleep for himself.'

The sentences in (15b-c) are different from (15a). In the latter, the sentence contains a complementizer *ngu* 'that', whereas the former sentences do not contain any complementizers but can nevertheless be translated into English using the complementizer 'while'. This interpretation is the result of the specific mood of the second verb (subjunctive), which is different from the mood of the first verb (indicative). According to Vitale (1981: 65), the conjugated Kihema verbs *ahimbire* 'he is carrying' and *agwedjegire* 'he is deep asleep' in (15b-c) appear with a subjunctive suffix *-e* preceded by the applicative morpheme *-ir-* to mean that the agent is the beneficiary of his/her own action. The subject prefix of the subjunctive verb agrees with the gender and person of the subject of the main verb.

(16)   Mu-ka-iruk-a   mu-hute-ir-e.
2PRS.PL.-PAST-run-ASP 2PRS.PL.-APP-SUBJ
'You ran while you were injured.'
Lit.: 'You ran you are injured.'

Vitale (1981) observes that such subjunctive forms are always tenseless. Moreover, if the subject of the embedded verb is the object of the matrix verb, it is replaced by its corresponding person:

(17)   Filipo a-ka-gur-a   emotoka e-kuz-ir-e.

    Philip SP-PAST- buy-ASP car   SP-be/old-APP-SUBJ

    'Philip bought an old car.'

    Lit.: 'Philip bought a car a car is old.'

In (17), one has to bear in mind that only the subject prefix remains. This is because in Kihema two identical NPs cannot co-occur overtly in the same structure:

(18)   a. *Petero a-ka-fw-a   Petero a-gwedjeg-ir-e.

        Peter   SP-PAST- die-ASP Peter   SP-sleep-APP-SUBJ

        ·Peter died while he was deep asleep.'

    b. *Filipo a-ka-gur-a   emotoka emotoka e-kuz-ir-e.

        Philip   SP-PAST- buy-ASP car   car   SP- be/old-APP-SUBJ

        'Philip bought an old car'

Finally, let me examine infinitival complements (IC). Infinitive complements behave like locative complements. The infinitive in Kihema is class 15 with the nominal prefix *ku*. An infinitival complement can stand on its own within the Kihema VP (19a), The verb -*saba* 'pray' in (19b) is the infinitive complement of the verb -*genda* 'go' which in turn is the complement of the main verb -*seera* 'want.' The NP *omukaba* 'the belt' in (19c) is the complement of the infinitive (I) -*gura* 'buy' which is the complement of the main verb *tekereza* 'think.' The rule would look like as follows: (VP → V, I (I), (NP))[1].

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[1] Here (I) stands for infinitive, which is not to be confused (I) representing Infl.

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(19) a. Ente e-ka-gend-a   ku-sab-a.

   cow SP-PAST-go-ASP 15:pray-ASP

   'The cow went to pray.'

   b. Enjoka e-ka-ser-a   ku-gend-a ku-sab-a.

   snake SP-PAST-want-ASP 15:go-ASP   15:pray-ASP

   'The snake wanted to go to pray.'

   c. Wakame a-ka-tekerez-a ku-gur-a omukaba.

   hare   SP-PAST-think-ASP 15:buy-ASP belt

   'The hare thought to buy the belt.'

As one may notice, Kihema allows a great variety of complements that appear along with the verb in the VP. In the following section I discuss how those complements can occur together in terms of their adjacency to the verb (order).

2.2.   Word order of complements

Kihema is a configurational language, that is, the complements of the verb are hierarchically ordered. For example, prepositional phrases in Kihema obligatorily appear after the NP that follows immediately after the verb. The reverse order is ungrammatical: Sentences in (20a), (21a), and (22a) are the repetitions of sentences in (9), the sentences provided in (9) above are repeated and contrasted with their ungrammatical counterparts:

(20) a. Omukazi a-ka-t-a   ebyokulia ha meza.

   woman SP-PAST-put-ASP food   on table

   'The woman put the food on the table.'

   b. *Omukazi a-ka-t-a   ha meza ebyokulya.

   woman   SP-PAST-put-ASP on table food

   'The woman put on the table the food.'

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(21) a. Omwaana a-ka-nag-a   omupira ha rusu.
       child   SP-PAST- throw-ASP ball   on   roof
       'The child threw the ball on the roof.'

     b. *Omwaana a-ka-nag-a   ha rusu omupira.
       child   SP-PAST- throw-ASP on   roof ball
       'The child threw on the roof the ball.'

(22) a. Enkende e-ka-ses-a   ameizi omu nzu.
       monkey SP-PAST-pour-ASP water   in   house
       'The monkey poured water in the room.'

     b. *Enkende e-ka-ses-a   omu nzu ameizi.
       monkey   SP-PAST-pour-ASP in   house water
       'The monkey poured in the room the water.'

In the next part of this section, I will discuss constructions with two postverbal NP objects that have the thematic roles of beneficiary/goal and theme. In general, the objects of the verb are strictly ordered. The two NP objects in (23), for example, must appear in the order benefactive/goal-theme. The opposite order is impossible in Kihema:

(23) a. Yohaana a-ka-h-a   omwaana   enkeito.
       John   SP-PAST-give-ASP child   shoes
       'John gave the child the shoes.'

     b. *Yohaana   a-ka-h-a   enkeito   omwaana.
       John   SP-PAST-give-ASP shoes   child
       'John gave the shoes to the child.'

     c. Kyaligonza a-ka-gu-ur-a   nyina   engoyi.
       Kyalingonza SP-PAST-buy-ASP his-mother clothes
       'Kyaliginza bought his mother clothes.'

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d. *Kyaligonza a-ka-gu-ur-a   enyoyi nyina.

    Kyaligonza SP-PAST-buy-for-ASP clothes his-mother

    'Kyaligonza bought the clothes his mother.'

The restricted order of complements in Kihema is interesting, since not all Bantu languages behave like that. For example, Kinyarwanda, another Bantu language spoken in central Africa, attests the free order of such objects:

(24) a Omugabo y-a- ha-ye   abaana   enkweto.

        man   SP-PAST-give-ASP children shoes

        'The man gave the children the shoes.'

     b. Omugabo y-a-ha-ye   enkweito abaana.

        man   SP-PAST-give-ASP shoes   children

        'The man gave the shoes to the children.'   (Kinyarwanda)

However, the order of objects in Kihema is not only determined by the thematic role of the NP. Rather, if two postverbal NPs have the thematic roles of benefactive and theme respectively, the animate NPs tend to occur before inanimate NPs. In this regard, Morolong (1977: 202) discusses four possibilities to identify the occurrence of the animate and inanimate thematic roles of postverbal NPs in Sesotho. Here, I investigate Kihema ditransitive verbs in the light of these four options:

(i)   If one object is benefactive and animate, and the other is a theme and inanimate; then the latter will follow the former: benefactive animate > theme inanimate (see (23a,c) and (25), (26) and (27)):

(25) a. Kyalimpa a-ka-gu-ur-a   omukazi-we empeta.

         Kyalimpa SP-PAST-buy-APP-ASP wife-his   ring

         'Kyalimpa bought his wife the ring.'

b. *Kyalimpa a-ka-gu-ur-a empeta omukazi-we.

Kyalimpa SP-PAST-buy-APP-ASP ring wife-his

'Kyalimpa bought the ring his wife.'

(26) a. Entale e-ka-cumb-ir-a entaama amahuli.

lion SP-PAST-cook-APP-ASP sheep eggs

'The lion cooked the eggs for the sheep.'

b. *Entale e-ka-cumb-ir-a amahuli entaama.

lion SP-PAST-cook-APP-ASP eggs sheep

'The lion cooked the sheep the eggs.'

(27) a. Embeba e-ka-itwek-er-a enzigamire enku.

rat SP-PAST-carry-APP-ASP boa fire-wood

'The rat carried the fire-wood for the boa.'

b. *Embeba e-ka-itwek-er-a enku enzigamire.

rat SP-PAST-carry-APP-ASP fire-wood boa

'The rat carried for the boa the fire-wood.'

(ii) If both objects are inanimate, then the benefactive comes first; benefactive inanimate > theme inanimate:

(28) a. Maryamu a-ka-cumb-ir-a omkoro ebyokulya.

Maryamu SP-PAST-cumb-APP-ASP ceremony food

'Maryamu cooked the food for the ceremony.'

b. *Maryamu a-ka-cumb-ir-a ebyokulya omkoro.

Maryamu SP-PAST-cumb-APP-ASP food ceremony

'Maryamu cooked the food for the ceremony.'

(iii)   If the benefactive is inanimate, and the theme animate; then the theme animate will precede the benefactive inanimate: theme animate > benefactive inanimate.

(29) a. Komunkemba a-ka-rali-z-a   abaramukati   obugenyi.
        Komunkemba SP-PAST-call-APP-ASP her-sisters-in-law   feast
        'Komunkemba called her sisters-in-law for the feast.'

   b. *Komunkemba a-ka-rali-z-a   obugenyi abaramukati.
        Komunkemba SP-PAST-call-APP-ASP feast   her-sisters-in-law
        'Komunkemba called for the feast her sisters-in-law.'

The data in (29) show that in Kihema, animacy is a stronger factor in determining word order than thematic role. Although benefactives usually precede themes, the opposite word order is required if the theme is animate but the benefactive is not. This means that if two objects are NPs (one referring to a person and another to a thing), the closest object must be that referring to the person. Morolong (1977: 205) argues that: "the order of benefactive inanimate/theme animate varies crosslinguistically. For example, in many Bantu languages if both NPs were animate, the benefactive would have to precede the theme. In Ligooli, if the benefactive is animate and the theme inanimate, both word orders are possible; if on the other hand, the benefactive is inanimate and the theme animate, only the order theme > benefactive is possible." Kihema and Sesotho are among many other Bantu languages where the theme animate must precede the benefactive inanimate. Example in (29) illustrates Kihema, whereas (30) illustrates Sesotho.

(30) a. Bana   ba-bitsel-tsoe   lijo.
         children SP-PAST- call-APP-ASP feast
         'They called the children for the feast.'
         Lit.: 'Children they were called for feast.'

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b. *Mokete o-bitselitsoe   bana.

   feast   SP-PAST- call-APP-ASP children

   'They called the feast for the children.'

   Lit.: 'the feast it was called for the children.'   (Sesotho; Morolong 1977: 203)

(iv)   If both objects are animates, then the benefactive must go first; benefactive animate > theme animate:

(31)   Omugurusi a-ka-et-er-a   omukama abeisiki.

   old man   SP-PAST-call-APP-ASP king   girls

   'The old man called the girls for the king.'

If the word order in (31) is reversed, as in (32),

(32)   Omugurusi a-ka-et-er-a   abeisiki omukama.

   old man   SP-PAST-call-APP-ASP girls   king

   'The old man called the king for the girls.'

then the NP *abeisiki* 'the girls' is interpreted as the benefactive, and *omukama* 'the king,' as the theme, in accordance with the requirement that a benefactive animate NP must always precede a theme animate NP.

Finally, let me have a look at constructions with two PPs.

As was shown in Section 2.1, Kihema allows for more than one PP complement to be added to an intransitive VP. If one PP is an instrumental and the other a locative, then the instrumental PP precedes the locative PP:

(33) a. Petero a-ka-tem-a   ekiti n'   omupunga   ha msiri.

    Peter SP-PAST-cut-ASP stick with machete   on field

    'Peter cut the stick with the machete on the field.'

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b. Petero a-ka-tem-es-a   ekiti omupunga   ha msiri.

   Peter SP-PAST-cut-APP-ASP stic machete   on field

   'Peter cut the stick with the machete on the field.'

c. *Petero a-ka-tem-es-a   ekiti ha msiri omupunga.

   Peter SP-PAST-cut-with-ASP stick on field   machete

   'Peter cut the stick on the field with the machete.'

In the following section, I will check whether or not all postverbal objects in Kihema are direct objects.

2.3.   Direct object properties

Baker (1988) distinguishes five properties of direct objects. These properties are word order, cliticization, passivization, relativization and theme deletion. Bresnan and Moshi (1990) discuss the same properties and add to the list two more properties, notably reciprocalization and interaction of object properties. In Chapter 3 and 4, I will mostly discuss cliticization and passivization, since they are commonly attested in many Bantu languages.

For a start, I assume that Kihema belongs to the group of so-called "symmetrical object languages" like Kichaga (Bresnan and Moshi, 1990), Kihaya (Duranti and Byarushengo, 1972), Kimeru (Hodges, 1977), Kinyarwanda (Kimenyi, 1980), Mashi and Luyia (Gary, 1977). This means that Kihema has the ability to display more than two postverbal NPs that attest 'primary object' syntactic properties. These properties are the ability of the object to cliticize to the verb (object marking), to undergo passivization and so on, Baker (1988). In contrast, according to Baker (1988), Mchombo (1993b) and Ngonyani (1998) there is also another category of languages named 'asymmetrical object languages' in which only the applied object can attest all the characteristics of a direct object.

2.3.1. Cliticization (object marking)

Cliticization is one of the properties of direct objects in that only primary objects can be replaced by a corresponding clitic pronoun infix in the verbal complex. Duranti (1979: 32) names it *Object Clitic Pronoun* (OCP). It is important to mention that, in Kihema the OCP agrees in noun class with the corresponding noun. For example in (39a), the noun *omubazi* 'medicine' is in class 3; its corresponding OCP is *gu* of class 3. Both *omukazi* 'the woman' and *omwaana* 'child' belong to class 1; their corresponding OCP is *mu.*

(34) a. Omwaana a-ka-ly-a   ebyenzu.

       child   SP-PAST-eat-ASP bananas

       'The child ate bananas.'

    b. Omwaana a-ka-**bi**-ly-a.

       child   SP-PAST-**OCP** 1-eat-ASP

       'The child ate them.'

In Kihema, the OCP cannot co-occur with the full NP that it replaces. In contrast, some Bantu languages such as Kiswahili (Ngonyani, 1998), Kirimi and Ruwund (Woolford, 2001), Zulu (Zeller, 2004) allow the presence of both the pronominal and the NP like in (36). The sentence in (35) is a Kihema example in which the OCP appears without its NP:

(35) a. Bazarwa a-ka-gonz-a   omwisiki.

       Bazarwa SP-PAST-love-ASP girl

       'Bazarwa loved the girl.'

    b. *Bazarwa a-ka-**mu**-gonz-a   **omwisiki.**

       Bazarwa SP-PAST-OCP-love-ASP **girl**

       'Bazarwa loved the girl.'

(36) a. Juma a-li-**m**-piga   mtoto.

      Juma sp-past- ocp-hit-asp child

      'Juma hit the child.'   (Kiswahili)

    b. N-a-**mu**-onaa Maria.

      sp-past-ocp-see Maria

      'I saw Maria.'   (Kirimi; Woolford, 2001:2)

    c. Ku-**y**-iiy   **antu** nfalâng.

      inf-ocp-steal **people** money

      'to steal money from [any or particular] people.' (Ruwund; Woolford , 2001: 6)

    d. Ng-**Ubani**   o-**m**-bona-yo?

      cop-**who** 1 a rc2nd sg-ocp 1 a-see-rs

      'Who is it that you see?'   (Zulu; Zeller, 2004: 2)

Considering examples in (35) and (36), Duranti (1977) further argues that the object clitic is a pronoun that replaces a direct object in the former, and in the latter the object clitic is considered as an object agreement morpheme (Woolford, 2000 and 2001). However, Zeller (2004) states that in Zulu, this morpheme can be analyzed as an object clitic pronoun although it can co-occur with a full NP. Kihema allows more than one OCP to be marked on a verb. This means that both NPs can cliticize individually or both in the same context:

(37) Enzangu e-ka-tiiz-a   embeba enkeito.

     cat   sp-past-lend-asp mouse shoes

     'The cat lent the mouse the shoes.'

(38) a. Enzangu e-ka-**gi**-tiiz-a   enkeito.

     cat   sp-past-lend-ocp i-asp shoes

     'The cat lent it the shoes.'

b. Enzangu e-ka-**zi**-tiiz-a   embeba.

cat   SP-PAST-lend-OCP 2-ASP mouse

'The cat lent them to the mouse.'

c. Enzangu e-ka-**zi**-**gi**-tiiz-a.

cat   SP-PAST-lend-OCP 2-OCP 1-ASP

'The cat lent them to it.'

As was shown in Section 2.1 above, the Kihema verb *hereera* 'to give on behalf of someone' allows three NPs to appear with the applied verb. All these can cliticize separately or together. Example (11) is repeated here as (39):

(39) a. Omuseija a-ka-he-er-a   omukazi omwaana omubazi.

man   SP-PAST- give-APP-ASP woman   child   medicine

'The man gave for the woman to the child the medicine.'

b. Omuseija a-ka-**gu**-he-er-a   omukazi omwaana.

man   SP-PAST-OCP 3-give-APP-ASP woman   child

'The man gave it for the woman to the child.'

c. Omuseija a-ka-**mu**-he-er-a   omukazi   amubazi.

man   SP-PAST-OCP 2-give-APP-ASP woman   medicine

'The man gave it for the woman the medicine.'

d. Omuseija a-ka-**mu**-he-er-a   omwaana amubazi.

man   SP-PAST-OCP 1-give-APP-ASP child   medicine

'The man gave for her the child the medicine.'

e. Omuseija a-ka-**gu-mu-mu**-he-er-a .

man   SP-PAST-OCP 3-OCP 2-OCP 1-give-APP-ASP

'The man gave it to it for her.'

As I have mentioned in Section 2.1 above, a locative PP can appear along with the three NPs. The PP can also be represented as a pronominal clitic attached to the verb. In this case, the locative proform is a suffix:

(40) a. Omuseija a-ka-he-er-a   omukazi omwaana amubazi ha irwaaro.
      man   SP-PAST- give-APP-ASP woman   child   medicine at hospital
      'The man gave for the woman the child the medicine at the hospital.'

   b. Omuseija a-ka-**gu**-**mu**-**mu**-here-er-a-**yo**.
      man   SP-PAST-OCP 3-OCP 2-OCP 1 -give-APP-ASP-OCP 4
      'The man gave it to it for her there.'

As was the case with the order of full object NPs, in Kihema, OCPs appear in a certain order, depending on their thematic role and animacy. In addition, person and number determine the order of the OCPs.

(i)   *Thematic role:*

As was mentioned earlier, if the benefactive is animate and the theme inanimate, the benefactive will precede the inanimate theme, and if the benefactive is inanimate and the theme animate, the animate theme will precede the inanimate benefactive. As for the order of OCP, the inanimate will always precede the animate, regardless of whether it is benefactive or theme, (see examples in (7), (8), (41)), etc. In case both NPs are animate, the animate theme OCP will precede the animate benefactive OCP, (see examples in (31) and (32) and also (42)).

(41) a. Petero a-ka-let-er-a   Yohaana amaarwa.
      Peter SP-PAST-bring-APP-ASP John   beer
      'Peter brought John beer.'

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b. Petero a-ka-**ga-mu**-zan-ir-a.

Peter SP-PAST-**OCP 2-OCP** 1-bring-APP-ASP

'Peter brought it to him.'

(ii)   Animacy

As was shown in (8) above, animate complements precede inanimate ones. Again the reverse holds for OCPs. Animate OCPs follow inanimate ones:

(42) a. Maria a-ka-et-er-a   obugenyi abaana.

Maria SP-PAST- call-APP-ASP feast   children

'Maria called the children for the feast.'

b. Maria a-ka-**bu-be**-et-er-a.

Maria SP-PAST- **OCP2-OCP1**-call-APP-ASP

'Maria called them for it.'

In (42a) the benefactive is inanimate and the theme is animate. In (42b) still the inanimate benefactive OCP precedes the animate theme. Animate supercedes theta role. This testifies that human beings have greater prominence over nonhumans. There are other more compelling reasons like, e.g. saliency, relevance, etc. that are linked to perceptual principles and conceptualization. Thus in many Bantu languages, the prominent position immediately following the verb complex is reserved for the human noun, (Morolong, 1977). In languages such as Lingala[2], only humans can cliticize over non-humans:

(43) a. Petelo a-tind-el-a-ki   Ngeleka mokanda.

Peter SP-send-APP-ASP- PAST Ngeleka letter

'Peter sent the letter to Ngeleka.'

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[2] Lingala is a Bantu language spoken in Congo-Kinshasa and Congo-Brazza-Ville

b. Petelo a-**mo**-tind-el-a-ki   mokanda.

Peter   SP-OCP-send-APP-ASP-PAST letter

'Peter sent the letter to him.'

c. *Petelo a-**mo**-tind-el-a-ki   Ngeleka

Peter   SP-OCP-send-APP-ASP-PAST Ngeleka

'Peter sent it to Ngeleka.'   (Lingala)

(iii)   Person

As far as person is concerned, a third person OCP must appear before a second or a first person OCP:

(44) a   Ananiya a-ka-**n**-tum-ir-a   omukozi.

Ananiya SP-PAST-**1**st-send-APP-ASP worker

'Ananiya sent the worker for me.'

b. Ananiya a-ka-**mu**-**n**-tum-ir-a.

Ananiya SP-PAST-**3**rd-**1**st-send-APP-ASP

'Ananiya sent him for me.'

c. *Ananiya a-ka-**n**-**mu**-tum-ir-a.

Ananiya SP-PAST-**1**st-**3**rd-send-APP-ASP

'Ananiya sent me him.'

(45) a. Ananiya a-ka-**mu**-**ku**-tum-ir-a.

Ananiya SP-PAST-**3**rd-**2**nd-send-APP-ASP

'Ananiya sent him for you.'[3]

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[3] In Kihema three OCPs can be marked on one verb. The third person OCP appears either with the first person or the second person. Constructions such as: *Petero a-ka-**mu-ku-n**-dete-r-a* 'Peter brought him to me for you' are impossible in Kihema.

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b. *Ananiya a-ka-**ku-mu**-tum-ir-a.

   Ananiya SP-PAST-**2nd-3rd**-send-APP-ASP

   'Ananiya sent him for you.'

But constructions such as in (46) are impossible in Kihema, since the OCP order first >
third is ungrammatical:

(46)   *Ananiya a-ka-**n-mu**-tum-ir-a.

   Ananiya SP-PAST- **1st-3rd** - send-APP-ASP

   'Ananiya sent him to it.'

The second person OCP must precede the first person OCP:

(47) a.   Ananiya a-ka-**ku-n**-tum-ir-a.

   Ananiya SP-PAST-**2nd-1st**-send-APP-ASP

   'Ananiya sent him to you.'

   b. *Ananiya a-ka-**n-ku**-tum-ir-a.

   Ananiya SP-PAST-**1st-2nd** -send-APP-ASP

   'Ananiya sent him to you.'

As was already shown in example (40b), when two third person OCPs occur in the same
sentence; the theme OCP will precede the benefactive:

(48) a.   Zonoberi a-ka-tum-ir-a   Besueri omukozi.

   Zonoberi SP-PAST-send-for-ASP Besueri worker

   'Zonoberi sent the worker to Besueri.'

   b.   Zonoberi a-ka-**mu**-**mu**-tum-ir-a.

   Zonoberi SP-PAST-**3rd-3rd**-send-APP-ASP

   'Zonoberi sent him to him.'

However, when the first or the second person is the theme and the third person the benefactive, the latter will precede the former:

(49) a. Maria a-ka-**n**-et-er-a obugenyi.

Maria SP-PAST-**1**[st]-call-APP-ASP feast

'Maria called me for the feast.'

b. Maria a-ka-**ku**-et-er-a obugenyi.

Maria SP-PAST-**2**[nd]-call-APP-ASP feast

'Maria called you for the feast.'

(50) a. Maria a-ka-**bu-n**-et-er-a   obugenyi.

Maria SP-PAST-**3**[nd] –**1**[st]-call-APP-ASP feast

'Maria called me for it.'

b. Maria a-ka-**bu-ku**-et-er-a.

Maria SP-PAST-**3**[rd] –**2**[nd]-call-APP-ASP feast

'Maria called you for it.'

(iv)   Number

The order of numbers (plural and singular) of OCPs depends on the semantic constraint. This means that the animate (benefactive) OCP will always appear after the inanimate (theme) regardless of its number:

(51) a. Tibasima a-ka-gu-ur-a   abakama ekyenzu.

Tibasima SP-PAST-buy-APP-ASP kings   banana

'Tibasima bought the banana for the kings.'

b. Tibasima a-ka-**ki-ba**-gu-ur-a.

Tibasima SP-PAST-SG -PL -buy-APP-ASP

'Tibasima bought it for them.'

c. *Tibasima a-ka-**ba-ki**-gu-ur-a.

Tibasima SP-PAST - PL -SG-buy-APP-ASP

'Tibasima bought it for them.'

(52) a. Tibasima   a-ka-gu-ur-a   omukama ebyenzu.

Tibasima SP-PAST-buy-APP-ASP king   bananas

'Tibasima bought the bananas for the king.'

b. Tibasima a-ka-**bi-mu**-gu-ur-a.

Tibasima SP-PAST -PL -SG -buy-APP-ASP

'Tibasima bought them for him.'

c. *Tibasima a-ka-**mu-bi**-gu-ur-a.

Tibasima SP-PAST -SG- PL -buy-APP-ASP

'Tibasima bought for him them.

2.3.2. Passivization

Passivization takes place when the object of an active sentence in Kihema becomes the subject of the corresponding passive sentence, and the subject optionally becomes the oblique PP introduced by the preposition *na* (the so-called by-phrase). The passive suffix-*w*- is attached to the verb. Kihema is particularly suited for demonstrating that almost any complements (including locatives, instrumentals, etc.) may be passivized. (The fact that any complements can be passivized will be discussed at length in Chapter 5). What I want to show here is that all NP objects that appear with a ditransitive verb in Kihema VP have the ability to passivize. In sentence (53), for example, both the theme and the benefactive NP can passivize:

(53) a. Yohaana a-ka-h-a   omwaana amata.
        John   SP-PAST-give-ASP child   milk
        'John gave the child the milk.'

    b. Omwaana a-ka-heb-**w**-a   amata (na Yohaana).
        child   SP- PAST-give-**PASS**- ASP milk   (by John)
        'The child was given the milk by John.'

    c. Amata ga-ka-heb-**w**-a   omwaana (na Yohaana).
        milk   SP-PAST-give-**PASS**-ASP child   (by John)
        'The milk was given to the child by John.'

2.3.3. Relativization

Extraction of relative operators is also possible in Kihema. This means that an empty operator moves from object position to SpecCP of the relative clause. In Kihema, both the theme and the benefactive can be relativized:

(54) a. N'   amata ngu Yohaana ya-he-ir-e   omwaana.
        3S/PRES milk that John   SP-give-APP-SUBJ child
        'It is the milk that John gave to the child.'

    b. N'   omwaana ngu Yohaana ya-he-ir-e   amata.
        3S/PRES child   that John   SP-give-APP-SUBJ milk
        'It is the child that John gave to the milk.'

2.3.4. Theme deletion

Theme deletion identifies the applied object of a ditransitive applicative construction as a direct object if the basic object (theme) can be omitted. Bresnan and Moshi (1990) state

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that theme deletion is one of the properties that attest that the applied object is a direct object:

(55) a. Kondo a-ka-ombek-er-a   abagenyi enzu.

Kondo SP-PAST- build-APP-ASP guests   house

'Kondo built the house for the guests.'

b. Kondo a-ka-ombek-er-a   abagenyi.

Kondo SP-PAST-OCP- build-APP-ASP guests

'Kondo built for the guests.'

To summarize, this chapter has provided Kihema data that illustrate the various arguments of the verb in the VP in Kihema. I have discussed the possible complements that appear within the Kihema VP, and I have presented data that show that Kihema is a VO-language like English and many Bantu languages in that objects, prepositional phrases, sentential complements, etc. follow the verb. Furthermore, I have examined the different possible word orders of verbal complements in Kihema. Finally, I have examined which of the postverbal NPs in Kihema ditransitive construction have the status of direct objects. Given the behavior of these NPs in tests such as object cliticization, passivization and extractability (relativization), etc. it can be concluded that all postverbal NPs in Kihema are true direct (or primary) objects. Therefore, Kihema is a genuine symmetrical language.

Chapter 3: The Kihema causative construction

In this chapter, I discuss the construction of causatives in Kihema. In Section 3.1, I look at different types of the causative in Kihema and examine the occurrence and position of the causative morpheme in the Kihema verbal stem. I also give different meanings of the Kihema causatives such as the causative without a causer, causation as assistance, causation as seeking assistance, and the instrumental meaning.

In Section 3.2, I provide Kihema data in which Kihema causatives are constructed with different types of verbs, that is intransitive, transitive, and ditransitive verbs. The causative construction changes the valency of the verb. This means that the causativization process of intransitive verbs allows the objectless verb to take one object, and the one-object verb to appear with two objects. I show that double-object verbs cannot form a causative morphologically.

I deal with Baker's (1988) analysis of causatives as a process of incorporation in section 3.3. Baker claims that the causative verb is a morpheme that needs to be attached to a host. A base verb must move cyclically and fuses with the causative verb in a higher clause.

3.1. Kihema causative constructions

Linguists such as Alsina (1992), Baker (1988), Fujita (1996), Hodges (1977), Katamba (1993), Kimenyi (1980), Li (1990), Machobane (1993), Marantz (1984), Mukata and Tamanji (2000), Vitale (1981), have discussed the causative construction which extends the verb by means of a derivational affix. The causative construction is a grammatical function change process that has an impact on the argument structure of the verb. This means that the causative has the ability to change monovalent verbs (objectless verbs) to bivalent verbs (one-object verbs). Mukata and Tamanji (2000) further argue that in a few of Bantu languages, the causative morpheme can be added to a one-object verb and turns the verb into a two-object verb. This means that: (i) the agent of the verb becomes the

object, (ii) the new agent is introduced to occupy the subject position, and (iii) the direct object follows the original agent which now occupies the object position.

The causative morpheme has the meaning 'to cause or to make somebody do something' or 'to cause something to become something different.'

Like many other Bantu languages, Kihema attests the causative that is formed by means of the verb receiving the causative morphemes notably, *-y-* and *-is-* (depending on the productivity of the verbs).

In the following subsection, I will provide Kihema data that illustrate the two different morphemes: *-y-* is non-productive, whereas *-is-* is productive.

3.1.1. The causative morphemes

As was mentioned above, Kihema attests two types of morphemes, namely the suffixes *-y-* and *-is-*. As suffixes, they always appear before the last extension (aspect) of the verb in the Kihema verb stem. Both causative suffixes have the same meaning, that is 'to make someone do something.' They differ in some ways. The use of *-y-* is very restricted compared to its counterpart *-is-*. On this point, Kimenyi (undated) highlights the differences between the two morphemes in Kinyarwanda that can be applicable to Kihema as well. Kimenyi (undated) states that: "The causative suffix *-y-* has exactly the same meaning as its counterpart the suffix *iish- (-is)-*. The only difference is their respective degree of productivity. *-y-* has a lot of constraints which is the characteristic of lexical or derivational morphology whereas *-iish- (-is-)* can be added to any verb thus behaving like other grammatical extensions namely the applicative and the comitative/reciprocal suffix," (p.1).

In this chapter, I will mainly discuss the causative suffix *-is-* since it is very productive, that is, it can be attached to any verb in Kihema.

Below is Kihema data with the causative morpheme *-y-:*

(1) a. Tahigwomu a-ka-ronk-a   ha   kiti.

     Tahigwomu SP-PAST-slide-ASP from tree

     'Tahigwomu slid from the tree.'

   b. Mugisa a-ka-ronk-**y**-a   Tahigwomu ha   kiti.

     Mugisa SP-PAST-slide-CAUS-ASP Tahigwomu from tree

     'Mugisa caused Tahigwomu to slide from the tree.'

(2) a. Embuzi e-ka-onk-a   ibeere.

     embuzi SP-PAST-suck-ASP breast

     'The goat sucked the breast.'

   b. Ensere   e-ka-onk-**y**-a   embuzi ibeere.

     hippopotamus SP-PAST-suck-CAUS-ASP goat   breast

     'The hippopotamus made the goat suck the breast.'

(3) a. Tabaro a-ka- sik-a   icumu.

     Tabaro SP-PAST-shake-ASP spear

     'Tabaro shook the spear.'

   b. Baguma a-ka-sik-**y**-a   Tabaro icumu.

     Baguma SP-PAST-shake-CAUS-ASP Tabaro spear

     'Baguma made Tabaro shake the spear.'

(4) a. Omugoyi gu-ka-reih-a.

     rope   SP-PAST-be/long-ASP

     'The rope is long.'

b. Omulisa a-ka-reih-**y**-a omugoyi.

shepherd SP-PAST-be/long-CAUS-ASP rope

'The shepherd lengthened the rope.'

Lit.: 'The shepherd made the rope be long.'

(5) a. Omwaana a-ka-byam-a ha rugudo.

child SP-PAST-lay down-ASP on road

'The child laid down on the road.'

b. Omukazi a-ka-byam-**y**-a omwaana ha rugudo.

woman SP-PAST-lay down-CAUS-ASP child on road

'The women made the child lie down on the road.'

As was mentioned above, the causative morpheme *-is-* is very common, since it can be added to any kind of verb:

(6) a. Omuseija a-ka-cumb-a omucere.

man SP-PAST-cook-ASP rice

'The man cooked the rice.'

b. Yohaana a-ka-cumb-**is**-a omuseija omucere.

Yohaana SP-PAST-cook-CAUS-ASP man rice

'John made the man cook the rice.'

(7) a. Akiiki a-ka-lim-a omsiri.

Akiiki SP-PAST-plough-ASP field

'Akiiki ploughed the field.'

b. Amooti a-ka-lim-**is**-a Akiiki omsiri.

Amooti SP-PAST-plough-CAUS-ASP Akiiki field

'Amooto made Akiiki plough the field.'

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(8) a. Ateenyi a-ka-handik-a   ekitabu.

      Ateenyi SP-PAST-write-ASP book

      'Ateenyi wrote the book.'

   b. Araali a-ka-handik-**is**-a   Ateenyi ekitabu.

      Araali SP-PAST-write-CAUS-ASP Ateenyi book

      'Araali made Ateenyi write the book.'

(9) a. Abwooli a-ka-tin-a   enjoka.

      Abwooli SP-PAST-fear-ASP snake

      'Abwooli feared the snake.'

   b. Atwooki a-ka-tin-**is**-a   Abwooli enjoka.

      Atwooki SP-PAST-fear-CAUS-ASP Abwooli snake

      'Atwooki made Abwooli fear the snake.'

(10) a. Abooki a-ka-zin-a   ha mkoro.

      Abooki SP-PAST-sing-ASP at ceremony

      'Abooki sang at the ceremony.'

   b. Atwooli a-ka-zin-**is**-a   Abooki ha mkoro.

      Atwooli SP-PAST-sing-CAUS-ASP Abooki at ceremony

      'Atwooli made Abooki sing at the ceremony.'

The causative morpheme -*is*- has different realizations depending on the environment in which it occurs.

When the radical of the verb contains the vowel -*i*-, the causative morpheme attached to that verb will have the same vowel, as shown in (7b), (8b), (9b) and (10b).

When the radical of the verb contains the vowel -*u*- the causative morpheme will still have the vowel -*i*- as shown in (6b), (11b), (12b), (13b) and (14b):

(11)   a.   Munyoro a-ka-tum-a   sente   mwa nyina.
            Munyoro SP-PAST-send-ASP money to   his-mother
            'Munyoro sent money to his mother.'

       b.   Tibafa a-ka-tum-**is**-a   Munyoro sente   mwa nyina.
            Tibafa SP-PAST-send-CAUS-ASP Munyoro money to   his-mother
            'Tibafa made Munyoro send money to his mother.'

(12) a.   Ensoro e-ka-suung-a   omuzaano.
            horse SP-PAST-watch-ASP game
            'The horse watched the game.'

     b.   Ente e-ka-suung-**is**-a   ensoro omuzaano.
            cow SP-PAST-watch-CAUS-ASP horse   game
            'The cow made the horse watch the game.'

(13)   a.   Omuseija a-ka-kungan-a   ha bugenyi.
            man   SP-PAST-quarrel-ASP at feast
            'The man quarreled at the feast.'

       b.   Omukazi a-ka-kungan-**is**-a   omuseija ha bugenyi.
            woman   SP-PAST-quarrel-CAUS-ASP man   at feast
            'The woman made the man quarrel at the feast.'

(14)   a.   Olimi a-ka-tung-a   omulimo.
            Olimi SP-PAST- find-ASP work
            'Olimi found the job.'

b. Oyo a-ka-tung-**is**-a   Olimi omulimo.

Oyo SP-PAST- find-CAUS-ASP Olimi job

'Oyo caused Olimi find the job.'

When the radical of the verb contains the vowel -*a*- the causative morpheme will still include the vowel -*i*- like in (15):

(15)   a.   Embwa e-ka-nag-a   enyama.

dog   SP-PAST- throw-ASP meat

'The dog threw meat.'

b.   Empisi a-ka-nag-**is**-a   embwa   enyama.

hyena   SP-PAST- throw-CAUS-ASP dog   meat

'The hyena caused the dog to throw the meat.'

However, when the radical of the verb contains the vowel -*e*- or -*o*-, the vowel -*i*- in the causative morpheme changes into -*e*-:

(16) a.   Maga a-ka-tek-a   ameizi.

Maga SP-PAST- boil-ASP water

'Maga boiled the water.'

b.   Bezaleri a-ka-tek-**es**-a   Maga ameizi.

Bezaleri SP-PAST- boil-CAUS-ASP Maga water

'Bezaleri made Maga boil the water.'

c.   Enjoka e-ka-soh-a   omu kyambo kikoto.

snake   SP-PAST- fish-ASP in   river   big

'The snake fished in the big river.'

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d. Enjojo   e-ka-soh-**es**-a   enjoka omu kyambo kikoto.

elephant SP-PAST- fish-CAUS-ASP snake   in   river   big

'The elephant caused the snake to fish in the big river.'

When the last consonant of the verb stem is -*r*-, the consonant -*s*- of the causative morpheme changes into -*z*- and its vowel -*i*- is deleted, and the last consonant of the verb stem is deleted as well:

(17) a. Omwaana a-ka-zir-a   ebyokulya.

child   SP-PAST- refuse-ASP food

'The child refused the food.'

b. Omukazi a-ka-zi-**z**-a   omwaana ebyokulya.

woman   SP-PAST- sulk-CAUS-ASP child   food

'The woman made the child sulk the food.'

(18) a. Keloya a-ka-seer-a   omuguzi.

Keloya SP-PAST- seek-ASP   buyer

'Keloya sought the buyer.'

b. Adyeeri a-ka-see-**z**-a   Keloya omuguzi.

Adyeri SP-PAST-seek-CAUS-ASP   Keloya buyer

'Adyeeri caused Keloya to seek the buyer.'

(19) a. Kagwahabi a-ka-sar-a   omugati.

Kagwahabi SP-PAST-chop-ASP   bread

'Kagwahabi chopped the bread.'

b. Semu a-ka-sa-**z**-a   Kagwahabi omugati.

Semu SP-PAST- chop-CAUS-ASP Kagwahabi bread

'Semu made Kagwahabi chop the bread.'

(20) a. Cyenkende a-ka-cur-a.

Cyenkende SP-PAST- cry-ASP

'Cyenkende cried.'

b. Mugenyi a-ka-cu-**z**-a   Cyenkende.

Mugenyi SP-PAST- cry-CAUS-ASP Cyenkenke

'Mugenyi made Cyenkende cry.'

(21) a. Murungi a-ka-gur-a   enzu

Murungi SP-PAST- buy-ASP house

'Murungi bought the house'

b. Tibamwenda a-ka-gu-**z**-a   Murungi enzu

Tbamwenda SP-PAST- buy-CAUS-ASP Murungi house

'Tibamwanda made Murungi buy the house'

In Subsections 3.1.3 – 3.1.5, I discuss the different meanings of the causative construction. Before I turn to these causative meanings, I present instrumental causative in Subsection 3.1.2.

3.1.2. Instrumental causatives

The Kihema causative suffix -*is*- changes the meaning of a verb when it implies that the action is done using an instrument. Mukata and Tamanji (2000: 179) observe that: "When added to a verb, the instrumental suffix necessitates the introduction of an instrumental noun phrase positioned after the direct object":

(22) a. Enkende e-ka-lim-a   omusiri n'   emfuka.

monkey SP-PAST- plough-ASP field   with hoe

'The monkey ploughed the field with the hoe.'

b. Enkende e-ka-lim-**is**-a   omusiri emfuka.

monkey SP-PAST-plough-CAUS-ASP field   hoe

'The monkey ploughed the field with the hoe.'

(23) a. Enkerebe e-ka-ly-a   omucere n'   omukono.

baboon SP-PAST-eat-ASP rice   with hand

'The baboon ate the rice with his hand.'

b. Enkerebe e-ka-li-**is**-a   omucere omukono.

baboon SP-PAST-eat-CAUS-ASP rice   hand

'The baboon ate rice with his hand.'

(24) a. Zadoki a-ka-king-a   orwiigi n'   endyamiti.

Zadoki SP-PAST-close-ASP door   with axe

'Zadoki closed the door with the axe.'

b. Zadoki a-ka-king-**is**-a   orwigi endyamiti.

Zadoki SP-PAST-close-CAUS-ASP door   axe

'Zadoki closed the door with the axe.'

(25) a. Entale e-ka-temb-a   orusozi   n'   omwiigo.

lion   SP-PAST-climb-ASP mountain with cane

'The lion climbed the mountain with the cane.'

b. Entale e-ka-temb-**es**-a   orusozi   omwiigo.

lion   SP-PAST-climb-CAUS-ASP mountain cane

'The lion climbed the mountain with the cane.'

(26) a. Wakame a-ka-oky-a   omuhogo n'   omuuro.

hare   SP-PAST-burn-ASP cassava   with fire

'The hare burnt the cassava with the fire.'

b. Wakame a-ka-ok-**es**-a   omuhogo omuuro.

   hare   SP-PAST-burn-CAUS-ASP cassava   fire

   'The hare burnt the cassava with the fire.'

Since the second object NP in the causative constructions in the (b)-examples above corresponds to the instrument of the action (and is therefore introduced by the preposition *na*, 'with' in the (a)-examples), this type of causative construction resembles the applicative, which is discussed in Chapter 4. However, the meaning of *-is-* in instrumentals can also be treated as causative if the instrument is regarded as the agent of the event caused by the causer.

3.1.3. Causative without a causer

Kimenyi (undated) identifies circumstances in Kinyarwanda where the causative is used to mean (i) causation without a causer, (ii) causation requesting assistance or (iii) causation seeking for assistance. These causative meanings are attested in Kihema as well. Kimenyi (undated) notes that "in these constructions, there is thus a semantic ambiguity. Only the context can help in deciding what the true meaning of the causative construction is," (p. 4).

Alsina (1992: 517) states that: "Morphologically, causatives are composed of a morpheme and a base verb. It is generally accepted that the causative morpheme is a two-place predicate expressing a relation between a causer and a caused event." However, in Kihema, Kinyarwanda and many other Bantu languages, in some causative constructions, the focus is on the causee rather than the causer. This means that the listener is not interested to know the causer of the action (maybe because there is none) but rather is interested in the action itself. In this case, we get a causative construction without a causer.

(27) a. Mariya a-ka-rwa-**az**-a   omuhara.

Mary   SP-PAST- be/sick-CAUS-ASP daughter

'Mary has a sick daughter.'

b. Ente e-ka-fw-**is**-a   enyana.

cow   SP-PAST- be/die-CAUS-ASP calf

'The cow's calf died.'

Kimenyi (undated: p. 4) states that: "Causatives in Kinyarwanda are used sometimes to relate not to causers of events but individuals affected by the events instead. This type of causative does not involve any voluntary participation at all in the resultative event. The subject of the main verb is a beneficiary or a maleficiary of the event." This is also true for Kihema. As one can notice sentences in (27), the NP subjects are not the causers of the action; rather they undergo the action of the daughter 'being sick,' and of the cow 'losing its calf.'

3.1.4. Causation as assistance

This type of causation requires physical or moral assistance, but not control or manipulation of the causee. This means that the causer of the action requests the causee to perform a task on his/her behalf (Kimenyi, undated: p. 6).

(28) a. Omwaana a-ka-kub-**is**-a   omukozi enzu.

child   SP-PAST- sweep-CAUS-ASP worker   house

'The child made the worker sweep the house.'

b. Omwisiki a-ka-kam-**is**-a   omwoojo.

girl   SP-PAST- milk-CAUS-ASP boy

'The girl made the boy milk.'

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In (28a), *omwaana* 'the child' asked if *omukozi* 'the worker' could help to clean the house. It is not an order but a request. In (28b), *omwisiki* 'the girl' asked for a favor from *omwoojo* 'the boy' to milk the cow. This suggests that in Kihema, circumstances like those mentioned above can be expressed by means of causative verbs.

3.1.5. Causation as seeking assistance

Kimenyi (undated: p. 6) notes that the 'would be causee' behaves as an adjunct when the causative morpheme has 'the seeking for assistance' meaning. This means that in (29a) the causative verb '-raguza' means 'seek for divination,' that is, to seek for assistance. In (29b), the causative verb *-raaza* meaning 'to lodge someone' as a way of helping.

(29) a. Paulo a-ka-ragu-**z**-a   mw'omufumu.
       Paul sp-past- seek-CAUS-ASP at   diviner
       'Paul went to seek divination at the diviner.'

    b. Petero a-ka-ikiriz-a   ku-ra-**z**-a   omunyamahanga.
       Petero sp-past- accept-ASP 15: lodge-CAUS-ASP foreigner
       'Peter accepted to lodge the foreigner.'

3.2.   Causatives and transitivity

As mentioned above, causatives are formed by adding a causative affix to the verb. As a result, a causer is introduced, and the number of arguments that the verb combines with therefore increases by one.

In the following subsections, I discuss causative verbs and their object complements. Specifically I look at causatives derived from intransitive, transitive and ditransitive base verbs.

3.2.1. Causatives deriving from intransitive verbs

Intransitive predicates are objectless. In some cases, for instance in (30a), the intransitive verb can appear with an adjunct. However, a causative morpheme attached to any verb of this category can change its valency, and a causative verb derived from an intransitive therefore becomes a transitive verb, (30b).

(30) a. Omwaana a-ka-byama-a   ha mkenka.

       child   SP-PAST-sleep-ASP on mat

       'The child slept on the mat.'

    b. Omukazi a-ka-byam-**y**-a   omwaana ha mkenka.

       woman SP-PAST-sleep-CAUS-ASP child   on mat

       'The woman made the child sleep on the mat.'

(31) a. Enkinzo a-ka-bur-a.

       needle SP-PAST-lose-ASP

       'The needle was lost.'

    b. Mugenyi a-ka-bu-**z**-a   enkinzo.

       Mugenyi SP-PAST-lose-CAUS-ASP needle

       'Mugenyi lost the needle.'

       Lit.: 'Mugenyi made the needle get lost.'

In (30b) and (31b) the causative morpheme is attached to intransitive verbs, notably -*byama* 'to sleep' and -*cura* 'to cry,' thus yielding transitive verbs. This means that the original subjects *omwaana* 'child' in (30a) and *enkinzo* 'needle' in (31a) become objects in their respective sentences. The new subjects *omukazi* 'woman' and *Mugenyi* are introduced as causers of the action expressed by the basic intransitive verb in (30a) and (31a).

3.2.2. Causatives deriving from transitive verbs

Transitive predicates are verbs that require objects. Sentences like (3a), (6a), (7a), (12a), (14a) are examples of transitive verbs. The causative morpheme has the ability to change the valency of these verbs in the sentences listed above. For the sake of illustration, I will repeat two of them, that is, (3a-b) and (6a-b) as (32a-b) and (33a-b):

(32) a. Tabaro a-ka- sik-a   icumu.

      Tabaro SP-PAST-shake-ASP spear

      'Tabaro shook the spear.'

   b. Baguma a-ka-sik-**y**-a   Tabaro icumu.

      Baguma SP-PAST-shake-CAUS-ASP Tabaro spear

      'Baguma made Tabaro shake the spear.'

(33) a. Omuseija a-ka-cumb-a   omucere.

      man   SP-PAST-cook-ASP rice

      'The man cooked the rice.'

   b. Yohaana a-ka-cumb-**is**-a   omuseija omucere.

      Yohaana SP-PAST-cook-CAUS-ASP man   rice

      'John made the man cook the potatoes.'

In (32b), the causative morpheme is added to a transitive verb. As a result, the original subject of (32a) becomes the second object of the causative verb. *Baguma* is the new subject, introducing the causers of the action expressed in (32a). The same process happens in (33) as well.

3.2.3. Causatives deriving from ditransitive verbs

From the two previous analyses, one may conclude that a ditransitive verb can be 'causativized' by adding a causative morpheme to the verb stem. This process would then be expected to derive a causative verb with three objects, two of which are the basic object of the original ditransitive verb, and the third would be the original subject (agent). However, ditransitive verbs in Kihema cannot be derivationally causativized, as (34b) shows. The only way to form a causative construction from a ditransitive verb is by means of the causative verb *-tuma* 'to cause something happen', which takes the original sentence as a clausal complement, (34c):

(34) a. Enzigamire e-ka-ak-a   enjoka omwiigo.

       boa   SP-PAST-confiscate-ASP snake   cane

       'The boa confiscated the cane from the snake.'

    b. *Ekikere ki-ka-ak-**is**-a   enzigamire enjoka omwiigo.

       Frog   SP-PAST-confiscate-CAUS-ASP boa   snake   cane

       'The frog caused the boa to confiscate the cane from the snake.'

    c. Ekikere ki-ka-tum-a   enzigamire e-ya-ak-e   enjoka omwiigo.

       frog   SP-PAST- cause-ASP boa   SP-PRES-confiscate-FV   snake   cane

       'The frog caused the boa to confiscate the cane from the snake.'

(35) a. Enzangu a-ka-im-a   embeba amata.

       cat   SP-PAST- refuse-ASP rat   milk

       'The cat refused the rat the milk.'

    b. * Wakame a-ka-im-**is**-a   enzangu embeba amata.

       hare   SP-PAST- refuse-CAUS-ASP cat   rat   milk

       'The hare caused the cat to refuse the rat the milk.'

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c. Wakame a-ka-tum-a   enzangu i-m-e   embeba amata.

hare   SP-PAST- caus-ASP rat   S/PRES-refuse-FV rat   milk

'The hare caused the cat to refuse the rat the milk.'

(36) a.   Enjojo   e-ka-t-a   egarubindi ha meza.

elephant SP-PAST- put-ASP glasses   on table

'The elephant put the glasses on the table.'

b.   *Omubu gu-ka-t-**is**-a   enjojo   egarubindi ha meza.

mosquito SP-PAST- put-CAUS-ASP elephant glasses   on table

'The mosquito caused the elephant to put the glasses on the table.'

c.   Omubu   gu-ka-tum-a   enjojo   e-t-e   egarubindi ha meza

mosquito SP-PAST-caus-ASP elephant S/PRES- put-FV glasses   on table

'The mosquito caused the elephant to put the glasses on the table'

The impossibility of deriving morphological causative constructions from ditransitive verbs may have to do with case: In Kihema a verb cannot assign case to three objects; therefore, at least one NP would violate the case filter. In contrast, the hypothesis that case is the reason is problematic in the light of the applicatives, since a ditransitive verb can assign case to three objects in applicative constructions, (see Chapter 4.3.3).

3.3.   Kihema causativization derived by incorporation

In this section, I discuss Kihema causativization in the light of Baker's (1988) theory of incorporation, (see Chapter 1, Section 4).

3.3.1. Baker's (1988) Theory of Incorporation

According to Baker's (1988), in an analysis of various kinds of morphologically complex words, certain types of derivational affixes are heads of phrases in the syntax and move to

combine with the basic verbal root. In this spirit, Baker analyses morphological causatives as being derived from biclausal constructions by *verb incorporation*: the derived causative verb is the result of the movement of the base verb from the embedded sentence to incorporate into the matrix verb, which is the causative suffix.

Baker (1988) presents his analysis by studying causatives in Chichewa, a Bantu language spoken in Malawi:

(37)   Mtsikana ana-chit-its-a   kuti mtsuko   u-gw-e.
        girl   AGR-do-make-ASP that water pot   AGR-fall-ASP
        'The girl made the water pot fall.'

(38)   Mtsikana anau-**gw-ets**-a   mtsuko.
        girl   AGR-**fall-made**-ASP water pot
        'The girl made the water pot fall.'   (Chichewa; Baker, 1988: 148)

The sentence in (37) is a periphrastic causative construction derived by means of a causative verb, which takes the sentence *kuti mtsuko ugwe* as its complement. The tree structure is given in (39a). According to Baker, the causative affix in (38), like the causative verb *anachititsa* in (37), is a verbal head of a matrix clause and takes the basic intransitive clause as its complement. This is shown in (39b):

(39) a.

```
                IP
              /    \
           NP        I'
           |        /   \
       Mtsikana    I⁰      VP
                   |     /    \
                  ana  V⁰       CP
                       |       /   \
                  chititsa        C'
                                 /    \
                               C⁰       IP
                               |       /   \
                             kuti     NP      I'
                                      |      /   \
                                  mtsuko   I⁰      VP
                                           |       |
                                           u      gw-
```

(39) b.

```
                        IP
                      /    \
                   NP        I'
                   |        /   \
              Mtsikana    I⁰      VP
                          |      /   \
                         ana   V⁰      CP
                               |      /   \
                             -itsa         C'
                                          /   \
                                        C⁰      IP
                                              /    \
                                           NP        I'
                                           |        /   \
                                        mtsuko    I⁰      VP
                                                          |
                                                          V
                                                          |
                                                          gw
```
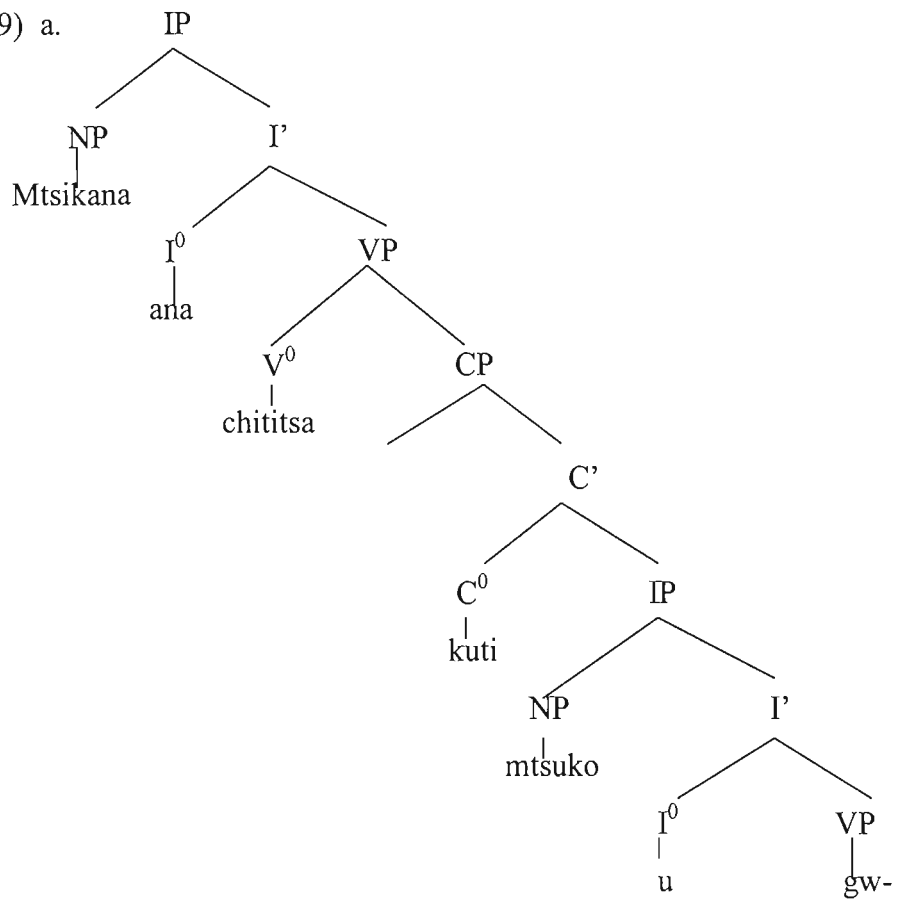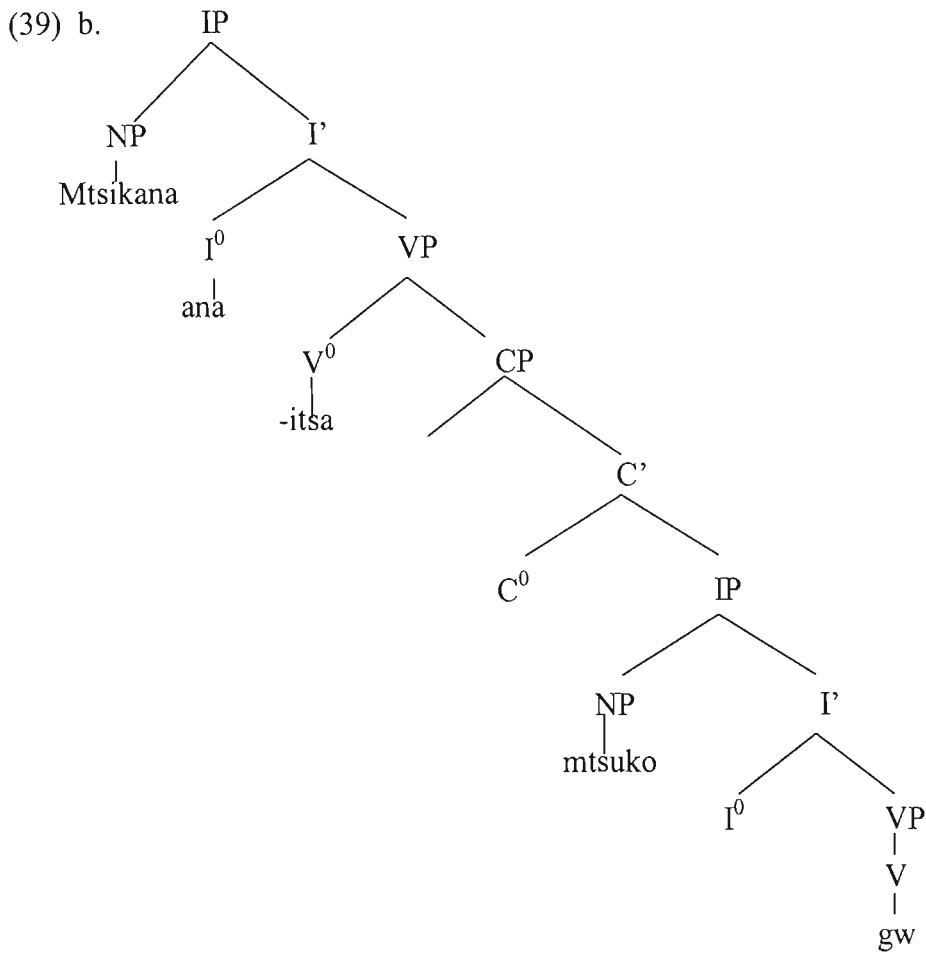
In both (39a) and (39b), the matrix verb is causative, taking a full sentence (= CP, see chapter 1) as its complement. However, in (39b), the causative verb is an affix, which needs a host. Therefore, the verb of the embedded CP must move and combine with the verbal root into a complex verb:

(40)

IP
├── NP
│   └── Mtsikana
└── I'
    ├── I⁰
    └── VP
        ├── V
        │   ├── V — gwᵢ
        │   └── V — -itsa
        └── CP
            └── C'
                ├── C⁰
                └── IP
                    ├── NP — mtsuko
                    └── I'
                        ├── I⁰
                        └── VP
                            └── V — tᵢ
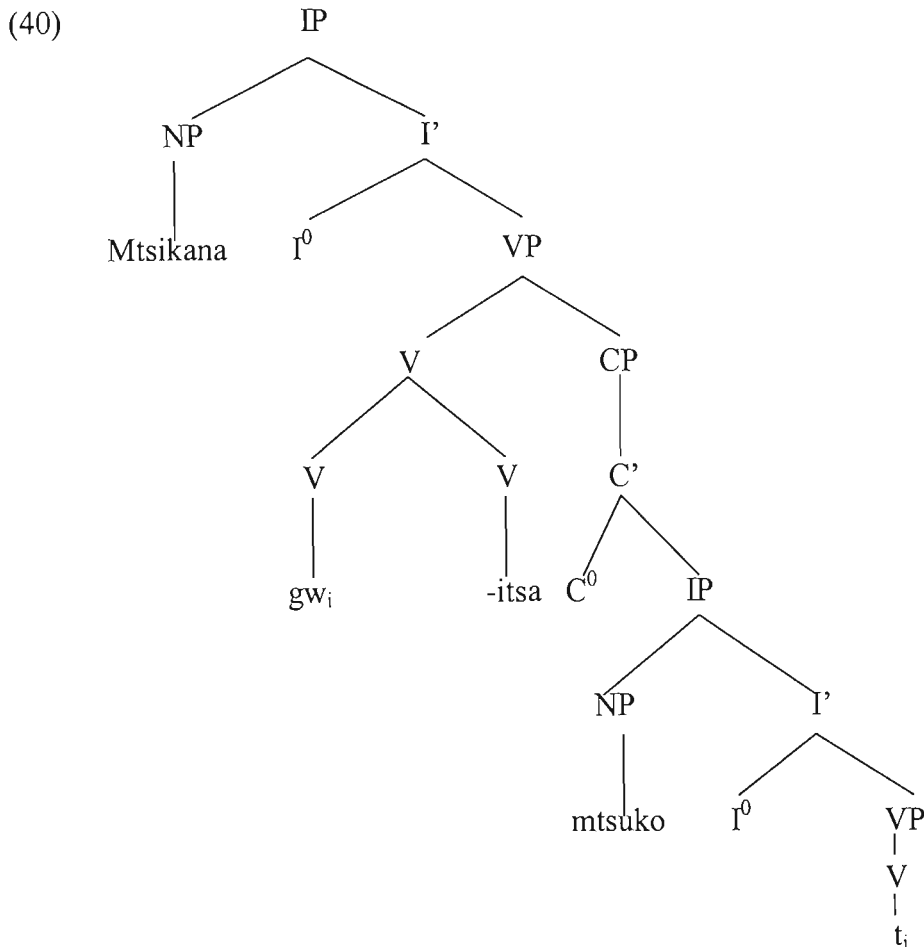
As a result of verb incorporation, the complex causative verb governs the embedded subject position and assigns objective case to the embedded subject by virtue of the GTC. The GTC states that a lexical category which has an item incorporated into it, governs everything that the incorporated item governed in its original structural position (see Chapter 1, Section 5). Therefore, the former subject has become an object of the causative (see Section 3.2.1). This is a straightforward analysis for causatives derived from intransitive verbs.

However, causatives derived from transitive verbs may have different properties in different languages. Baker (1988) examines two dialects of Chichewa (which he calls "Chichewa A" and "Chichewa B") to illustrate these differences:

(41)   Causative 1 (Chichewa A):

(42)   If the embedded clause is transitive, then (i) the embedded subject becomes an
       oblique PP and (ii) the embedded object becomes the object of the causative:

(43) a. Anyani   a-na-meny-**ets**-a   ana   kwa buluzi
       baboons SP-PAST-hit-CAUS-ASP children to lizard
       'The baboons made the lizard hit the children'

   b. Kambuku a-ku-umb-**its**-a   mtsuko   kwa kadzidzi.
       leopard   SP-PRES-mould-CAUS-ASP waterpot to   owl
       'The leopard is having the owl mould the water pot.'
       (Chichewa, Baker, 1988: 163)

Baker (1988) observes that the object of the causative 1-construction is a true direct
object, since it has all the properties typical of a direct object. For example, it can trigger
object agreement on the verb, and can become the subject of the verb in the passives
(44a-b).

(44) a. Anyani a-na-**wa**-meny-ets-a   ana   kwa buluzi.
       baboons SP-PAST-OP- hit-CAUS-ASP children to   lizard
       'The baboons made the lizard hit the children.'

   b. Ana   a-na-meny-ets-**edw**-a   kwa buluzi (ndi anyani)
       children SP-PAST- hit-CAUS-PASS-ASP to   lizard (by baboons)
       'The children were made to be hit by the lizard (by the baboons).'
       (Chichewa; Baker, 1988: 163)

On the other hand, Baker (1988) notices that the former subject (= object of the
prepositional phrase in (43)) is *not* a true direct object because it does not exhibit direct
object properties. As (45) shows, it does neither cliticize nor passivize:

(45) a. *Anyani   a-na-**zi**-meny-ets-a   ana   kwa mbuzi.

baboons   SP-PAST- OCP-hit-CAUS-ASP children to   goats

'The baboons made the goats hit the children.'

b.   *Buluzi a-na-meny-ets-edw-a   ana   (ndi anyani)

lizard   SP-PAST- hit-CAUS-PASS-ASP children (by baboons)

'The lizard was made to hit the boys by the baboons'

(Chichewa, Baker, 1988: 163)

The properties of the second type of causative are different from those of causative 1:

(46)   Causative 2 (Chichewa B):

(47)   If the embedded clause is transitive, then (i) the embedded subject becomes the
         first object and (ii) the embedded object of the base verb becomes the second
         object of the causative verb.

Contrary to Chichewa A or Causative rule 1, the causative construction in Chichewa B is
ditransitive, with the complex causative verb taking two NP objects:

(48)   Catherine   a-na-kolol-ets-a   mwana wake   chimanga.
         Catherine   SP- PAST-harvest-CAUS-ASP child   her   corn
         'Catherine made her child harvest the corn.'   (Chichewa; Baker 1988: 164)

As Baker shows, it is now the thematic subject of the base verb which behaves like the
direct object of the causative verb. The first object in (49a-b) triggers object agreement
and becomes the subject in passives:

(49) a. Catherine   a-na-**mu**-kolol-ets-a   mwana wake   chimanga.
         Catherine   SP- PAST-OCP-harvest-CAUS-ASP child   her   corn
   'Catherine made her child harvest the corn.'

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b. Mnyamata a-na-kolol-ets-**edw**-a   chimanga ndi Catherine.

boy   SP-PAST-harvest-CAUS-**PASS**-ASP corn   by Catherine

'The boy was made to harvest the corn by Catherine.'

(Chichewa; Baker, 1988: 165)

In contrast, the second object does not behave like a direct object, since it neither triggers object agreement nor moves to subject position in the passive:

(50) a.   *Catherine a- na-**chi**-kolol-ets-a   mwane wake **chimanga**

Catherine   SP-PAST- **OCP**-harvest-CAUS-ASP child   her   corn

'Catherine made her child harvest the corn'

b.   *Chimanga chi-na-kolol-ets-**dew**-a   mwana wake ndi Catherine

corn   SP-PAST-harvest-CAUS-**PASS**-ASP child   her   by Catherine

'The corn was made to be harvested by her child by Catherine.'

(Chichewa; Baker, 1988: 165)

Now, the question is: how are these causatives and the different properties of the arguments derived? Clearly, the verb cannot move in one big step to the matrix sentence, since this step would cross IP and CP as barriers and violate the ECP (see Chapter 1). Therefore, incorporation has to proceed in such a way that the ECP is not violated.

As Baker shows, the differences between Causative 1 and Causative 2 follow from the two different ways in which the embedded verb can incorporate into the matrix (causative) verb without violating the ECP. In Causative 1, the VP moves to SpecCP first; from here, the verb incorporates into the matrix verb:

(51)
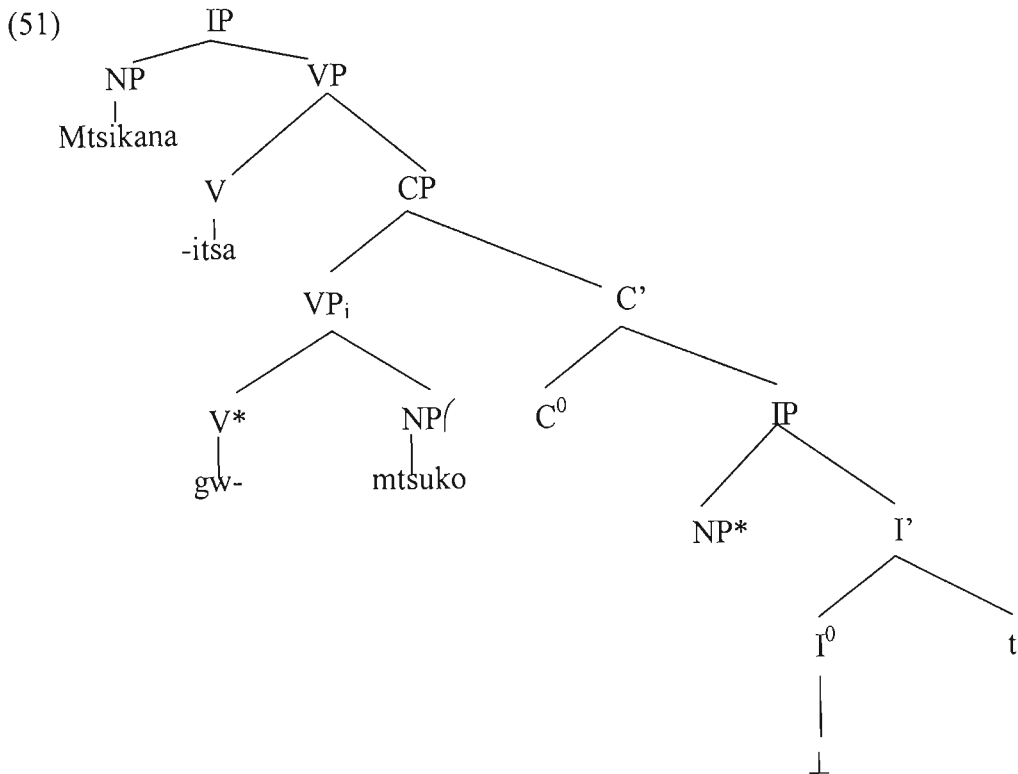
The movement of the verb into the matrix sentence illustrated in (51) does not violate the ECP. I repeat the definition of "barrier" given in Chapter 1, Section 4:

(52)   Let D be the smallest maximal projection containing A. Then C is a BARRIER between A and B if and only if C is a maximal projection that contains B and excludes A, and either:

(i)   C is not selected, or

(ii)   The head of C is distinct from the head of D and selects some WP equal to or containing B.

In (51) CP is not a barrier, because it is selected by the matrix verb; its head (C^0) does not select a phrase WP that contains or is equal to the incorporated verb. The embedded VP in SpecCP is not a barrier either, because it is selected (by the embedded I^0); its head does not select some WP equal to or containing the verb. Therefore, the verb can incorporate into the matrix verb. As a result of verb incorporation, the complex verb governs the

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embedded object (by the GTC), but not the embedded subject, since here, CP is a barrier by definition (49ii) since C^0 selects IP, which includes the subject. Therefore, the embedded object gets structural case, but the embedded subject remains caseless and needs to be realized in a PP.

Baker also further suggests that a Causative 2-construction does not involve VP-movement, but successive-cyclic movement of the embedded verb. The verb moves first to I, then to C, and then to the matrix V. Neither CP, IP nor the embedded VP are barriers, since all three XPs are selected, and their heads are not distinct, because of the successive incorporation of the verb. As a result, the matrix verb now governs both NPs and, according to Baker, assigns structural case to both NPs:

(53)

```
            IP
          /    \
        NP      VP
              /    \
            V       CP
          /   \    /   \
        V*     V  C      IP
        |      |  |     /   \
     build_i make t_i  NP*    I'
                          /    \
                         I       VP
                         |      /   \
                        t_i    V     NP(
                               |
                              t_i
```
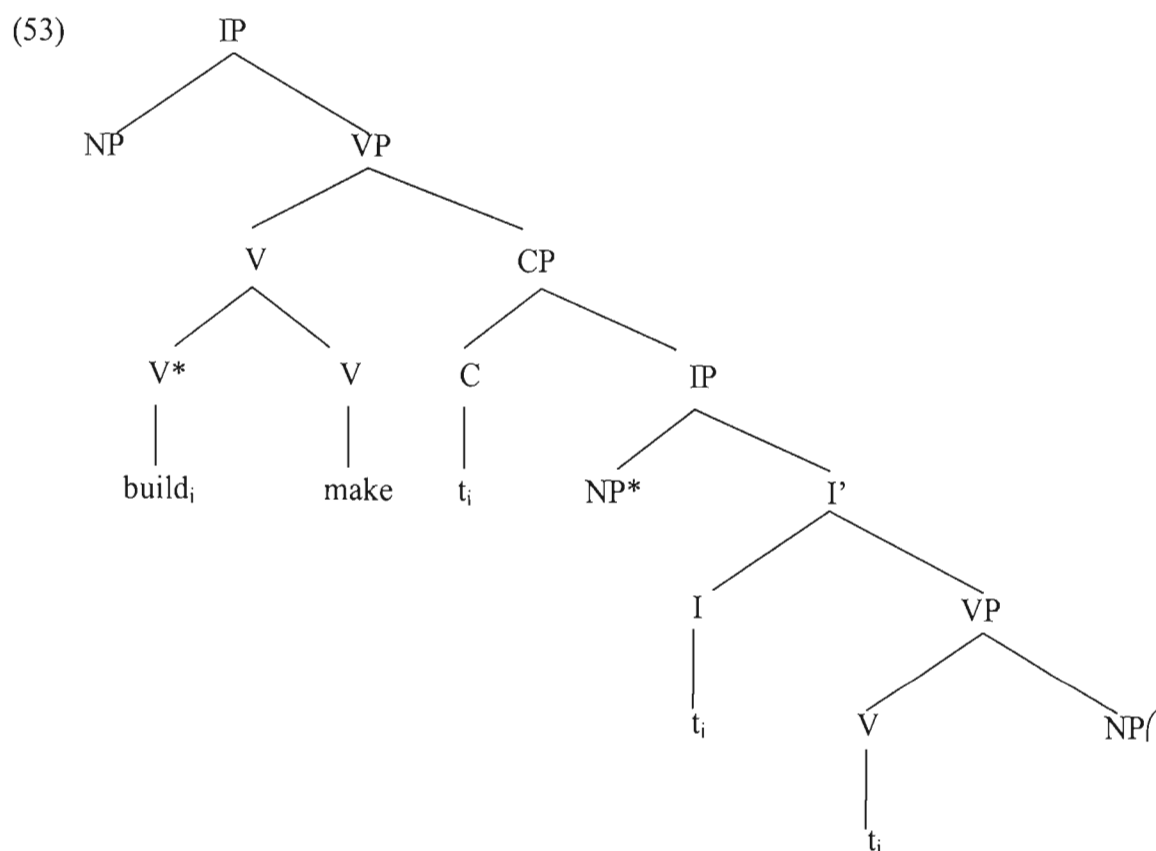
Recall that only the first object (the subject of the base verb) shows direct object properties, although the second object also receives structural case in (53). Therefore, Baker suggests that the ungrammaticality of examples such as (45) follows from

independent principles of Binding Theory (see Baker, 1988: 179f. for more detailed discussion).

In order to complete my discussion of Kihema causatives, it remains to be shown which type of causative Kihema causatives belong to.

3.3.2. Application to Kihema

As the examples discussed in Section 3.2.2 show, causative constructions derived from transitive verbs in Kihema are of the Chichewa B-type (Causative 2), since the subject of the base verb becomes the first object and the object of the base verb becomes the second object of the causative verb. Sentence (7b) is repeated here as (58):

(54)   Amooti a-ka-lim-is-a   Akiiki omsiri.
         Amooti SP-PAST-plough-CAUS-ASP Akiiki field
         'Amooto made Akiiki plough the soil.'

Interestingly, there is a difference between Kihema and Chichewa B regarding the properties of the second object. In Kihema, both the first and the second object are true direct objects, since they can both cliticize (55a-c) and be passivized (56a-b), whereas in Chichewa B, only the first object acts like a true direct object (see (49a-b).

(55) a.   Amooti a-ka-**mu**-lim-is-a   omsiri.
           Amooti SP-PAST-**OCP**-plough-CAUS-ASP field
           'Amooto made her plough the field.'

      b.   Amooti a-ka-**gu**-lim-is-a   Akiiki.
           Amooti SP-PAST- **OCP**-plough-CAUS-ASP Akiiki
           'Amooti made Akiiki plough it.'

c. Amooti a-ka-**gu**-**mu**-lim-is-a.

Amooti SP-PAST-**OCP2**-**OCP1**-plough-CAUS-ASP

'Amooto made her plough it.'

(56) a. Akiiki a-ka-lim-is-**w**-a   omsiri n' Amooti.

Akiiki SP-PAST-plough-CAUS-**PASS**-ASP field   by Amooti

'Akiiki was made to plough the field by Amooti.'

b. Omsiri gu-ka-lim-is-**w**-a   n' Amooti.

field   SP-PAST-plough-CAUS-**PASS**-ASP by Amooti

'She was made to plough the field by Amooti.'

The possibility of (55a-c) and (56a-b) shows that in Kihema causatives, both objects (= the embedded subject and the embedded object) receive structural case from the complex matrix verb after incorporation, as is predicted by Baker's analysis in (51).

To sum up, this chapter has discussed causative constructions in Kihema. First, I looked at different causative morphemes that can be attached to the Kihema verb to form the causative verb. Second, I provided a range of data in which the causative morpheme added to the verb has the potential to change the valency of the verb. In the last section, I discussed causative formation in the light of Baker's (1988) analysis of causatives. I concluded that the construction of causatives in Kihema involves the successive-cyclic movement of the embedded base verb and incorporation into the matrix verb (the causative affix).

Chapter 4: The Kihema applicative construction

This chapter describes different aspects of the construction of applicatives in Kihema. Section 4.1 gives a thorough definition of the applicatives. Section 4.2 deals with different applicative morphemes in Kihema. In Section 4.3, I discuss the construction of applicatives with different types of verbs. In Section 4.4 I present various types of Kihema applicatives and test whether both the applied and the basic object are direct objects. In the last section, I investigate the syntactic properties of the Kihema applicative construction in the light of Baker's theory of incorporation. In particular, I test whether instrumentals and benefactive applicatives are derived via syntactic movement or whether there is reason to believe that some applicatives are derived morphologically (in the lexicon). To this end, I study the properties of the two objects in a ditransitive Kihema applicative, and I test if one of the two, or both, has properties of a genuine direct object.

4.1.   Defining applicatives

So far, applicative constructions have received much attention from different writers, notably Alsina and Mchombo (1993), Baker (1988, 1992), Bresnan and Moshi (1990), Gerdts and McGinnis (2003), Harford (1993), Kimenyi (1980, 1995), Marantz (1993), McGinnis (2001), Moshi (1998), Nakamura (1997), Ngonyani (1998), Pylkkanen (2000) and Zeller and Ngoboka (2005). An example from Kihema is provided in (1b):

(1) a. Omuseija a-ka-cumb-a   enyama habwa nyina.
       man   SP-PAST-cook-ASP meat   for   his-mother
       'The man cooked the meat for his mother.'

   b. Omuseija a-ka-cumb-**ir**-a   nyina   enyama.
       man   SP-PAST-cook-**APP**- ASP his-mother meat
       'The man cooked the meat for his mother.'

In (1a) the verb -*cumba* 'to cook' appears with two complements. *Enyama* 'meat' is the first NP object complement and the benefactive PP *habwa nyina* 'for his mother' is the second complement introduced by the preposition *habwa* 'for.'

In (1b) the Kihema applicative -*ir*- is attached to the verb. As a result the benefactive NP *nyina* 'his mother' becomes the first object and *enyama* 'meat,' which used to be adjacent to the verb in the non-applied structure in (1a), becomes the second object in the applied structure. Baker (1988) names the latter 'basic object' and the former 'applied object.' In (1b), the applied object is the benefactive and the basic object is the theme/patient.

Baker (1988) argues that the applicative construction derives from a grammatical function changing process in which the applicative morpheme is a preposition, which takes the applied object as its complement. Baker claims that the applicative construction results from moving this preposition out of the prepositional phrase and incorporating it into the verb that governs it.

In Kihema, the applicative construction derives from an applicative morpheme -*ir*- in (1b) that plays the same role as the preposition *habwa* 'for' in (1a), which is a non-applied construction. In other words, in both examples in (1), there is a preposition that takes the applied object NP as its complement at D-Structure. However, comparing the two prepositions, the one in (1a) is a full and independent item that can stand on its own, whereas the one in (1b) is an affix, therefore it cannot appear alone. It must be attached to the verb at S-Structure. Consequently, the latter, that is, the affixal preposition must undergo head movement.

Before I discuss Baker's theory in more detail in Section 4.5, I will provide data using applicative morphemes. I will show that applicative morphemes such as -*ir*- have different realizations depending on the environment in which they occur.

4.2   Applicative morphemes in Kihema

In this section I will introduce the different types of applicative morpheme in Kihema. Their meanings are discussed in Section 4.4.

-Ir-, -is-, -ho, -mu and *-yo* are the main types of applicative morphemes in Kihema. The applicative *-ir-* is the most common that is found in Kihema. It can be attached to intransitive, transitive and ditransitive verbs. The instrumental applicative morpheme *-is-* on the other hand is not widespread in Kihema. The last class of morphemes is that of locative applicative morphemes. They are attached to the verb, which determines the meaning of each morpheme. For instance, the locative morpheme *-ha* is interpreted as 'from' with the verb *-ruga* 'come' but as 'to' with the verb *-genda* 'go.'

4.2.1. The applicative morpheme *-ir-*

As was mentioned above, the applicative morpheme *-ir-* can be attached to any class of verb, that is, intransitive, transitive and ditransitive (see Section 4.3). However, like the causative morpheme, the applicative morpheme undergoes phonological changes when it appears in a given environment (vowel harmony):

When the verb radical contains the vowels *-i-, -u-* and *-a-,* the vowel *-i-* in the applicative morpheme remains *-i-* like in (1), (2) and (3):

(2) a. Azaliya a-ka-tung-a   omukazi habw'omutabani.
        Azaliya SP-PAST- find-ASP wife   for   son
        'Azaliya found the wife for the son.'

    b. Azaliya a-ka-tung-**ir**-a   omutabani omukazi.
        Azaliya SP-PAST- find-**APP**-ASP son   wife
        'Azaliya found the wife for the son.'

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(3) a. Kadzurunga a-ka-nag-a   ekigiko habwa Benoni.

      Kadzurunga SP-PAST-throw-ASP spoon   for   Benoni

      'Kadzurunga threw the spoon for Benoni.'

   b. Kadzurunga a-ka-nag-**ir**-a   Benoni ekigiko.

      Kadzurunga SP-PAST-throw-**APP**-ASP Benoni spoon

      'Kadzurunga threw the spoon for Benoni.'

When the verb radical contains the vowels, -e- or -o-, the vowel -i- of the applicative morpheme changes into -e-:

(4) a. Komi a-ka-tek-a   ebihimba habw'abaana.

      Komi SP-PAST-warm-ASP beans   for   children

      'Komi warmed the beans for the children.'

   b. Komi a-ka-tek-**er**-a   abaana ebihimba.

      Komi SP-PAST-warm-**APP**-ASP children beans

      'Komi warmed the beans for the children.'

(5) a. Enjoka e-ka-soh-a   habw'entaama.

      snake SP-PAST-fish-ASP for   sheep

      'The snake fished for the sheep.'

   b. Enjoka e-ka-soh-**er**-a   entaama.

      snake SP-PAST-fish-**APP**-ASP sheep

      'The snake fished for the sheep.'

However, if the verb radical contains the cluster -eer- or -oor- like in -teera, 'bit,' -eera, 'grow' (crops), -seera 'look for,' -toora, 'choose', -hoora 'revenge', -goora, 'iron', etc. the applicative morpheme vowel -i- changes into -e- in the first cluster and -o- in the second cluster. When the verb radical contains the cluster such as -ur- or -ar-; the vowel -

i- in the applicative morpheme changes into *-u-* for the former and into *-a-* for the latter, (see (14b), (17a) and (18c), (20) and (21).

The following examples illustrate the cluster *-eer-* and *-oor-*:

(6) a. Wakame a-ka-teer-a empisi habw'entale.
   rabbit sp-past-beat-asp hyena for lion
   'The rabbit beat the hyena for the lion.'

   b. Wakame a-ka-teer-**er-a** entale empisi.
   rabbit sp-past-beat-**app-asp** lion hyena
   'The rabbit beat the hyena for the lion.'

   c. Akampimpina ka-ka-toor-a ekinkorokoma habw'omukama.
   chameleon sp-past-choose-asp lizard for king
   'The chameleon chose the lizard for the king.'

   d. Akampimpina ka-ka-toor-**or-a** omukama ekinkorokoma.
   chameleon sp-past-choose-**app-asp** king lizard
   'The chameleon chose the lizard for the king.'

The various meanings of the applicative formed by means of *-ir-* are discussed in Sections 4.4.1- 4.4.2 and 4.4.5- 4.4.6.

4.2.2. The instrumental applicative morpheme *-is-*

The instrumental applicative morpheme *-is-* is attached to the verb to yield an instrumental meaning:

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(7) a. Ananiya a-ka-lim-**is**-a   omsiri emfuka.

Ananiya SP-PAST plough-**APP**-ASP field   hoe

'Ananiya ploughed the field with the hoe.'

b. Petero a-ka-nyw-**is**-a   omunwa ameizi.

Peter   SP-PAST- drink-**APP**-ASP mouth   water

'Peter drank water with the mouth.'

The relation between the use of the morpheme *-is-* as an applicative morpheme and its relation to the causative morpheme *-is-* will be discussed in Section 4.4.3.

4.2.3. The locative applicative morphemes *-ho, -mu* and *-yo*

The locative applicative morpheme *-ho* corresponds to the preposition *ha* 'on, at' in non-applied constructions, whereas the locative applicative morpheme *-mu* corresponds to the preposition meaning 'in, inside.' I assume that the locative applicative morpheme *-yo* has a zero (⊥) preposition counterpart in the non-applicative construction. The morpheme *-yo* refers to larger regions such as countries, provinces, districts, villages, and so on. It substitutes the full PP and cannot occur together with an NP object:

(8) a. Kadzurunga a-ka-ikar-a   ha meza.

Kadzurunga SP-PAST- sit-ASP on table

'Kadzurunga sat on the table.'

b. Kadzurunga a-ka-ikar-a-**ho**   emeza.

Kadzurunga SP-PAST- sit-ASP-**LOC** table

'Kadzurunga sat on the table.'

(9) a. Ibanda a-ka-taah-a   mu kisika.

 Ibanda SP-PAST-enter-ASP in bedroom

 'Ibanda entered in the bedroom.'

  b. Ibanda a-ka-taah-a-**mu**   ekisika.

 Ibanda SP-PAST-enter-ASP-**LOC** bedroom

 'Ibanda entered in the bedroom.'

(10) a. Mugenyi a-ka-rar-a   Nyankunde.

 Mugenyi SP-PAST-sleep-ASP Nyankunde

 'Mugenyi slept in Nyankunde.'

  b. Mugenyi a-ka-rar-a-**yo.**

 Mugenyi SP-PAST-sleep-ASP-**LOC**

 'Mugenyi slept there.'

  c. *Mugenyi a-ka-rar-a-**yo**   Nyankunde.

 Mugenyi SP-PAST-sleep-ASP-**LOC** Nyankunde

 'Mugenyi slept there.'

According to Ngoboka (2005), Kihema sentences like (8b) and (38b) are impossible
compared to their counterparts in Kinyarwanda:

(11) a. Umwaana y-a-shyi-ze   ibiryo **ku** meza.

 child   SP-PAST-put-ASP food   on table

 'The child put the food on the table.'

  b. ?? Umwaana y-a-shyi-ze-**ho** ameeza ibiryo.

 child   SP-PAST-put-**APP** table   food

 'The child put the food on the table.'   (Ngoboka, 2005: 70)

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In contrast, Kimenyi (1980) provides such constructions in Kinyarwanda. To this end, his example that I repeat here in (12b) matches with Kihema examples in (8b) and (38b). I presume that the Kinyarwanda data provided by Ngoboka might be from another variety of Kinyarwanda, compared to the data by Kimenyi:

(12) a. Abaana b-iica-ye ku meza.
          children SP-sit-ASP on table
          'The children are sitting on the table.'

     b. Abaana b-iica-ye-**ho**   ameeza.
          children SP-sit-ASP-**LOC** table
          'The children are sitting on the table.'   (Kimenyi, 1980: 35)

I return to the locative applicatives in Section 4.4.

4.3. Kihema applicatives and transitivity

In this section, I discuss how the applicative morpheme attached on a verb can change the valency of a verb.

4.3.1. Applicatives derived from intransitive verbs

In Kihema, when the applicative morpheme *-ir-* is added to an intransitive verb, this process endows the verb with a new object. This object is obligatory:

(13) a. Meri a-ka-sin-a.
          Meri SP-PAST- sing-ASP
          'Meri sang.'   (intransitive verb)

b. *Meri a-ka-zin-**ir**-a.

    Meri   SP-PAST- sing-**APP**-ASP

    'Meri sang for ?'

c. Meri a-ka-zin-**ir**-a   abasoni.

    Meri SP-PAST- sing-**APP**-ASP in-laws

    'Meri sang for the in-laws.'   (transitivized applied structure)

(14) a. Mwenda a-ka-cur-a.

    Mwenda SP-PAST- cry-ASP

    'Mwenda cried.'   (intransitive verb)

b. *Mwenda a-ka-cu-**ur**-a.

    Mwenda SP-PAST- cry-**APP**-ASP

    'Mwenda cried for?'

c. Mwenda a-ka-cu-**ur**-a   amahuli.

    Mwenda SP-PAST- cry-**APP**-ASP eggs

    'Mwenda cried for eggs.'   (transitivized applied structure)

The obligatorily transitive applicative constructions in (13c) and (14c) contrast with some non-applied transitive verbs whose objects are optional and can be omitted:

(15) a. Kabwa a-ka-som-a   enziri.

    Kabwa SP-PAST- read -AS gospel

    'Kabwa read the gospel.'

b. Kabwa a-ka-som-a.

    Kabwa SP-PAST- read-ASP

    'Kabwa read.'

The new object introduced by the applicative morpheme *-ir-* in (13c) and (14c) is a genuine direct object. This is revealed by the application of two standard tests for direct objecthood: The object of the transitive applicative can become the subject in the passive construction and it can be marked as an object clitic on the verb:

(16) a. Abasoni ba-ka-zin-**ir**-**w**-a   na Meri.

      in laws   SP-PAST- sing-APP-PASS-ASP by Meri

      'The in-laws were sung for by Meri.'   (passivized)

    b. Meri a-ka-**ba**-zin-**ir**-a.

      Meri SP-PAST-OCP- sing-APP-ASP

      'Meri sang for them.'   (cliticized)

(17) a. Amahuli ga-ka-cu-**ur**-**w**-a   na Mwenda.

      eggs   SP-PAST- cry-APP-PASS-ASP by Mwenda

      'The eggs were cried for by Mwenda.'   (passivized)

    b. Mwenda a-ka-**ga**-cu-**ur**-a.

      Mwenda SP-PAST-OCP-cry-APP-ASP

      'Mwenda cried for them.'   (cliticized)

4.3.2. Applicatives derived from transitive verbs

A transitive verb can appear with a second object when the applicative morpheme is added to it. This means that the applicative construction turns a transitive verb into a ditransitive verb:

(18) a. Mpigwa a-ka-byar-a   omugusa.

      Mpigwa SP-PAST- plant-ASP sorghum

      'Mpingwa planted the sorghum.'   (transitive verb)

b. Mpigwa a-ka-byar-a   omugusa habwa Kiiza.

Mpigwa SP-PAST- plant-ASP sorghum for   Kiiza

'Migwa planted the sorghum for Kiiza.'

c. Mpigwa a-ka-byar-**ar**-a   Kiiza omugusa.

Mpigwa SP-PAST- plant-**APP**-ASP Kiiza sorghum

'Mpigwa planted the sorghum for Kiiza.'   (ditransitivized applied structure)

(19) a. Ateenyi a-ka-simur-a   ebyoma.

Ateenyi SP-PAST- clean-ASP   utensils

'Ateenyi cleaned the utensils.'   (transitive verb)

b. Ateenyi a-ka-simur-a   ebyoma habw'Akiiki.

Ateenyi SP-PAST- clean-ASP   utensils for   Akiiki

'Ateenyi cleaned the utensils for Akiiki.'

c. Ateenyi a-ka-simuru-**ur**-a   Akiiki ebyoma.

Ateenyi SP-PAST- clean-**APP**-ASP Akiiki ustensils

'Ateenyi cleaned the ustensils for Akiiki.'   (ditransivized applied structure)

Again, it turns out that the newly added applied object behaves like a direct object. I will consider two tests (cliticization, passivization) in order to illustrate the direct properties of the applied object:

(20) a. Mpigwa a-ka-**mu**-byar-**ar**-a   omugusa.

Mpigwa SP-PAST-**OCP**-plant-**APP**-ASP sorghum

'Mpigwa planted the sorghum for him.'   (applied object cliticized)

b. Kiiza a-ka-byar-**ar**-**w**-a   omugusa na Mpigwa.

Kiiza SP-PAST-plant-**APP**-**PASS**-ASP sorghum   by Mpigwa

'Kiiza was planted sorghum for by Mpigwa.'   (applied object passivized)

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Importantly, however, the basic object of a ditransitive applicative also has the properties of a direct object. This is illustrated by the examples in (21a-b):

(21) a. Mpigwa a-ka-**gu**-byar-**ar**-a   Kiiza.

        Mpigwa SP-PAST-OCP-plant-APP-ASP Kiiza

        'Mpigwa planted it for Kiiza.'   (basic object cliticized)

    b. Omugusa gu-ka-byar-**ar**-**w**-a   Kiiza na Mpigwa.

        sorghum SP-PAST- plant-APP-PASS-ASP   Kiiza by Mpigwa

        'The sorghum was planted for Kiiza by Mpigwa.'   (basic object passivized)

Considering examples such as in (18) and (19), I conclude that Kihema is a symmetrical language, since both objects in ditransitive constructions exhibits 'primary object' syntactic properties (Bresnan and Moshi, 1990). Referring to Chapter 3, I reached a similar conclusion, namely, that all postverbal NPs in Kihema are true direct objects.

4.3.3. Applicatives derived from ditrinsitive verbs

Kihema attests simplex ditransitive verbs. Among the most used, there are *ha* 'give', *gura* 'buy', *egesa* 'teach', *tuma* 'send', etc. When the applicative morpheme is added to these verbs the resulting applied verb appears with three NP objects.

In Chapter 2.1, I showed that the applied verb *ha* 'give' is a ditransitive verb that takes two NPs in its basic form. It can take a third NP complement in the applicative construction. I repeat sentence (11) of Chapter 2 as (23b). Sentence (23a) is a non-applied construction whereas sentence in (22) the verb is used in the dative construction.

(22) Omuseija a-ka-h-a   omwaana omubazi.

     man   SP-PAST- give-ASP child   medicine

     'The man gave the medicine to the child.'

(23) a. Omuseija a-ka-h-a   omwaana omubazi habw' omukazi.
       man   SP-PAST- give-ASP child   medicine for   woman
       'The man gave for the woman the medicine to the child.'

    b. Omuseija a-ka-he-**er**-a   omukazi omwaana omubazi.
       man   SP-PAST- give-**APP**-ASP woman   child   medicine
       'The man gave the medicine to the child for the wife.'

All three objects in (23b) show properties of direct objects, given that Kihema is a
symmetrical language. Each NP in (23b) can passivize, cliticize, relativize, etc. All the
three objects are passivized in (24) and cliticized in (25).

(24) a. Omubazi gu-ka-h-**er-ebw**-a   omukazi omwaana n' omuseija.
       medicine SP-PAST- give-**APP-PASS**-ASP woman   child   by man
       'The medicine was given to the child for the woman by the man' (patient PASS)

    b. Omwaana a-ka-h-**er-ebw**-a   omukazi omubazi n' omuseija.
       child   SP-PAST- give-**APP-PASS**-ASP woman   medicine by man
       'The child was given the medicine for the woman by the man.'   (goal PASS)

    c. Omukazi a-ka-h-**er-ebw**-a   omwaana omubazi.
       woman   SP-PAST-give-**APP-PASS**-ASP child   medicine
       'The woman was given the medicine for the child.'   (ben. PASS)

(25) a. Omuseija a-ka-**mu**-he-er-a   omukazi   amubazi.
       man   SP-PAST-**OCP** -give-APP-ASP child   medicine
       'The man gave it the medicine for the woman.'   (goal cliticized)

    b. Omuseija a-ka-**mu**-he-er-a   omwaana amubazi.
       man   SP-PAST-**OCP** -give-APP-ASP child   medicine
       'The man gave the child the medicine for her.'   (ben. cliticized)

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c. Omuseija a-ka-**gu**-he-er-a   omukazi omwaana

    man   SP-PAST-**OCP**-give-APP-ASP woman   child

    'The man give it to the child for the woman'   (patient cliticized)

d. Omuseija a-ka-**gu**-**mu**-**mu**-he-er-a.

    man   SP-PAST-**OCP 3-OCP 2-OCP 1**-give-APP-ASP

    'The man gave it to it for her.'   (patient, goal and benefactive cliticized)

4.4. Types of Kihema applicative

In this section, I mainly discuss the meaning of different types of applicatives such as benefactive, dative, instrumental, locative, reason and purpose/motive.

4.4.1. The benefactive applicative

The sentence in (1) repeated here as (26) illustrates the meaning of benefactive applicatives and it shows that both the benefactive and theme/patient are direct objects:

(26) a. Omuseija a-ka-cumb-a   enyama habwa nyina.

       man   SP-PAST-cook-ASP meat   for   his-mother

       'The man cooked the meat for his mother.'

b. Omuseija a-ka-cumb-**ir**-a   nyina   enyama.

    man   SP-PAST-cook-**APP**- ASP   his-mother meat

    'The man cooked the meat for his mother.'

In sentence (26b) the first object is the benefactive, whereas the second object is the theme/patient. The benefactive applicative can be interpreted in two ways. The first interpretation in (26b) is that the man cooked the meat and the mother enjoyed the result. This means that she ate the meat that was cooked by the man for her. The second meaning reflects that the mother had to cook the meat, but for some unknown motif she

did not cook, therefore the man had to do the cooking on her behalf. The 'mother' is the beneficiary of *the action of cooking* not of the food. However, in English examples such as '*the man cooked his wife the food*,' only the first meaning applies.

Both the benefactive and the theme/patient are true direct objects. This means that both objects can become subjects in the passive constructions. They can be marked on the verb:

(27) a Omukazi a-ka-cumb-**ir**-**w**-a   enyama n' omuseija.
         woman SP-PAST-cook-APP- PASS-ASP meat   by man
         'The woman was cooked the meat for by the man.'   (applied object passivized)

     b. Enyama e-ka-cumb-**ir**-**w**-a   omukazi n' omuseija.
         meat SP-PAST-cook-APP- PASS-ASP woman   by man
         'The meat was cooked for the woman by the man.'   (basic object passivized)

     c. Omuseija a-ka-**gi**-**mu**-cumb-ir-a.
         man   SP-PAST- OCP2-OCP1-cook-APP-ASP
         'The man cooked it for her.'   (both basic and applied object cliticized)

4.4.2. The dative applicative

In Kihema, a few dative verbs can be used with an applicative morpheme *-ir-*. For instance the verb *tuma* 'send' is a dative verb in Kihema that can be used with or without the applicative morpheme. Sentences in (28) illustrate both cases:

(28) a. Omukeikuru a-ka-tum-a   omwidzukuru ekisembo.
         oldwoman SP-PAST- send-ASP grand-child   present
         'The old woman sent the grand-child the present.'

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b. Omukeikuru a-ka-tum-**ir**-a   omwidzukuru ekisembo.

old woman   SP-PAST- send-**APP**-ASP grand-child   present

'The old woman sent the present for the grand-child.'

Both objects in (28a) and (28b) can passivize and cliticize. Here, I apply direct object tests to (28b) only, since it constitutes the core study of this chapter:

(29) a. Omwidzukuru a-ka-tum-**ir-w**-a   ekisemba n'   omukeikuru.

grand-child   SP-PAST- send-**APP-PASS**-ASP present   by oldwoman

'The grand-child was sent the present by the old woman.' (app. obj. passivized)[1]

b. Ekisemba ki-ka-tum-**ir-w**-a   omwidzukuru n' omukeikuru.

present   SP-PAST- send-**APP-PASS**-ASP grand-child   by oldwoman

'The present was sent to the grand-child by the old woman.' (bas.obj. passivized)

c. Omukeikuru a-ka-**ki**-tum-**ir**-a   omwidzukuru.

old-woman SP-PAST- OCP-send-**APP**-ASP grand-child

'The old woman sent it to the grand-child.'   (bas. obj. cliticized)

d. Omukeikuru a-ka-**mu**-tum-**ir**-a   ekisembo.

old-woman SP-PAST- OCP-send-**APP**-ASP present

'The old woman sent him the present.'   (app. obj. cliticized)

e. Omukeikuru a-ka-**ki-mu**-tum-**ir**-a.

old-woman SP-PAST- OCP2-OCP1-send-**APP**-ASP

'The old woman sent it to him.'   (both bas. obj and app. obj. cliticized)

4.4.3. The instrumental applicative

Considering the examples of instrumental applicatives in Subsection 4.2.2 again, recall

that the instrumental morpheme -is- is used for both applicatives and causatives. In some cases a verb with the morpheme -is- can be interpreted both as causative and instrumental applicative, whereas in other contexts, only one meaning is available. For example, (30a) can be translated as both a causative and an instrumental applicative. In contrast, the applicative is the only plausible reading of (30b), whereas only the causative reading makes sense in (30c), unless the sentence is used in a fairy tale whereby the cow is an instrument that Peter uses to drink water:

(30) a. Ananiya a-ka-lim-**is**-a   omsiri emfuka.
         Ananiya SP-PAST plough-APP-ASP field   hoe
         'Ananiya plouged the field with the hoe.'
         'Ananiya made the hoe plough the field.'

    b. Petero a-ka-nyw-**is**-a   omunwa ameizi.
        Peter SP-PAST- drink-APP-ASP mouth   water
        'Peter drank water with the mouth.'
        # 'Peter made the mouth drink water.'

    c. Petero a-ka-nyw-**is**-a   ente   ameizi.
        Peter SP-PAST- drink-APP-ASP cows   water
        # 'Peter drank water with the cow.'[2]
        'Peter made the cows drink water.'

In Kihema instrumentals, both objects are direct objects. I use sentence (31) by way of illustration, to which I apply the passivization and object marking tests:

---

(31)   Kaka a-ka-tem-**es**-a   endyamuti ekiti.

Kaka SP-PAST- chop-**APP**-ASP tree   axe

'Kaka chopped the tree with the axe.'

(32) a. Ekiti ki-ka-tem-**es**-**w**-a   endyamuti na Kaka.

tree SP-PAST- chop-**APP**-**PASS**-ASP axe   by Kaka

'The tree was chopped with the axe by Kaka.'   (bas. obj. passivized)

   b. Endyamuti e-ka-tem-**es**-**w**-a   ekiti na Kaka.

axe   SP-PAST- chop-**APP**-**PASS**-ASP tree by Kaka

'The axe was used to chop the tree by Kaka.'   (app. obj. passivized)

   c. Kaka a-ka-**ki**-tem-**es**-a   endyamuti.

Kaka SP-PAST- OCP-chop-**APP**-ASP axe

'Kaka chopped it with the axe.'   (bas. obj. cliticized)

   d. Kaka   a-ka-**gi**-tem-**es**-a   ekiti.

Kaka SP-PAST- OCP-chop-**APP**-ASP tree

'Kaka chopped the tree with it.'   (app. obj. cliticized)

   e. Kaka e-ka-**gu**-**ki**-tem-**es**-a.

Kaka SP-PAST- OCP2-OCP1-chop-**APP**-ASP

'Kaka chopped it with it.'   (both app. obj. and bas. obj. cliticized)

Again, the examples show that Kihema is a symmetrical language.

4.4.4. The locative applicatives

As was mentioned in section 4.2.3, -*ho, -mu* and -*yo* are locative morphemes. The locative morphemes -*ho* and -*mu* can appear in the same construction with the NP that they refer to, whereas the morpheme -*yo* cannot. Therefore, -*yo* cannot be analyzed as a

locative applicative morpheme. Rather, *-yo* is a prepositional proform which replaces a whole PP.

Here, I show that the applied objects (locative arguments) are direct objects by testing them, using the properties of direct object as developed in Baker (1988). Once more, I consider two tests (cliticization and passivization):

(33) a. Yona a-ka-rar-a   mu   motoka.

     Yona SP-PAST- sleep-ASP in   car

     'Yona slept in the car.'

   b. Yona a-ka-rar-a-**mu**   emotoka.

     Yona SP-PAST- sleep-ASP-**APP** car

     'Yona slept in the car.'

(34) a. Yona a-ka-**gi**-rar-a-**mu.**

     Yona SP-PAST-**OCP**-sleep-ASP-**APP**

     'Yona slept in it.'

   b. Emotoka e-ka-rar-**w**-a-**mu**   Yona.

     car   SP-PAST- sleep-**PASS**-ASP-**APP** Yona

     'The car was slept in by Yona.'

(35) a. Enzangu e-ka-nyar-a   ha meza.

     cat   SP-PAST- urinate-ASP on table

     'The cat urinated on the table.'

   b. Enzangu e-ka-nyar-a-**ho**   emeza.

     cat   SP-PAST- urinate-ASP-**APP** table

     'The cat urinated on the table.'

(36) a. Enzangu e-ka-**gi**-nyar-a-**ho.**

    cat   SP-PAST-**OCP**-urinate-ASP-**APP**

    'The cat urinated on it.'

    b. Emeza e-ka-nyar-**w**-a-**ho**   enzangu.

        table SP-PAST- urinate-**PASS**-ASP-**APP** cat

        'The table was urinated on by the cat.'

Besides, -*mu* and -*ho* can derive ditransitive applicatives like in (37) and (38):

(37) a. Bazarwa a-ka-gur-a   ebyenzu mu akatale.

       Bazarwa SP-PAST- buy-ASP bananas in   market

       'Bazarwa bought the bananas in the market.'

    b. Bazarwa a-ka-gur-a-**mu**   akatale ebyenzu.

       Bazarwa SP-PAST- gur-ASP-**APP** market bananas

       'Bazarwa bought the bananas in the market.'

(38) a. Zefania   a-ka-tek-a   esapeho ha meza.

       Zephania SP-PAST- put-ASP hat   on table

       'Zefania put the hat on the table.'

    b. Zefania a-ka-tek-a-**ho**   emeza esapeho.

       Zefania SP-PAST- put-ASP-**APP** table   hat

       'Zefania put the hat on the table.'

Like in Kinyarwanda (Zeller and Ngoboka, 2005: 6), only the applied objects in (37b) and (38b) are genuine direct object that can cliticize, passivive, etc. This is due to the assumption that only structural case is absorbed in passives and that only objects with structural case can be realized as object markers.

(39) a. Bazarwa a-ka-**ka-bi**-gur-a-**mu.**

Bazarwa SP-PAST-OCP2-OCP1-gur-ASP-APP

'Bazarwa bought them in it.'   (both app. and bas. obj. cliticized)

b. Akatale ka-ka-gur-**w**-a-**mu**   ebyenzu na Bazarwa

market SP-PAST- buy-PASS-ASP-APP bananas by Bazarwa

'The bananas were bought in the market by Bazarwa.'   (app. obj. passivized)

c. Ebyenzu bi-ka-gur-**w**-a-**mu**   katale na Zefania.

bananas SP-PAST- buy-PASS-ASP-APP market by Zefania

'The bananas were bought in the market by Zefania.'

(40) a. Zefania a-ka-**gi-gi**-tek-a-**ho.**

Zefania SP-PAST-OCP2-OCP1-put-ASP-APP

'Zefania put it on it.'   (both bas. obj. and app. obj. cliticized)

b. Emeza e-ka-tek-**w**-a-ho   esapeho na Zefania.

table   SP-PAST- put-PASS-ASP-APP hat   by Zefania

'On the table the hat was put.'   (app. obj. passivized)

c. *Esapeho e-ka-tek-**w**-a-**ho** meza na Zefania.

hat SP-PAST- put-PASS-ASP-APP table by Zefania

'The hat was put on the table by Zefania.'

In the data above, one may argue that the applicative morphemes *-mu* and *-ho* are phonologically similar to the preposition, which supports the incorporation approach that I provide in Section 4.5.

In Kihema, both the applicative morpheme *-ir-* and the instrumental applicative *-is-* can co-occur with the locative applicatives *-ho* and *-mu:*

(41) a. Petero a-ka-zin-ir-a   mu kanisa.

Peter SP-PAST- sing-APP-ASP in   church

'Peter sang in the church.'

b. Petero a-ka-zin-**ir**-a-**mu**   ekanisa.

Peter SP-PAST- sing-**APP**-ASP-**APP** church

'Peter sang in the church.'

(42) a. Embwa a-ka-ly-**er**-a   ha sahani.

dog   SP-PAST- eat-**APP**-ASP on plate

'The dog ate from the plate.'

b. Embwa e-ka-ly-**er**-a-**ho**   esahani.

dog   SP-PAST- eat-**APP**-ASP-**LOC** plate

'The dog ate from the plate.'

As one may notice, I have restrained myself by using only 'transitivized' verbs (Section 4.3.1) resulting from applicative morpheme *-ir-* being attached to the intransitives *zina* 'to sing' and *lya* 'to eat.' In the constructions of these kinds, all postverbal NPs can cliticize and passivize.

(43) a. Petero a-ka-**gi**-zin-**ir**-a-**mu**.

Peter SP-PAST-**OCP**-sing-**APP**-ASP-**LOC**

'Peter sang in it.'   (cliticization)

b. Ekanisa e-ka-zin-**ir**-**w**-a-**mu**   na   Petero.

church SP-PAST-sing-**APP**-**PASS**-ASP-**LOC** with Peter

'The church was sung in by Peter.'   (passivization)

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(44) a. Embwa e-ka-**gi**-ly-**er**-a-**ho.**

       dog   SP-PAST-**OCP**-eat-APP-ASP-LOC

       'The dog ate on it.'   (cliticization)

   b. Esahani e-ka-ly-**er-w**-a-**ho**   n' embwa.

       plate   SP-PAST- eat-**APP-PASS**-ASP-**LOC** by dog

       'The plate was eaten on by the dog.'   (passivization)

However, instrumental NP is optional. Its presence is not obligatory as in the case of the applied object. The instrumental NP can be omitted without affecting the general meaning of the sentence.

(45) a. Petero a-ka-zin-a   mu kanisa (n'engunga).

       Peter SP-PAST- sing-ASP in church (with trumpet)

       'Peter sang in the church (with the trumpet).'

   b. Petero a-ka-zin-**is-ir**-a-**mu**   ekanisa (engunga).

       Peter SP-PAST- sing-**INST-APP**-ASP-**APP** church (trumpet)

       'Peter sang in the church (with the trumpet).'

(46) a. Embwa e-ka-ly-a   ha sahani (n'ekigiko).

       dog   SP-PAST- eat-ASP on plate (with spoon)

       'The dog ate from the plate (with the spoon).'

   b. Embwa a-ka-l-**is-ir**-a-ho   esahani (ekigiko).

       dog   SP-PAST- eat-**INST-APP**-ASP-**APP** plate   (spoon)

       'The dog ate from the plate with the spoon.'

The applied object is a direct object, since it can be marked on the verb (cliticization) and can become the subject in the passive construction:

(47) a. Petero a-ka-**gi**-zin-**is-ir**-a-**mu.**

Peter SP-PAST-OCP-sing-INST-APP-ASP-APP

'Peter sang in it with (the trumpet).'   (app. obj. cliticized)

b. Ekanisa e-ka-zin-**is-ir-w**-a-**mu**   na Petero.

church SP-PAST- sing-INST-APP-APP-PASS-ASP-APP by Peter

'Peter sang in the church (with the trumpet).'   (app. obj. passivized)

(48) a. Embwa a-ka-**gi**-l-**is-ir**-a-**ho.**   (ekigiko)

plate   SP-PAST-OCP-eat-INST-APP-ASP-APP (spoon)

'The dog ate from it (with the spoon).'   (app.obj. cliticized)

b. Esahani a-ka-l-**is-ir-w**-a-**ho**   (ekigiko) n'   embwa.

dog   SP-PAST-OCP-eat-INST-APP-PASS-ASP-APP (spoon)   with dog

'The dog ate from it (with the spoon).'   (app. obj. passivized)

4.4.5. Reason applicatives

In Kihema, reason can be expressed by means of a sentence or a PP introduced by the conjunction/ preposition *habwokuba* 'because (of)':

(49) a. Abaana ba-gonz-a   embombo habwokuba zi-nur-a.

children S/PRES-like-ASP sweets   because   S/PRES-sugar-ASP

'The children like sweets because of sweetness.'

b. Abaana ba-gonz-a   embombo habw' obunuzi.

children S/PRES-like-ASP sweets   for   sweetness

'The children like sweets because of sweetness.'

Alternatively, reason can be expressed in an applicative construction with the applicative morpheme -*ir*-:

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(50)   Abaana ba-gond-**ez**-a   embombo obunuzi.[3]

       children sp-past- like-**app**-asp sweet   sweetness

       'The children like sweets for sweetness.'

Again, both applied object and the basic object have the characteristics of a direct object (cliticization and passivization), as described in (51) and (52):

(51) a. Abaana ba-**zi**-gond-**ez**-a   obunuzi.

        children s/pres-**ocp**- like-**app**-asp sweetness

        'The children like them for sweetness.'   (app. obj. cliticized)

    b. Abaana ba-**bu**-gond-**ez**-a   embombo.

        children s/pres-**ocp**- like-**app**-asp sweets

        'The children like sweets for it.'   (bas. obj. cliticized)

    c. Abaana ba-**zi**-**bu**-gond-**ez**-a.

        children s/pres-**ocp2-ocp1**-like-**app**-asp

        'The children like them for it.'   (both app. obj. and bas. obj. cliticized)

(52) a. Embombo zi-gond-**ez**-**w**-a   obunizi   n' abaana.

       sweets   s/pres- like-**app**-**pass**-asp sweetness by children

       'The sweets are liked by the children for the sweetness.'   (app. obj. passivized)

    b. Obunuzi bu-gond-**ez**-**w**-a   embombo n' abaana.

       sweetness s/pres-like-**app**-**pass**-asp sweets   by children

       'The sweetness is liked by the children for the sweets.'

       Lit: 'The sweetness is the sweets liked for by the children.' (bas. obj. passivized)

---

[3] Kihema verbs like *gonza* 'like,' *banza* 'start' undergo phonological change when the applicative morpheme is added to them. First, the consonant *-z-* in the verb radical changes into *-d-*. Second, the consonant of the applicative morpheme changes into *-z-*. Thus, *gondeza* 'like for,' *bandiza* 'start for.' Recall that *-o-* changes into *-e-* and *-a-* into *-i-*.

4.4.6. Purpose/motive applicatives

Like in Kinyarwanda (Ngoboka, 2005), motive/purpose is expressed in Kihema with the conjunction *kugira ngu* 'in order that,' (53a). The motive/purpose can also be expressed by means of the preposition *habwa,* meaning 'for' (53b). However, purpose or motive can also be expressed in an applicative construction by means of the applicative morpheme *-ir-,* (53c):

(53) a. Omutayeri a-ka-bazir-a   orugoyi kugira ngu   a-tung-e esente.

       tailor   SP-PAST-sew-ASP cloth   in order that SP-get-FV money

       'The tailor sewed the cloth in order to get the money.'

    b. Omutayeri a-ka-bazir-a   orugoyi habwa esente.

       tailor   SP-PAST-sewed-ASP cloth   for   money

       'The tailor sewed the cloth for the money.'

    c. Omutayeri a-ka-bazir-**ir**-a   esente orugoyi.

       tailor   SP-PAST-sew-**APP**-ASP money cloth

       'The tailor sewed the cloth for the money.'

The postverbal NPs in (53c) behave like direct objects, since they can be subjects in the passives; they can cliticize to the verb as object markers:

(54) a. Omutayeri a-ka-**zi**-bazir-**ir**-a   orugoyi.

       tailor   SP-PAST-**OCP**-sew-**APP**-ASP cloth

       'The tailor sewed the cloth for it.'   (app. obj. cliticized)

    b. Omutayeri a-ka-**ru**-bazir-**ir**-a   esente.

       tailor   SP-PAST-**OCP**-sew-**APP**-ASP money

       'The tailor sewed it for the money.'   (bas. obj. cliticized)

c.   Omutayeri a-ka-**ru-zi**-bazir-**ir**-a.

tailor   SP-PAST- **OCP2-OCP1**sew-**APP**-ASP

'The tailor sewed it for it.'   (both app. obj. and bas. obj.cliticized)

(55) a.   Orugoyi ru-ka-bazir-**ir-w**-a   esente n' omutayeri.

cloth   SP-PAST- sew-**APP-PASS**-ASP money by tailor

'The cloth was sewn for the money by the tailor.'   (bas. obj. passivized)

b.   Esente zi-ka-bazir-**ir-w**-a   orugoyi n' omutayeri.

money SP-PAST- sew-**APP-PASS**-ASP cloth   by tailor

'For the money the cloth was sewn by the tailor.'   (app. obj. passivized)

4.5.   Kihema applicative analysis

In this section I discuss the analysis of ditransitive applicatives presented in Baker (1988, 1992). Baker's (1988) analysis of applicatives is based on his Theory of Incorporation, already outlined in Chapter 1 and Chapter 3. Baker argues that the non-applicative sentence in (56a) and the corresponding applicative in (56b) are derived from similar D-Structure:

(56) a.   Kabwa a-ka-tem-a   obunyansi n' omuhyo.

Kabwa SP-PAST- cut-ASP grass   with knife
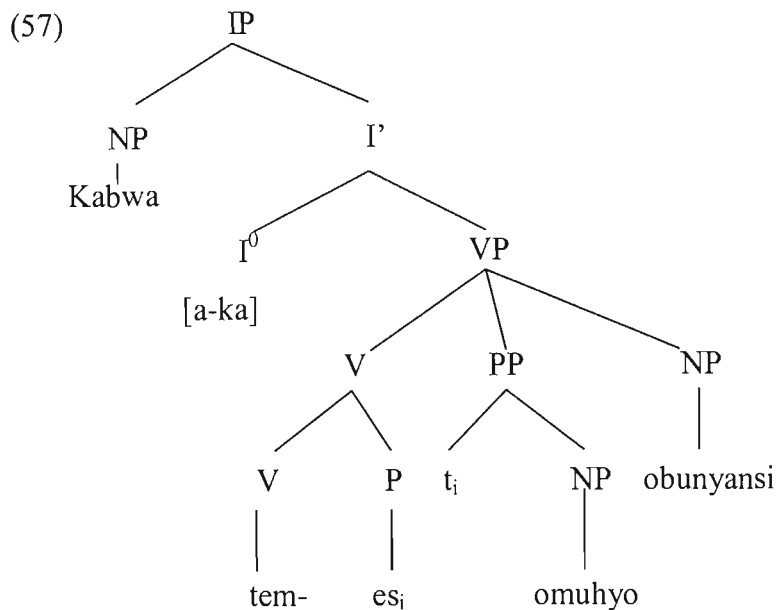
'Kabwa cut the grass with the knife.'

b.   Kabwa a-ka-tem-**es**-a   omuhyo obunyansi.

Kabwa SP-PAST- cut-**APP**-ASP knife   grass

'Kabwa cut the grass with the knife.'

According to Baker, the instrument *omuhyo* 'knife' is the complement of a preposition in both examples. Whereas the preposition *na* 'with' in (56a) is a free standing word, in

(56b), the preposition is the applicative affix and as such a bound morpheme. Therefore, this applicative preposition must incorporate into the verb:

(57)

```
                      IP
                    /    \
                  NP      I'
                  |      /  \
               Kabwa   I⁰     VP
                      [a-ka]  / | \
                           V'  PP   NP
                          / \  / \   |
                         V   P tᵢ NP obunyansi
                         |   |    |
                       tem- esᵢ  omuhyo
```

Importantly, as a result of incorporation, the instrument NP *omuhyo* 'knife' can no longer receive case. In this regard, Baker (1988: 250) states the following reason: " [o]nce the preposition has moved, the NP cannot receive case from it, since traces of X^0s in general neither assign case themselves, nor transmit it from their antecedent". However, the stranded NP receives case by virtue of the GTC: a lexical category, which has an item incorporated into it, governs everything that the incorporated item governed in its original structure position, (see Chapter 1 and Chapter 3). This means that the complex applicative verb governs the instrument, since the PP is no longer a barrier. Therefore, the applicative verb assigns structural case to the instrument. This explains the observation, discussed in the preceding sections, that the applied object in Kihema applicatives has properties of a direct object:

(58) a. Omuhyo gu-ka-tem-**es-w**-a   obunyansi na Kabwa.

      knife   SP-PAST-cut-**APP-PASS**-ASP   grass   by Kabwa

      'The knife was used to cut the grass by Kabwa.'   (app. obj. passivized)

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b. Kabwa a-ka-**gu**-tem-**es**-a   obunyansi.

Kabwa SP-PAST- OCP-cut-APP-ASP grass

'Kabwa cut the grass with it.'   (app. obj. cliticized)

The question raised by the discussion in this chapter concerns the direct object properties of the basic object (theme). As was shown with numerous examples, the basic object of Kihema applicatives can be passivized and object-marked as well:

(59) a. Obunyansi bu-ka-tem-**es-w**-a   omuhyo na Kabwa.

grass   SP-PAST- cut-APP-PASS-ASP knife   by Kabwa

'The grass was cut with the knife by Kabwa.'   (bas. app. passivized)

b. kabwa a-ka-**bu**-tem-**es**-a   omuhyo.

Kabwa SP-PAST-**OCP**-cut-APP-ASP knife

'Kabwa cut it with the knife.'   (bas. obj. cliticized)

Since the theory of incorporation states that structural case is assigned to the applied object, it is not clear how the basic object receives structural case in Kihema applicatives. Interestingly, Baker shows that the theme in languages such as Chichewa, in which verbs can only assign structural case to one object, can no longer receive structural case in applicative constructions and must be marked with inherent case. Therefore, only the applied object, but not the theme, can be passivized in Chichewa benefactive applicatives as shown in the sentences below:

(60) a. Kalulu a-na-gul-ir-a   *mbidzi* nsapato.

hare   SP-PAST- buy-APP-ASP **zebras** shoes

'The hare bought shoes for the zebras.'   (Chichewa; Baker, 1988: 247)

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b. ***Mbidzi*** zi-na-gul-ir-idw-a   nsapato (ndi kalulu).

   zebras SP-PAST- buy-APP-ASP shoes   by hare

   'The zebras were bought shoes for by the hare.'   (app. obj. passivized)

c. *Nsampato zi-na-gul-ir-idw-a   mbidzi (ndi kalulu).

   shoes   SP-PAST- buy-APP-PASS-ASP zebras   by hare

   'The shoes were bought for the zebras by the hare.'

   (Chichewa; Baker, 1988: 248)

As Kihema clearly differs from Chichewa in that the theme in applicatives can also be passivized. The conclusion that must be drawn from examples such as (60a-b) is that in Kihema, verbs may assign two structural cases. Therefore, the theme can still be marked with structural case from the verb. In this regard, Kihema therefore behaves like Kinyarwanda, for which it has been argued as well that verbs can assign two structural cases (Jaeggli, 1986; Baker 1988).

To sum up, in this chapter, I have discussed the construction of applicatives in Kihema. I started by giving a thorough definition of applicatives, which was followed by the illustration of the different types of morphemes that attest applicative meaning in Kihema. It was shown that the applicative morpheme *-ir-* is the most productive one, in that it can be used with different types of verbs and can increase the number of objects of the verb. It was also noted that applicative morphemes have various meanings (benefactive, dative, instrumental, locative, reason and purpose/motive). Finally, I discussed the analysis of applicatives using the theory of preposition incorporation presented in Baker (1988, 1992), and I contrasted the properties of Kihema to those of Chichewa. I data provide further evidence for the hypothesis that Kihema is a symmetrical language in that any Kihema ditransitive applicative verb has the ability to assign two structural cases to two postverbal NPs. In contrast, Chichewa ditransitive verbs assign only one structural case to the applied object. Chichewa is therefore an asymmetrical language.

Chapter 5: The passive construction in Kihema

In this chapter, I discuss the passive construction in Kihema and relate it to the general properties of the passive construction attested by studies in Government and Binding theory. In Section 5.1, I give a general definition of the passive and its properties. In Section 5.2, I examine the formation of the passive in Kihema in the light of these properties. In the last section, I apply the passive theories developed in Jaeggli (1986) and Baker, Johnson and Roberts (1989) to the construction of the passive in Kihema.

5.1. Defining the passive

The passive construction is one of the grammatical changing function processes that have received much attention from different linguists such as Baker (1988), Baker, Johnson and Roberts (1989), Chomsky (1981), Jaeggli (1986), Siewierska (1984) and many others. However, there have been controversies in the analysis of the passive. This is partly due to different realizations of the passive construction in different languages of the world. For instance, the passive in English can only be derived from transitive verbs, whereas in German, the passive can also be derived from an intransitive active verb (the so-called 'impersonal passive,' see below). Various attempts have been made to incorporate these crosslinguistic differences within a general theory of the passive.

Generally speaking, in the passive construction, the object of an active sentence becomes the subject of the corresponding passive sentence, and the subject is realized in an oblique PP introduced by the preposition *by* or its equivalent. In many languages, the passive morpheme is attached to the verb. In the Principles-and-Parameters theory, these aspects of the passive are derived from two basic properties associated with a passive construction: (i) the base verb loses its ability to assign accusative case, and (ii) it no longer assigns an external thematic role to the subject position. Therefore, the D-Structure of a passive sentence like (1b) has the internal argument of the verb still inside the VP, but it cannot receive case there, given the assumption that the passive verbs

absorb structural case.[1] At the same time, the subject position (SpecIP) is empty, since no theta role is assigned to it, (1a):

(1)   a.   [$_{IP}$___ was_ [$_{VP}$ kicked [the ball]]]

        b.   [$_{IP}$ _[the ball]$_i$_was_ [$_{VP}$ kicked t$_i$]]

According to case filter (Chapter 1.2.2), all overt NPs must be assigned case. Therefore, the former direct object moves to the syntactic subject position, where it receives nominative case, (1b). (The former thematic subject can only be realized inside an optional adjunct PP).

As I will show below, Jaeggli (1986) and Baker, Johnson and Roberts (1989) assume that the two basic properties (i) and (ii) follow from the presence of the passive morphology in (1). They claim that the passive morpheme (in Infl) absorbs the structural case of the verb and the external thematic role (see Section 5.3 for more details).

5.2.   The properties of the Kihema passive

In this section I discuss the properties of the formation of passives in Kihema and I test whether or not Kihema attests impersonal passives, a construction which is found in languages such as German and Dutch.

5.2.1. The passive construction in Kihema

In passive constructions, Kihema uses the morpheme -w- as the passive morpheme which is attached to the verb before the aspect marker. As in passives in general, the object of the active base verb becomes the subject of the passivized verb. The former subject can optionally be realized in a PP introduced by the preposition na.

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[1] Recall that in previous chapters, passivization was used as an important test to determine whether an object is a direct object, i.e. has structural case. This follows from the fact that only structural objective

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(2) a. Omwaana a-ka-sar-a   omugoha

   child   SP-PAST- cut-ASP rope

   'The child cut the rope'

   b. Omugoha gu-ka-sar-**w**-a   n' omwaana

   rope   SP-PAST- cut-**PASS**-ASP by child

   'The rope was cut by the child'

(3) a. Ekikere ki-ka-teer-a   embeba

   frog   SP-PAST- hit-ASP rat

   'The frog hit the rat'

   b. Embeba e-ka-teer-**w**-a   n' ekikere

   rat   SP-PAST- hit-**PASS**-ASP by frog

   'The rat was hit by the frog'

If a causative verb that contains the Kihema causative morpheme *-is-* is passivized, the cluster *-ib-* co-occurs with the Kihema passive morpheme in (4b) and (5b). This means that *-ib-* appears with the passive verbs in the passive construction. The vowel *-i-* in *-ib-* changes according to the vowel in the verb stem (vowel harmony):

(4) a. Omuseija a-ka-tin-**is**-a   omwaana

   man   SP-PAST- be/scared-CAUS-ASP child

   'The man made the child scared'

   b. Omwaana a-ka-tin-**is-ibw**-a   n' omuseija

   child   SP-PAST- be/scared-CAUS-PASS-ASP by man

   'The child was made scared by the man'

---

case can be absorbed in passives.

(5) a. Obugenyi bu-ka-dzwah-**y**-a   ebinkorokoma

      party   SP-PAST- be/tired-CAUS-ASP lizards

      'The party made the lizards tired'

  b. Ebinkorokoma bi-kadzwah-**is-ibw**-a   n' obugenyi

      lizards   SP-PAST- be/tired-CAUS-PASS-ASP by party

      'The lizards were made tired by the party'

The subject NP of the passive sentence *omugoha* 'rope' in (2b) corresponds to the internal argument of the active sentence in (2a). This means that the NP *omugoha* in (2a) has been assigned its theta-role under government by the verb -*sara* 'cut,' exactly as in (2b), which implies that at the level of D-Structure, it must have been the complement of the verb inside the VP, but has moved to the subject position in (2b). The external argument *omuseija* 'man' of the active sentence has become the oblique PP introduced by *na* in (2b). This preposition assigns oblique case to the NP *omuseija* 'man.' The morpheme -*w*- is the passive marker in Kihema.

This construction is what Siewierska (1984) labels "personal passives", since it responds to the three canonical properties of passive formation (verb marking, NP-movement and by-phrase). As was shown in Chapters 2, 3 and 4, personal passives in Kihema are also attested with verbs having more than one postverbal NP object. In other words, a Kihema passive can be constructed with all postverbal NPs. This means that if a verb appears with two postverbal NPs, both NPs can passivize in Kihema.

5.2.2. Impersonal passives in Kihema

The standard assumptions about the passive predict that only verbs that assign objective structural case may passivize, since structural case is absorbed in passives. Intransitive (unergative and unaccusative) verbs should therefore fail to passivize. Although this seems to be the case in English, in languages such as German, Dutch (Jaeggli, 1986),

Welsh (Perlmuter and Postal 1984), and Polish (Keenan and Timberlake 1985), intransitive verbs can passivize. (6a-b) and (7) are examples from German and Dutch:

(6) a. Es wurde getanzt.

      It was danced.

      'There was dancing.'

    b. Es wurde bis spät in die Nacht getrunken.

       It was till late in the night drunk.

       'Drinking went on till late at night.'   (German; Jaeggli, 1986: 595)

(7)   Er wordt gefloten.

       It was whistled.

       'There was whistling.'   (Dutch; Jaeggli 1986: 595)

In the examples in (6) and (7), the external theta role has been absorbed. However, since there is no internal argument which has to move to the subject position for case reasons, this position is filled with an expletive. In order to explain why some languages allow passives to be formed from intransitive verbs, Jaeggli (1986: 595) argues that in the relevant languages, (German and Dutch) unergative verbs such as *tanzen* 'dance' in (6) can assign structural objective case.

Now let us consider the Kihema example in (8):

(8) a. Yohaana a-ka-kor -a.

     John   SP-PAST- work-ASP

     'John worked.'

    b. ***Ha**-ka-kor-**w**-a

     It SP-PAST- work-PASS-ASP

     'It was worked.'

This sentence is ungrammatical in Kihema, since the passive morpheme -*w*- receives an external theta role. The expletive *ha* 'it' occupies the position which is a non-theta-position. The passive morphology has absorbed the objective case; as a result the internal argument *Yohaana* remains caseless and would have to move to subject position so as to receive nominative case. This movement is impossible since the expletive *ha* fills this position, therefore *Yohaana* cannot move, and the case filter is violated.

From the example above, Kihema does attest impersonal passive. This follows from the theories of impersonal passive developed in Jaeggli (1986) and Baker, Johnson and Roberts (1989).

5.3. Jaeggli's (1986) and Baker, Johnson and Roberts's (1989) theories of the passive

In this last section of this chapter, I examine Kihema passives following the theory of the passive developed in Jaeggli (1986) and Baker, Johnson and Roberts (1989).

All of the above authors assume that in passive constructions, it is the passive morpheme that receives the theta-role and accusative case that are apparently absorbed in the passive. In other words, the external theta-role and accusative case are not really absorbed in passives, but can no longer be assigned to the internal argument (case) and SpecIP (external theta-role), because they are assigned to the passive morpheme. According to Baker, Johnson and Roberts (1989), the passive morpheme is a clitic (i.e. a weak pronominal element) associated with the Infl-position. As a pronominal clitic, the passive morpheme needs a theta-role and structural case. Since the passive clitic is in Infl at D-Structure, it is external to VP. Therefore, the theta-role assigned to the passive morpheme must be the external theta-role of the verb. However, since the passive argument is then attached to the verb in VP at S-Structure, only the structural objective case of the verb can be assigned to the passive morpheme at this level. This means that the two properties associated with passive constructions (case and theta role absorption)

do not have to be stipulated as part of the passive process, but follow from the presence of passive morphology.

Here, I demonstrate the theory above using the English examples in (9) and (10):

(9)   John kicked the ball.

(10)   The ball was kicked by John.

In (9), the case filter is satisfied, since the verb assigns structural case to the internal argument *the ball*. The Theta criterion is satisfied as well, since each theta-role associated with the predicate *kick* is assigned to an argument: the NP *John* is assigned the external theta-role agent and the direct object NP *the ball* is assigned the internal theta role patient.

Passivization has taken place in (10). This process affects the morphology of the verb and the position of arguments in the structure. This means that the agent of the action is no longer expressed by an NP in the subject position (A-position). Rather, according to the theory outlined above, the external theta-role is assigned to the passive morpheme in Infl. As a result, SpecIP is a non-theta position. Furthermore, since the structural case assigned to the internal argument in (a) is now assigned to the passive argument, the object NP fails to be case marked. The only possibility for the sentence to be grammatical is to allow the complement of the verb to receive case in another position in the sentence. The ultimate candidate is the SpecIP position to which nominative case is assigned by finite Infl. Recall that this position is available in the passive sentences because the external argument of the predicate is not assigned to this position in the passive, but to $Infl^0$. Thus, NP-preposing is forced by case theory (Jaeggli, 1986: 595) and the object NP *the ball* moves to the subject position. After the NP has received nominative case, the verbal case remains free to be associated with the passive suffix, and the passive morpheme absorbs the verbal case after being attached to the verb.

Note that a sentence like (11) is correctly predicted to be ungrammatical according to this theory:

(11)   *It was eaten an apple.

Both the Kihema example in (9) and the English sentence in (10) are ungrammatical, since the passive morphology has been assigned the external theta role, and SpecIP is a non-theta-position. In (11), this position has been filled with an expletive (the empty pronominal DP *it*). Since the passive morphology also absorbs the objective case, the internal argument *an apple* remains caseless and would have to move to subject position (NP proposing) to get case. However, since the NP *it* occupies this position, *an apple* cannot move, and the case filter is violated.

The theory predicts that passive constructions such as (11) with internal arguments that do not need case are grammatical. This prediction is borne out in the following:

(12)   It was believed that the conclusion was false

In (12), the internal argument is a sentence (CP), and CPs do not need case. Therefore, the CP can remain in situ, so there is no need for movement, and the expletive *it* can fill SpecIP. The structural verbal case of *believe* and its external theta role are absorbed by the passive morpheme.

A problem raised by this theory concerns the *by*-phrase. In passive examples with a *by*-phrase, the Agent-theta-role does not seem to be absorbed by the passive clitic in Infl, but is assigned to the complement of the case-assigning preposition *by*. Baker, Johnson and Roberts (1989:223) solve this problem by assuming that constructions with a "doubled" argument and the passive morpheme are comparable to clitic doubling constructions found in Romance languages:

(13)   Le$_i$ duele la   cabeza a Juan$_i$.

       Him hurts the head   to Juan.

       'Juan has a headache.'   (Spanish; Borer 1984: 193)

In the same way that the internal argument of the verb in (13) can be assigned to a clitic and doubled by a full NP inside a PP, the NP inside a by-phrase in a passive doubles the theta role assigned to the clitic in Infl, the passive morpheme.

The theory developed by Jaeggli (1986) and Baker, Johnson and Roberts (1989) can straightforwardly be applied to Kihema, since the passive morpheme is a productive affix -*w*- in this language:

(14) a.   Enzoka a-ka-rum-a   Kafwabusa.

          snake SP-PAST- bite-ASP Kafwabusa

          'The snake bit Kafwabusa.'

     b.   Kafwabusa a-ka-rum-**w**-a   n' enzoka

          Kafwabusa SP-PAST- bite-PASS-ASP by snake

          'Kafwabusa was bitten by the snake.'

We can therefore assume that -*w*- is a pronominal Infl-element which receives case and the external theta-role. As a consequence, SpecIP is a non-theta-position in Kihema and the internal argument *Kafwabusa* in (14b) has moved to SpecIP to receive nominative case. This means that the steps of the passive transformation that underlies (14) are the same as in (10).

Examples such as (15) are grammatical in Kihema:

(15)   **Ha**-ka-rum-w-a   Kafwabusa.

       It SP-PAST- bite-ASP Kafwabusa

       'It was bitten Kafwabusa.'

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Apparently, no NP-movement to SpecIP is necessary; instead the expletive *ha* occupies SpecIP. One can presume that Kihema allows the transfer of nominative case to an NP inside VP. This possibility is also attested in passive constructions from other languages. In the German passive in (16), for example, the nominative NP *das Buch*, 'the book', follows the dative NP *dem Mann*, 'the man', and therefore has clearly remained inside its base position in the VP. Nevertheless, it can receive nominative case assigned by Infl:

(16)   [...] weil   dem Mann   das Buch   gegeben wurde.
        [...] because the man-DAT the book-NOM given   was.
        'Because the book was given to the man.'

The possibility of assigning nominative case to an NP inside VP is therefore not unusual. Furthermore, it is also attested in Kihema active constructions:

(17)   **Ha**-ka-kor-a   Petero.
        it- PAST-work-ASP Peter.
        'Peter worked.'

Sentence in (17) is common in a number of Bantu languages (see, for example, Demuth and Mmusi (1997) for Sotho and Chichewa and Louwrens (1981) for Northern Sotho) and in which a postverbal subject NP co-occurs with an expletive in SpecIP. Given that nominative case assignment to an NP inside VP is a possibility in Kihema, the grammaticality of examples such as (17) is not surprising.

To sum up this chapter, I have discussed the general properties of the analysis of the passives as highlighted in the GB-theory. I have shown that only the structural case of genuine direct objects could be absorbed. This explains why passivization is one of the tests for direct objecthood. I explained that passives in Kihema are also formed according to the general properties of the passives. I demonstrated that languages such as German and Dutch do attest impersonal passives, whereas Kihema does not. In the last section, I discussed the theories of Jaeggli (1986) and Baker, Johnson and Roberts (1989) that

assume that the passive morpheme is an argument that receives the case and the theta-role that are absorbed in the passive transformations. I concluded by saying that this process is applicable to Kihema as well.

General conclusions

This thesis has given a detailed description of some grammatical function changing processes that occur in the Kihema Verb Phrase. The thesis was divided into five chapters. In Chapter 1, I presented the theoretical background that is, the concept of UG and the Principles-and-Parameters as they articulated in Chomsky's (1981) GB-theory. I summarized the theory of incorporation as developed in Baker (1988), a theory which I used to describe certain grammatical phenomena in Kihema. Baker presents a syntactic theory of various grammatical function changing processes such as causatives, applicatives, etc. Baker assumes that the causative or the applicative markers belong to lexical categories such as V or P and are represented as independent heads in syntax. As lexical elements, they have their own argument structures and, according to X-bar theory they realize their own arguments within their own maximal projections.

In Chapter 2, I provided Kihema data that show possible complements that can appear along with the verb in the VP. I tested the order of complements and I explained the properties of direct objects. I showed that the Kihema VP could include four complements which can all function as direct objects.

In Chapter 3, I described causative formation in Kihema. I looked at different causative morphemes and their realizations and explained how the addition of the causative affix increases the number of arguments that may occur in a sentence.

In Chapter 4, I discussed the formation of applicatives in Kihema in the light of Baker's (1988) analysis of preposition-incorporation. I started by giving a thorough definition of applicatives, the types of Kihema applicative morphemes and their meanings. I said that, as is the case with causatives, when the applicative morpheme is attached to the verb, the number of arguments is increased.

In Chapter 5, I discussed the passive construction in Kihema. I started by defining the passive and by discussing its general characteristic properties. Then, I said that the construction of the passive in Kihema exhibits the three main properties of the passive in general.

As a conclusion, I can say that the principles and theories of syntax proposed in the Principles-and-Parameters framework have proven to be suitable for an analysis of an "exotic" language like Kihema. For example: (i) it has been proven that all syntactic phrases and sentences in Kihema are built according to X-bar theory; (ii) in Kihema, verbs assign theta roles to internal and external arguments and abstract case is assigned to the internal argument by the verb, whereas the external argument gets its case from tense Infl. (iii) Baker's Theory of Incorporation is applicable to the constructions of Kihema causative and applicative.

In my study, I have shown, that according to Baker's theory, the Kihema morphological causative construction is the result of a syntactic process in which the base verb (= V_2) undergoes head movement and combines with the causative affix (= V_1) in the syntax. I have also shown that Kihema applicative construction results from moving the preposition (P) out of a prepositional phrase (PP) and incorporating it into the verb that governs it; (iv) finally, Jaeggli's (1986) and Baker, Johnson and Roberts theories of the passive can be applied to the passive in Kihema in the sense that the Kihema passive morpheme is an argument that receives abstract case and a theta role that are absorbed during passive transformations.

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