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#### Abstract

RUNYAMBO VERB EXTENSIONS AND CONSTRATNTS ON PREDICATE STRUCTURE by Josephat Muhozi Rugemalira Doctor of Philosophy in Linguistics University of California at Berkeley Professor Charles J. Fillmore, Chair

This study presents a description of the productive verb extensions in Runyambo, a Bantu language of Tanzania. It challenges the common view that the extensions are potentially a resource for increasing the number of a verb's arguments indefinitely, and shows instead that the extensions form part of a set of interrelated mechanisms, within the Bantu languages, which ensure that the arguments of a verb remain distinguishable from each other.

The first chapter provides a general background to the language and its speakers. Chapter two articulates a theoretical framework of argument differentiation which proposes a two-level theory of predicate structure (argument structure and lexical semantic structure) and helps focus attention on the means for distinguishing arguments from each other.


Chapters three and four treat the two extensions (the applicative and causative) that expand predicate structure. It is argued that the distinction between them suggests that
the number of thematic roles that participate in grammatical generalizations can be reduced to two, viz. actor and nonactor. The actor is a causative role, while the nonactor is an applicative role.

Chapter five deals with the three extensions (reciprocal, stative, and passive) that contract predicate structure. It shows that the extensions are organized around the binary distinction between actor and nonactor thematic roles.

Chapter six shows that extension combinations are highly constrained by the general requirement that arguments be distinguishable from each other. It is this requirement that finds reflection in restrictions on extension repetition and cooccurrence. These restrictions furnish further evidence for the dual thematic role organization proposed in this study. In addition, evidence that undermines the significance of variable ordering of the extensions is presented and it is suggested that some of the restrictions are compatible with a template-matching view of affixation.


# Runyambo Verb Extensions and Constraints on Predicate Structure 

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## ABBREVIATIONS

| A | Applicative |
| :---: | :---: |
| AS | Argument Structure |
| C | Causative |
| CG | Construction Grammar |
| I | Double Stem |
| FUT | Future Tense |
| EV | Final Vowel |
| GB | Government and Binding |
| I | Intensive |
| L | Locative |
| LC | Locative Clitic |
| LFG | Lexical Functional Grammar |
| LMT | Lexical Mapping Theory |
| LSS | Lexical Semantic Structure |
| NEG | Negative |
| P | Passive |
| PF | Perfective |
| PR | Present Tense |
| PST | Past Tense |
| PSY | Yesterday Past Tense |
| R | Reciprocal |
| RF | Reflexive |
| S | Stative |
| TP | Today Past Tense |
| V | Reversive |


#### Abstract

Acknowledgements I would like to thank the members of my dissertation committee - Charles Fillmore, Larry Hyman, Sam Mchombo, and Johanna Nichols - for ensuring that this project came to a successful conclusion. Many thanks also to my friends, especially Kathleen Hubbard and Joyce Mathangwane, for invaluable assistance, and to all of my teachers at Berkeley. For financial assistance, I am particularly indebted to the University of California at Berkeley, and to the James Grubb Scholarship Foundation.

My wife Leah not only took care of me and our daughters, Neema and Namara, but she also provided tremendous assistance as my language consultant as I struggled to compile the data in the appendix. For all this, thanks Leah.


## CHAPTER ONE

GENERAL BACKGROUND

### 1.0 Introduction

The aims of this study are two-fold. First it seeks to present a detailed description of the productive verb extensions (suffixes) in Runyambo, ivz. the applicative, causative, passive, stative, and reciprocal extensions. Second, it seeks to show that although on the face of it these extensions are potentially a resource for indefinitely increasing the number of arguments on any verb, there are general predicate structure constraints which restrict the realization of this potential. In the course of realizing these aims, the study will articulate a theoretical framework of argument differentiation which makes no use of the notion of grammatical relations and severely restricts the inventory of thematic roles that participate in grammatical generalizations to two, viz. actor and nonactor.

This chapter gives a general background to the language and its speakers. Section 1.1 discusses the geography and socio-political context. Section 1.2 provides a linguistic profile of Runyambo to facilitate a better understanding of the discussion in subsequent chapters and of the data in the Appendix. Section 1.3 presents the descriptive and analytical problem posed by the verb extensions. Section 1.4 discusses the database on which the study is based.

### 1.1 Geography and Society

The people whose language is the subject of this study inhabit the district of Karagwe, in the northwestern corner of Tanzania. The district covers an area of 2,700 square miles, stretching roughly from $30^{\circ} 30^{\prime}$ to $31^{\circ} 30^{\prime} \mathrm{E}$, and from $1^{\circ}$ to $2^{\circ}$. This constitutes the core of the old Karagwe kingdom, but it is said that the kingdom used to stretch further south and east before German colonialists gave part of the territory to Karagwe's neighbors whose kings collaborated with the invaders at the turn of the century (Katoke 1970, 1975; Cory n.d.; Webster 1979). The current territory is almost completely demarcated by natural boundaries. The Kagera river constitutes the western boundary with Rwanda, the northern boundary with Uganda, and the northwestern boundary with the district of Bukoba within Tanzania. A tributary of the Kagera, River Mwisa, and Lake Burigi and the adjoining marshland, form the eastern boundary with Bukoba and Muleba districts. The southern boundary with Ngara district consists of a straight line from the southern tip of Lake Burigi just south of the 2nd parallel.

According to the preliminary report of the 1988 census, the population of Karagwe was 292,589 . Given an annual growth rate of $2.7 \%$, the current figure should be about 325,000 inhabitants ${ }^{1}$.

The indigenous inhabitants of Karagwe call themselves abanyambo and refer to their orurimi 'tongue/language' as orunyambo or occasionally as ecinyambo. Since there has been considerable confusion in the literature on this score, a few clarifications are in order. The confusion is of two kinds. First, there is confusion in naming and locating the land, the people, and the language. This confusion apparently originates from Bryan (1959:107) who lists "nyambo(ru-)" and "Karagwe (ru-)" as two distinct languages spoken in the same area, then Tanganyika Territory, south of the Kagera river. Barreteau and Bastin's (1978) map compounds this confusion by seeming to locate these supposedly distinct languages in Uganda, north of the Kagera river! Although Rubanza (1988) correctly identifies Karagwe as the name of the old Kingdom, he wrongly aligns it with a "Mwani" dialect and never mentions Runyambo except in connection with Guthrie's and Nurse's works. While there is a Kimwani ward in Muleba district (not in Karagwe) on the shores of Lake Victoria, it is my understanding that the people of the area call their language oruháya, not orumwani. What should be clear is that Karagwe is not the name of a language, a people, or even a town. It refers to an administrative territory much larger than a town or a village.

The second type of confusion is inherently controversial, having to do with the problem of defining and identifying languages and dialects. Guthrie (1948, 1967-71), and Bryan (1959), Bastin (1978), and Nurse (1979) after him,
identified Runyambo (E21) and Ruhaya (E22) as distinct languages (the latter with the Ziba, Ihangiro, and Hamba dialects). Heine's (1972) classification, however, only mentions Ruhaya. And from the perspective of the two most extensive studies of Ruhaya, Byarushengo et al.(1977) and Rubanza (1988), Runyambo does not exist (This is the stuff that wars are made of!). In this regard Bickmore's work (1989, 1992) is significant for having at least reaffirmed Runyambo's place on the map.

The treatment of Runyambo is an apt illustration of the "standard joke that a language is a dialect with an army and a navy" (Chomsky 1977:190)2. The Banyambo have always regarded their language as distinct from that of the Bahaya of Buhaya (Hayaland). But the advent of German and, later, British colonialists set the stage for the characterization of Runyambo as a Ruhaya dialect. Both Buhaya (Muleba, and Bukoba rural and urban, districts; 1988 population census: $665,412)$ and Karagwe were incorporated into an administrative entity called Bukoba, with headquarters at Bukoba town, on the shores of Lake Victoria. (Bukoba is now the regional capital of Kagera Region, which besides the districts already mentioned, also includes Ngara and Biharamulo districts). Alongside the colonial administration, the Christian missionaries established their first stations in Buhaya, learnt Ruhaya, translated the Bible, and built schools and health centers ${ }^{3}$. From there they moved into Karagwe and proceeded to preach and teach in Ruhaya ${ }^{4}$ (cf Sundkler 1980).

In purely linguistic terms, Ruhaya, Runyambo, Runyankore, and Ruciga (Nurse's Rutara group) could be regarded as dialects of the same language. The intercomprehension rate among these tongues ranges between 75\% and 85\% (International Encyclopedia of Linguistics 1992; Ladefoged et al. 1968:69)5. But as the "standard joke" above suggests, such criteria are usually irrelevant or, at best, subsidiary when important decisions have to be made. It is conceivable that if the Rutara group were to be consolidated under one political order, a single standard language for the political entity could be developed/imposed. Guthrie's (1948) classification reflects the political reality by placing Runyankore and Ruciga in group 10 (with Luganda) because they are in Uganda, while Runyambo and Ruhaya, being on the other side of the border in Tanzania (then Tanganyika) are placed in group 20. Nor can Heine's genetic classification justify, in linguistic terms, the suppression of Runyambo except on the basis of the political dominance of Ruhaya during the past one hundred years, and/or on the basis of the numerical dominance of the speakers of Ruhaya - which reinforces the point: they can raise a bigger army and navy! Fortunately, in the sphere of language policy there has not been much room for fighting since both Runyambo and Ruhaya are subordinate to the national language, Kiswahili. All primary school instruction is conducted in Kiswahili and all materials for the adult literacy campaign of the 1970 s were in Kiswahili. But unfortunately, this has also meant that both Ruhaya and

Runyambo, like all other ethnic languages of Tanzania, cannot hope to develop a literary tradition of their own, and will remain in the shadow of Kiswahili ${ }^{6}$.

### 1.2 Linguistic Profile of Runyambo

In this section $I$ only represent information that $I$ consider sufficient for the reader to understand the subsequent data and discussion. No attempt is made to present a comprehensive grammar of Runyambo. For detailed discussion of various aspects of the language reference should be made to the following works on Runyambo and its sister languages: Bickmore 1989,1992; Buckley 1990; Byarushengo et al.1977; Hubbard 1993; Hyman \& Byarushengo 1984; Rubanza 1988; Rugemalira 1990, 1991a\&b, 1992, 1993a; Taylor 1959, 1985.

### 1.2.1 Phonological sketch

The consonant and vowel inventories are shown below in (101) and (102) respectively.

| (101) | stops | nasals |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | p b | m |  | v |  | W |
|  | $t \mathrm{~d}$ | n | S | 2 |  | r |
|  | c j | ก |  |  |  | $Y$ |
|  | k g |  |  |  |  |  |

h

```
(102) i u
    e o ei
    a
The palatal nasal /n/ will be orthographically represented as -ny- in this study. Vowel length is distinctive in the monophthongs. The inventory includes one diphthong /ei/ (as in omuséija 'man'; kubéiha 'tell lies').
Important alternations include the following:
i) \(h \rightarrow p / N_{1}\) e.g. omuti guhángo 'big tree'
enju mpango 'bicy house'
ii) \(r \rightarrow d / N \ldots e . g\). kurúma 'to bite'; kundúma 'to bite me'
iii) \(N \quad \rightarrow \quad N \alpha p l a c e / \ldots \quad\) coplace i.e. a nasal consonant assimilates to the place of articulation of the following consonant e.g. [eŋkura mpaingo] 'big rhino'.
iv) A high front vowel /i/ which is not phonetically distinct from /i/ brings about significant consonant alternations (Bourquin 1955, Hyman 1991). The vowel is incarnate in the 'agentive' and the 'perfective tense' morphemes (103), and in the causative morpheme (see chapter four).
(103)
```

a) kwita
omwis beisíre
'kill' 'killer'
'they killed'

```
    b) kurira omurizi barizíre
    'cry' 'cry baby' 'they cried'
    In (103) /t,r/ -> /s,z/ before /i/.
    v) A more general alternation consists in the
    palatalization of velar consonants before the front vowels,
    as illustrated in (104).
    (104)
            a) kuruka omuruci barucíre
            'to weave' 'weaver' 'they weaved'
            b) kuniiga omuhiiji bahiijíre
            'to hunt' 'hunter' 'they hunted'
            c) kutéeka kutéécera bateecíre
            'to cook' 'cook for' 'they cooked'
            d) kutéga kutéjera batejíre
            'to shave' 'shave for' 'they shaved'
In (104) both front vowels (including /i/) palatalize a
preceding velar consonant. This is a fairly distinguishing
characteristic of Runyambo (in contrast with Runyankore and
Ruhaya), although even within Runyambo there are some
dialectal and lexical variations). In general speakers in the
eastern half of Karagwe are less likely to palatalize than
speakers in the western half.
```


#### Abstract

vi) Compensatory vowel lengthening is associated with glide formation (e.g. [kwóosa] from ku-ós-a 'to skip a day'; [kubyáara] from *ku-bí+ar-a 'to plant'), and nasal-consonant clusters (e.g. [kubi:クga] 'chase') (cf Hubbard 1993). In this study the vowel length in these environments will be taken for granted and will not be marked in the orthography. Only lexically long vowels are represented by a double spell-out. vii) Only high tone is marked (e.g. kukóma 'to tie'). Otherwise tone is low by default. Only where vowel length is derived, and therefore unmarked in the orthography, is falling tone marked (e.g. kuhenda 'to break').


### 1.2.2 Nominal morphology

The nominal class prefixes are shown in Table 1.1.

| Class | Prefix | subject | object | example | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | o-mu- | a- | -mu- | omukázi | woman |
| 2 | a-ba- | ba- | -ba- | abakázi | women |
| 3 | o-mu- | gu- | -gu- | omuti | tree |
| 4 | e-mi- | e- | -ji- | emiti | trees |
| 5 | e-ri- | ri- | -ri- | eríno | tooth |
|  | i- | ri- | -ri- | ihuri | egg |
| 6 | a-ma- | ga- | -ga- | amahuri | eggs |
| 7 | e-ci- | ci- | -ci- | ecicére | frog |
| 8 | e-bi- | bi- | -bi- | ebicére | frogs |
| 9 | $e-(N)-$ | e- | -ji- | embúzi | goat |
| 10 | e-(N) - | e- | -zi- | embúzi | goats |
| 11 | o-ru- | ru- | -ru- | orúhu | skin |
| 12 | a-ka- | ka- | -ka- | akakázi | small woman |
| 13 | o-tu- | tu- | -tu- | otukázi | small women |
| 14 | o-bu- | bu- | -bu- | obugúfu | shortness |
| 15 | o-ku- | ku- | -ku- | okuguru | leg |
| 16 | a-ha- | ha- | -ha- | aharúhu | on the skin |
| 17 | o-ku- | ha- | -ha- | .kúnu | here |
| 18 | o-mu- | ha- | -ha- | omumiti | among trees |
|  | Person | Sing/Plur |  | Sing/Plur |  |
|  | 1 | $\mathrm{N}-/$ tu- |  | -N-/-tu- |  |
|  | 2 | o-/mu- |  | -ku-/-ba- |  |
|  | 3 | a-/ba- |  | -mu-/-ba- |  |

TABLE 1.1: Nominal class prefixes

Note that the augment or initial vowel consists of only the mid and low vowels ( $0, \mathrm{e}, \mathrm{a}$ ), and these can only cooccur with the high and low vowels (u,i,a) respectively in the class prefix proper (cf vowel harmony in the verb stem below). Class 17 survives only in the following forms: kúnu/kúnúúya 'here', kúriya 'there', oku 'this way', and okwo 'that way'. The other locative prefixes (classes $16 \& 18$ ) can attach to any nominal without displacing the original prefix on that nominal. As will be shown later (chapter three), these prefixes are related to the locative enclictics on the verb.

### 1.2.3 Verb morphology

The nucleus of the verb complex is the root, to which various prefixes and suffixes may be attached. In the Appendix all verbs are listed with the ku- prefix, arguably a class 15 nominal prefix. The root, the ku- prefix, and the final vowel -a, together constitute the infinitive form of the verb (e.g. ku-som-a 'to read'). The simple imperative form drops the prefix and adds a high tone (e.g. soma 'read!'). The final vowel is -e in the following cases:
i) Perfective and yesterday tenses:
a) ba -som -ír -e 'they read' (yesterday) they-read-PSY-FV
b) bá -á -som -ir-e 'they have already read' they-PF-read-PF-FV

Both the yesterday past (-ír-) and the perfective (-a-..-ir-) require the final vowel -e.
ii) Certain combinations of imperative mood and pronominal prefix:
(106)
a) ci-sóm -e 'read it'
it-read-FV
b) ba -rek-é ba -sóm -e 'let them read'
them-let-FV they-read-FV
iii) Certain combinations of tense and negation:
(107) ti -ba -raa-som -e 'they won't read'

NEG-they-FUT-read-FV

Combining the -raa- future tense and the negative requires the final vowel -e.

Besides the $-a,-e$, and $-i r-e$ suffixes, Runyambo has one more inflectional suffix -ag-, shown in (108).
(108)
ti -tú-ka -ci-som -ág -a

NEG-we-PST-it-read-ever-FV 'we have never read it'

The -ag- suffix always cooccurs with negation and with the -ka- past tense, as shown in (108) i.e. it always needs them, but they don't need it.

There exists a large group of verb suffixes in Bantu languages which, following Guthrie (1962), are generally called extensions, implying that they extend the meaning of the verb they are attached to. Traditionally they are regarded as derivational suffixes, in contrast with the tense and mood suffixes discussed above, which are regarded as being inflectional. I will return to a consideration of the identification and relative productivity of the extensions in section 1.3. Here we need to note that there exists in Runyambo, as in many eastern Bantu languages, a vowel harmony rule between the root and the extension. Consider (109).
(109) a) -guma -gum-ir-a -gum-is-a
b) -gamba -gamb-ir-a -gamb-is-a
c) -biika -biic-ir-a -biic-is-a
d) -kóma -kóm-er-a -kom-es-a
e) -reeba -reeb-er-a -reeb-es-a

The relevant feature in (109) is height. The suffix vowel is mid when the root vowel is mid; it is high elsewhere (cf Rugemalira 1990 for an underspecification theory account). However, as Table 1.2 shows, the $C V$ roots as a group display
a different pattern that does not conform to the letter of this rule.

| Gloss | Infiniti | Root | -ir- | -is- |
| :---: | :---: | :---: | :---: | :---: |
| die | kúf (w) a | -fú- | -f(w) éera | -f(w)iisa |
| fall | kugwa | -gu- | -gweera | -gwiisa |
| cut | kúcwa | -cú- | -cwéera | -cwiisa |
| eat | kúrya | -ri- | -riira | -riisa |
| go | kuja | -ji- | -jiira | -jiisa |
| burn | kúsya | - $\mathrm{i}_{\mathbf{i}}$ - | -híra | -híisa |
| give | kúha | -hé- | -héera | -héisa |
| put | kúta | -tė- | -téera | -téisa |
| grind | kusa | -se- | -seera | -seisa |
| defecate | kunia | -ne- | -neera | -neisa |
| be | kúba | -bé- | -béera | -béisa |
| dawn | kúca | -cé- | - céera | -céisa |
| drink | kúnywa | -nyo- | -nywéera | -nywéisa |
| exhaust | kúhwa | -ho- | -hwéera | -hwéisa |

TABLE 1.2: Suffix vowel harmony in CV roots

The table shows that in CV roots the vowel of the causative (-is-) suffix is always /i/, whereas in the
applicative (-ir-) the vowel is /i/ if the root has /i/, and /e/ elsewhere. The passive follows the applicative pattern (see Katamba 1984 for the Luganda pattern).

One more pattern should be noted. It involves the reversive extension -ur-, shown in (110).
a) -cing-ur-a open
b) -bár-ur-a burst
C) -gút-ur-a snap
d) -tér-ur-a remove from hearth
e) -gom-or-a fatten

The vowel in the reversive extension is /o/ after a root /o/, and /u/ elsewhere.
1.3 The Challenge of the Verb Extensions
1.3.1 Identifying the extensions

It is generally believed that the majority of protoBantu verb roots had a -CVC- structure, except a few which had a -CV- structure (cf Guthrie 1967-71, Schadeberg n.d.). According to this view, complex verb roots in current languages were formed via a process of suffixation using suffixes with a -VC- structure. Several of these derivational suffixes have since ceased to be productive and the roots to which they are attached do not occur alone, or if they do
occur, the meaning of root + suffix is not the sum of the parts. For illustration, consider the root -han- 'censure, rebuke', and the various extensions that can attach to it in Table 1.3 (for glossing details see the Appendix).

| Stem | A | C | P | R | S |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 -han-a 'censure' | $+$ | + | $+$ | + | - |
| 2 -han+am-a 'climb' | + | + | + | + | + |
| 3 -han+ik-a 'hang' | $+$ | + | + | + | - |
| 4 -hantuur-a 'discuss' | + | + | $+$ | - | + |
| 5 -han+ur-a 'unhang' | + | $+$ | + | + | + |

TABLE 1.3: Productive and non-productive verb extensions

Table 1.3 is centered around the root -han- in row 1. There are two patterns of suffixation on the root. On the horizontal pattern the applicative (A), causative (C), passive (P), reciprocal (R) and stative (S) derivations are fairly regular and predictable in meaning. The vertical pattern, involving the -am-, -ik-, -uur-, and -urextensions, is unpredictable. Each of the derivations on the vertical pattern $(2-5)$ also participates in the horizontal pattern in turn. But the derivations on the horizontal pattern cannot participate in the vertical one (e.g. *han-ir-am-a).

There are two gaps in the stative column, and one gap in the reciprocal column. As for the meaning of the derivations, only two are non-compositional, namely (4C) -hanuuza 'marvel' and (4S) -hanuuka '(of a rare, unexpected event) happen'. There is a discernible semantic relationship between -hana 'censure' and -hanuura 'discuss, decide, set rules'. There is also a relationship between -hanama 'climb' and -hanika 'hang'. And, of course, the reversive relationship between -hanika 'hang' and -hanura 'bring down' is readily available. This is reflected in the Appendix where -hanura is listed under -hanika, whereas all the others are given independent entries. Yet this is slightly problematic because, strictly speaking, the reversive of -hanika should be *-hanikura. Furthermore, although the reversive does have the -ur- and -uur- variants shown in rows 4 and 5 on the Table (cf chapter five), by listing -hanuura separately in the lexicon we are giving the inaccurate impression that it has no relation to -hana. And yet it does not seem appropriate to posit the existence of a separate extension -uur-.

The problem with forms like -am-, -ik-, and -uur- in Table 1.3 consists in their lack of a systematic semantic relationship to a verb root and the consequent lack of productivity. Two other examples of non-productive extensions are shown in (112).
(112)
a) -by-âr-a 'plant' (*-bi-)
b) -sig-ar-a 'remain' (-sig-a 'leave behind')
c) -rag-ar-a 'fall' (-rag-a 'bequeath,
bid farewell)
d) -tag-at-a 'warm up' (*-tag-)
e) -fúmb-at-a 'embrace' (*fúmb-)
e) -kúr-at-a 'follow' (-kúr-a 'grow')


#### Abstract

The -ar- and -at- extensions in (112) may be identified and isolated from roots which may or may not exist in the current language. On the basis of historical reconstruction it may be possible to arrive at a probable semantic pattern underlying the verb stems. But from the perspective of synchronic grammar, these extensions are essentially frozen onto their roots, and they do not offer much that is of interest to grammatical theory. For this reason they will not be considered any further in this study. Occasionally they pop up in the Appendix and they are coded as X , for "Other".


### 1.3.2 Productive extensions and predicate structure

The decision to focus on five extensions (applicative, causative, passive, reciprocal; stative) in this study is based on their high degree of productivity and on the fact
that these five can enhance our understanding of predicate structure.

Productivity is understood in two senses here. The first sense is compositional determinacy (Shepardson 1986), i.e. the extent to which the whole root plus extension derivation is the sum of its parts semantically as well. The second sense involves the extent to which a particular extension can be attached to any verb root. On the basis of Table 1.3 alone, only the applicative and passive have a 100\% productivity while each of the other three extensions has less than perfect productivity. As already noted, the reversive is morphologically problematic but the semantic transparency available with some forms places the extension somewhere in between the frozen -am-, -ik-, -ta-, -ar-, and the productive $A, C, P, R, S$.

The study of the five productive extensions has always presented a challenge to lexicographers of Bantu languages. The problem is whether to treat the derived items as independent entries and provide full glosses, or to treat them as fully predictable derivations which do not even need to be mentioned in the lexicon. For illustration consider the treatment of nyamaa 'be silent' in three Kiswahili dictionaries.

Johnson (1939) lists and glosses under this entry four related derivations - 'prepositional' nyamalia, 'causative' nyamaza, 'prepositional' nyamazia, and 'double causative'
nyamazisha. But even this fairly detailed dictionary does not attempt to show cooccurrences such as $C+A$ nyamazishia, $C+R$ nyamazishana, $A+R$ nyamaziana, $C+P$ nyamazishwa.

Kamusi (1981) only lists under the entry the extensions which may be attached to nyamaa. These are the applicative, stative, causative, and passive. It is not clear to me whether the applicative derivation that may thus be formed (nyamalia) is equivalent to Johnson's nyamazia. I do not know what nyamalika and nyamawa are supposed to mean. And nyamaza could erroneously be given a causative interpretation especially since nyamazisha is not mentioned. Clearly this dictionary lacks some essential details besides being too permissive about the regularity of the extension system.

Perrot (1965) has two entries together - nyamaa and nyamaza. In addition, a separate entry, nyamazisha, is also given. No attempt is made to indicate the existence of a relationship between this latter entry and the other two.

Even though the choices made by a particular lexicographer usually reflect other considerations, viz. target audience, available resources, and the nature of the product, the theoretical problem always looms in the background. But for a linguist in search of the ideal lexicon, these dictionaries leave a lot to be desired. Thus Shepardson (1986) faults even Kamusi (1981) for listing "these suffixes under each verb stem as if they were nonproductive" (p.36). He maintains that all five suffixes "are
potentially acceptable with each and every Swahili verb stem" (p.79), and that the "failure to achieve 100\% 'predictability' is not because of any formal constraint on the SPARC suffixes" (p.170).

But in contradiction to Shepardson, this study will seek to show that there are indeed formal constraints on these extensions. Ever since Guthrie (1962) classified the extensions into transitivizers (+0), detransitivizers (-0), and neutral extensions ( $=0$ ), various studies have repeatedly shown these extensions as effecting significant changes in predicate structures (see Scotton 1967a,b and Khamisi 1985 on Kiswahili, Satyo 1985 on Xhosa, and Machobane 1989 on Sesotho). The applicative and causative are transitivizers, while the rest are detransitivizers. Two basic questions keep coming up, albeit indirectly, in these studies:
i) Is there a limit on the number of arguments per verb? What is it and why? This question is related to the issues of suffix cooccurrence, ordering and repetition.
ii) What are the principles by which arguments are differentiated? This is the question underlying the notions of grammatical relations, thematic roles, and external vs internal argument.

Only Machobane (1989) attempts to give an explicit answer to the first question by proposing a principle stating that "the maximum number of internal arguments that a verb
can take is two" (p.129). But as the term "internal argument" itself demonstrates, the first question is inextricably linked to the second, and this study will propose a theory of argument differentiation for the analysis of these verb extensions.

### 1.4 Materials and Methods

The data base for this study is contained in the Appendix. It consists of a lexicon of 530 Runyambo verb stems together with their extended derivations. The lexicon was compiled on the basis of the author's native-speaker knowledge, with valuable assistance from Leah Rugemalira, also a native speaker. Although every effort was made to list every probable derivation, with each extension individually and in combination with others, I have no illusions regarding. the completeness of this lexicon as far as the 530 verbs are concerned. There are two kinds of limitations. The first is simple oversight and is potentially rectifiable without much controversy. But the second type of limitation is controversial because it concerns the delicate distinction between the possible and the plausible in verb extension semantics. It is directly related to the discussion on extension productivity above.

Shepardson (1986) criticizes Kamusi (1981) editors for placing "unnecessary constraints on the communicative potential of the language."

For instance, they say that mez-, 'swallow', has no reciprocal, apparently due the unlikelihood of two animate agents actually swallowing one another. In natural language, likelihood of occurrence has nothing to do with reality. The issue is not how likely it is that mezan-, 'swallow each other', can occur, but whether it is a possible utterance in some conceivable situation, and of course, it is, just as its translation is in English.(p.79)

While Shepardson has a good point about the futility of trying to imagine every context of usage for every root+extension derivation, he underestimates the formidable problem of distinguishing the regular and productive derivations from lexicalized forms which must be listed since they are unpredictable. It should be noted too, that a derivation may have both regular and lexical aspects. Dictionaries usually try to offer some guidance through Shepardson's acknowledged "myriad of semantic and pragmatic variables" instead of giving the impression that anything is possible. By excluding derivations of the "swallow each other" type, my lexicon is thus comparable to the common dictionaries; but it clearly goes further, particularly in persevering to record probable multiple combinations. In any case the exclusion should have no effect on the conclusions of this study, especially the conclusion that, given the nature of each of the extensions, certain derivations are indeed impossible, not just "improbable", as Shepardson (1986:167) maintains.

The relatively large data base, and the decision to publish it have their methodological significance. Whiteley (1966:47) cautions that "this is an area in which even the native speaker's intuition may prove an unreliable guide". Scotton (1967a:150) notes "a fair amount of disagreement as to whether or not many of the extended forms cited are operative for the general speaker of Swahili". Given this potential skepticism, and the potential for cross-linguistic variation, it is important that the data on which the conclusions are based be readily available. Even more important, given the possible variations from one verb to the next, it is important that we base our conclusions on a study of 500 verbs rather than on the analysis of only a handful of verbs.

The rest of this dissertation is organized as follows: Chapter two spells out the theoretical framework of the whole study. In order to answer the question about the number of possible arguments posed above, it avoids an analysis in terms of theories that represent predicate structure on four levels (grammatical relations, thematic roles, cases, and arguments) and instead, proposes a two-level theory of predicate structure (argument structure and lexical semantic structure).

Chapters three and four treat the two extensions (the applicative and causative) that expand predicate structure. It is argued that the distinction between them reflects the
only thematic role distinction that should count in the analysis of the verb extensions, viz. the distinction between actor and nonactor. The actor is a causative role, while the nonactor is an applicative role.

Chapter five deals with the three extensions (reciprocal, stative, and passive) that contract predicate structure. The central theme is that these extensions are organized around the binary distinction between actor and nonactor thematic roles, suggesting that the analysis of the verb extensions does not need a more elaborate inventory of thematic roles beyond this binary scheme.

Chapter six shows that the extension combinations are highly constrained by the general requirement that arguments be distinguishable from each other. It is this requirement that finds reflection in restrictions on extension repetition and cooccurrence.

NOTES TO CHAPTER ONE

1 Although there were a number of immigrants during the sixties from Rwanda and Bukoba, this figure may still be taken as a reliable estimate of the speakers of Runyambo. The Tanzania census does not investigate linguistic or ethnic identity.

2 The larger context of this quote includes these questions and statements:

What is the "Chinese language"? Why is "Chinese" called a language and the Romance languages, different languages? The reasons are political, not linguistic. On purely linguistic grounds, there would be no reason to say that Cantonese and Mandarin are dialects of one language while Italian and French are different languages. Furthermore, what makes French a single language? I suppose fifty years ago neighboring villages could be found which spoke dialects of French sufficiently different so that mutual intelligioility was limited ...

Questions of language are basically questions of power, the kind of exercise of power that created the system of nation-states as in Europe. (Chomsky 1977:190-91)

3 Missionary work in Buhaya was quite successful: the first African cardinal, Laurian Rugambwa, and a former president of the Lutheran world Federation, the late Bishop Josiah Kibira, came from Buhaya.

4 One of the enduring traces of Ruhaya influence in Karagwe is the spelling of some mission station names which reflects Ruhaya rather than Runyambo pronunciation:

| Runyambo | Ruhaya | Spelling |
| :--- | :--- | :--- |
| [kéiso] | [káifo] | Kaisho |
| [rwambeizi] | [rwambaizi] | Rwambaizi |
| [neisózi] | [naifózi] | Nyaishozi |

5 "In fact ... Runyankore, Rukiga, Runyoro, Rutooro, and Rutagwenda are all so similar that they might be regarded
simply as dialects of the one language (which might, following a suggestion by Mr Mosha, be called Rutara, since it is in the area of the former Kitara Kingdom)" (Ladefoged et al. 1968:69).

6 In the religious sphere, Karagwe was separated from the Catholic diocese of Bukoba (Buhaya) in the late 1950s to form a new diocese of Rulenge which also includes the districts of Ngara and Biharamulo. The Lutherans too got their own Karagwe diocese in the late 1970s. Economically the tensions of a center-periphery relationship between Karagwe and Buhaya were particularly intense during the $1980 s$ as the peasants of Karagwe sought to establish a separate marketing cooperative union under their own control.

## A GRAMMAR OF ARGUMENT DIFFERENTIATION

2.0 Introduction

This chapter presents the analytical framework for the whole study. The first section (2.1) critically reviews a subtheory of Lexical Functional Grammar, namely the theory of linking or lexical mapping, as well as the status of grammatical functions and thematic roles. Section 2.2 sidesteps the problems arising out of linking theory by proposing a theory that seeks to represent predicate structure on two levels - argument structure (AS) and lexical semantic structure (LSS). Section 2.3 examines the various means of argument differentiation across languages and it is suggested that Bantu linguistic structure displays certain peculiarities which have the overall effect of limiting the number of things one can talk about within the structure of a single clause.

### 2.1 On Grammatical Relations and Thematic Roles <br> The study of Bantu verb extensions is closely tied to

 the study of verb valency, grammatical relations, and thematic roles (cf Guthrie 1962, Scotton 1967a, 1967b, Kimenyi 1980, Khamisi 1985, Satyo 1985, Rubanza 1986, Machobane 1989). In current linguistic theory up to four levels of representation are employed in order to capture the link between the valency of $a$ verb and the syntactic and semantic realization of that valency. These levels are shownTable 2.11.

| Grammatical Relations: | subject, object ... |
| :--- | :--- |
| Thematic Roles | $:$ |
| Cases | agent, patient ... |
| Arguments | nominative, accusative ... |

TABLE 2.1: Levels of representation of predicate structure

The theory of Government and Binding (Chomsky 1981:43) makes use of all four levels of representation: the thetacriterion states "that every $\theta$-role determined obligatorily in the D-structure must be filled by some argument with the appropriate GF [grammatical function], and that each argument must fill exactly one $\theta$-role as determined by its GF". Nonthematic GFs do not occupy argument positions and are represented at $S$-structure rather than at D-structure. Like GFs, which are configurationally determined via dominance and precedence, "case is assigned to NPs by virtue of the configurations in which they appear" (p.49). The content of the theory consists in spelling out the mechanisms for the appropriate linking of the various elements of all four levels ${ }^{2}$. Note that, from a particular perspective, there is a significant amount of redundancy: both GFs and cases are configurationally determined, and theta roles are assigned to
arguments. In addition, the proper determination of theta roles relies on GF information (p.42-43).

Lexical Functional Grammar does not posit a level of abstract case, choosing instead to record morphological case features in the functional structure like any other feature (e.g. person, number). For the remaining three levels, LFG has developed an elaborate sub-theory of lexical mapping or linking to articulate the relationship among them. How, for instance, is it determined that argument $x$ is assigned the agent role and the subject function? In the next sub-section (2.1.1) I sketch the linking theory of LFG and offer an appraisal. The choice of LFG for critique is not merely a consequence of my linguistic upbringing. It is also based on the fact that the theory has the most detailed linking component.
2.1.1 Lexical mapping theory (LMT)

It appears to me that early LFG had a very good grasp of the real problem for natural language analysis, viz. the mapping of predicate arguments onto the phrases of a construction. As Bresnan \& Kaplan (1982) pointed out, this is a problem because there is a many-to-many relation between argument types and phrase types, and also because there are variations in the forms of the phrases (NPs, PPs, affixes, clitics) that realize arguments across the languages of the world. In this early phase, LFG consisted of two basic
components of the theory - functional structure, with undefinable grammatical functions, and constituent structure, which presented the surface realization of f-structure (cf. Bresnan (ed) 1982; Horrocks 1987). Successive elaboration of f-structure over the years has enriched this component immensely and resulted in a complete subtheory of linking, called lexical mapping theory, even though it may be argued that the basic notion of mapping was always implicit in the theory.

LMT consists of a set of principles for linking predicate arguments to semantic roles, and for linking the latter to grammatical functions (relations). This sub-theory of LFG originated from the desire to incorporate semantic information in the theory of grammatical functions.

The theory consists of three basic principles (Alsina 1990, Mchombo 1991, Alsina \& Mchombo 1993). The first is the ordering of semantic roles within the argument structure of every predicate. This ordering corresponds to a universal hierarchy of semantic roles, represented in linear order in (201), so that the further to the left a semantic role is the more prominent (higher) it is.
(201) agent>beneficiary>goal>instrument>patient>locative

The second principle consists of morpho-lexical operations which alter argument structures by adding or suppressing roles. For instance, the applicative morpheme adds a new semantic role to a predicate, while the passive
suppresses the highest role. The third principle is the assignment of grammatical functions to semantic roles according to the intrinsic properties of the semantic roles as well as their relative position on the universal hierarchy in (201). A crucial assumption here is that grammatical functions are decomposable into two primitive features +/$r$ (estricted) and $+/-0$ (bjective). Alsina (1990) defines these as follows: "Intuitively the restrictedness of a grammatical function refers to whether it can only be linked to a specific set of thematic roles $[+r]$ or whether it can be associated with any thematic role [-r]; objective [+o] functions are those which are selected by transitive categories of predicators (verb and preposition) and which cannot appear with intransitive categories". This decomposition yields four syntactic functions:

| (202) | $[-r,-0]$ : SUBJECT | [ $+\mathrm{r},-0$ ]: OBLIQUE THEME |
| :---: | :---: | :---: |
|  | [-r,+o]: OBJECT | [ $+\mathrm{r},+\mathrm{ol}$ : THEMATIC OBJECT |

Each argument structure position is assigned two of these features depending on the intrinsic properties of the semantic role (intrinsic classification) and according to the role's position relative to other roles (default classification). Arguments are intrinsically classified [-0] unless they are patient-like in which case they may be Classified [-r] or [+o]. Two constraints apply: the first is the Suppression constraint which stipulates that only syntactically unmarked arguments may undergo suppression
(i.e. only those classified $[-r]$ or $[-0]$ ). The second constraint is the Instrinsic Classification constraint which states that the intrinsic classfication [-r] can be assigned at most once in any given argument structure. This constraint, according to Bresnan \& Moshi (1990), constitutes the parameter of variation which distinguishes asymmetrical languages (where objects are unequal) from symmetrical languages (where objects are equal). Symmetrical languages, according to this theory, lack this Asymmetric object Paramenter (AOP).

Three problems arise from this theory. First it will be noted that the AOP construct is a grudging admission of the possibility of two direct objects in a construction. Indeed it is a statement of an exception to the LFG principle of "function-argument biuniqueness which requires that a unique function be assigned to each argument that is grammatically interpreted (i.e has some surface syntactic realization), and that a unique argument be assigned to each function that is associated with an argument" (Horrocks 1987:235) ${ }^{3}$. By this principle it is impossible to have more than one instance of a grammatical function or a thematic role. The AOP construct relaxes this constraint somewhat ${ }^{4}$. In determining whether or not a particular language violates the biuniqueness principle the problem boils down to a consideration of the nature of the mechanisms for identifying grammatical functions and thematic roles, a question that $I$ will return to shortly.

The second problem in LMT is the absence of a mechanism for properly ordering and exhaustively assigning all of a verb's arguments to thematic roles. The absence of such a mechanism leads to the breakdown of the theory. Consider a case like (203) where a transitive verb kúnywa 'drink' undergoes the morpholexical operations of the causative and the applicative, adding two arguments in this way.

```
(203) Kato a - ka - tu - nywe - is - ez - a omwánáa amáte
    Káto he -PST - us -drink - C - A -FV child milk
    'Káto made the child drink milk for us'
```

The crucial question is: what role is to be assigned to each of the four noun phrases in (203)? Even if it is assumed that the lexical entry for the verb specifies the agent (drinker) and patient (drink) roles, the two new arguments are still unassigned. There is no automatic procedure to apply here because each of the causative and applicative extensions may license a variety of roles (see chapters $3 \& 4$ ). For the sake of argument here, let us assume that the applicative can license three role types $p, q$, and $r$, while the causative can license two, s and $t$. LMT lacks a mechanism that will specify which of the two additional arguments in (203) is to be assigned which applicative role out of the three possibilities, as well as which argument will be assigned which causative role out of the two possibilities. As already indicated, only one reading is acceptable: 'he made the child drink the milk for us' not *'he made us drink the milk for
the child's.

Now this is not a minor shortcoming that can be patched up. It is a more basic problem caused by the elevation of arbitrary, albeit convenient, descriptive labels (see my own choices in chapters $3 \& 4$ ) to a level of objective categories uniquely identifiable across verbs, theories, and languages. As I make use of my own arbitrary labels for descriptive convenience in the presentation of the data in the rest of this study, I will show that the LMT problem is essentially a problem of overgeneralization partly rooted in a theoretical commitment to autonomous syntax. Suffice it to say that there are no grounds on which to base a standard inventory of semantic roles, let alone a hierarchy of such roles ${ }^{6}$.

The third problem for LMT concerns the status of the features [r] and [o]. According to LMT, an unrestricted [-r] grammatical function is one that can be associated with any. semantic role, while a restricted $[+r]$ function can only be associated with a limited set of semantic roles. So the subject function is unrestrioted since it can be linked to any role on the semantic hierarchy, from the agent at the top of the hierarchy, to the locative at the bottom. Note though, in connection with the discussion of thematic roles above, that if the role inventory is arbitrary and far from fixed, we may include roles such as reason and manner, that the subject cannot be linked to, in which case it may be considered restricted.

While the [r] feature is a classification of the grammatical functions, the [0] feature appears to be a classification of the semantic roles. Objective roles are those that are typically complements of predicators. The agent is the prototype [-0] role.

However the LMT literature is not clear about the status of these feature constructs. It appears as if grammatical functions are being defined in terms of semantic roles, while the semantic roles themselves are also being defined in terms of grammatical functions (e.g. "patient is intrinsically classified [-r], capturing the fact that it alternates between the functions of subject and object" (Alsina 1990:3)). What is in no doubt is that the limit of four grammarical functions (subject, object, thematic object, and oblique theme) is determined by the fact that there are only two features [r] and [0], each of which has two values, plus and minus. Incidentally, this limit of four grammatical functions may be a reflection of some empirical facts about language (some languages at least). But its significance in LMT depends on the status of the grammatical function categories of subject, object etc. Unfortunately, as has already been observed, grammatical functions and semantic roles are inextricably linked in this theory - which is not accidental since each of the four levels in Table 2.1 is indeed, in some neutral sense, a representation of grammatical relations: in grammar these are relations among the NPs as mediated by the verb; in the real world these are
relations among the participants in the action described by the verb. As such there is no independent mechanism for linking the level of grammatical functions to the level of semantic roles. (Recall the redundancy noted earlier in the $G B$ conception of these levels.)

In effect the problem concerns the status of grammatical functions, and an appeal has to be made to the "traditional" or "standard" tests of objecthood (Bresnan \& Moshi 1990), an issue that is discussed in the next sub-section.

### 2.1.2 Problems in defining grammatical functions

Unlike Transformational Grammar and its heir, GB theory, where grammatical relations are defined in terms of the constituent structure notions of dominance and precedence ${ }^{7}$ (Chomsky 1965, 1981), early LFG (Bresnan 1982) followed the lead of Relational Grammar (Perlmutter \& Postal 1974) in regarding grammatical relations as primitive, undefinable notions. It is only recently that LFG theorists have moved towards the position that regards grammatical relations as decomposable entities (Bresnan \& Kanerva 1989, Bresnan \& Moshi 1990, Alsina \& Mchombo 1990a\&b, 1993, Alsina 1990, Mchombo 1991) and embraced the notion of syntactic tests or criteria for objecthood, reminiscent of Keenan's (1976) cluster concept of subject based on a "subject properties list". Yet attempting to define supposedly universal grammatical relations in this way is inherently problematic ${ }^{8}$. Criticizing Keenan's prototype definition of subject, Johnson
(1977:347) stated:
The relative interpretation runs into the following serious problem. If an NP merely needs more properties than any other NP in its clause to be e.g., a b[asic] SUBJ, then the definition would allow the case in which SUBJs in a language $J$ are defined by a subset $S$ of the SPL [subject properties list] and SUBJs of some distinct language $M$ are defined by another subset $T$ of the SPL, where $S$ and $T$ are disjoint. That is, totally different criteria could be used in the definition of SUBJ in $J$ and M... But one of [Keenan's] main assumptions is that "if we use different criteria to identify subjects in different $L s$ then 'subject' is simply not a universal category..."

Johnson's criticism is vindicated by several studies, including those by people who believe in grammatical relations. In Bantu the issue has usually revolved around the relative status of multiple 'objects' - whether realized as postverbal NPs, or as pronominal prefixes on the verb, or some combination of both as in (203) above. Bantuists generally rely on three tests for objecthood:
i) Word order - which of the NPs is closer (adjacent) to the verb;
ii) Agreement - which of the NPs is marked on the verb by an affix;
iii) Subjectivization - which of the NPs can become subject of the passive construction.

Hyman \& Duranti (1982) make use of the three tests for objecthood but they note that "not only do the actual criteria for object status vary from one Bantu language to the next, but so do the strategies or factors influencing which arguments will acquire these criteria" (p.233). So even
though they take the category 'object' for granted, they inadvertently show that it cannot be defined, even in Bantu alone.

In Rugemalira (1991a, 1993a) it was shown that while the word order test works well in Runyambo, usually placing the human NP closer to the verb than the non-human NP, this test cannot be used in Kiswahili where order is irrelevant and agreement is more important. In addition, the agreement test in Runyambo gave results that conflicted with the subjectivization test. Up to three potential ${ }^{9}$ postverbal NPs can be marked on the verb, but not all of them can become 'subjects' of the passive construction.

Van Valin (1991) discusses similar proilems for a properties (tests, criteria) approach towards subject in Icelandic. He presents examples "in which the coding properties [nominative case and verb agreement] either do not fall on the $N P$ with the behavioral properties [raising] or are lacking altogether in the clause" (p.146).

Hudson (1991) believes that grammatical relations are basic to linguistic analysis. He then proceeds to select ten criteria for identifying objects in English. His tests are (where X is the NP being tested for objecthood, p.347):
i) $\quad \mathrm{X}$ passivizes easily
ii) $X$ extracts easily
iii) $X$ can follow a particle
iv) $X$ can be moved by Heavy NP shift
v) $\quad \mathrm{X}$ is accusative in a true case system
vi) $X$ must be subcategorized for
vii) $X$ has same semantic role as some monotransitive objects
viii) $X$ is normally non-human
ix) Verb $+X$ may constitute an idiom
x) $\quad \mathrm{X}$ is extractee of infinitival

In a construction of the type Ann gave Fred a book, Hudson picks 'a book' as the ordinary object and Fred is regarded as some sort of adjunct. Note that the Bantu tests would pick Fred as the primary (unrestricted) object. This was essentially the point of Johnson's (1977) critique of Keenan (1976): 'Object' cannot be regarded as a universal category if we use different criteria to identify it in different languages. Hudson (1991) indeed illustrates the opposite of his declared thesis, an opposite that Baker (1988) states very well: 'Subject' and 'object' "cannot be fundamental notions of the theory ... Thus whether one calls a certain phrase a subject or an object often depends more on what linguistic processes one is interested in at the time than on any deep property of language" (p.431) ${ }^{10}$.

Bhat's (1991) analysis of Kannada and Manipuri,
languages spoken in India, argues that grammatical relations are neither necessary nor universal. While such notions may be convenient in the description of "languages like English, which jointly encode semantic and pragmatic relations", in other languages "such abstract entities are completely unhelpful", and it is the distinct semantic and pragmatic factors that have more relevance (p.31).

To recapitulate: the basic problem with the linking theory of LFG is that it seeks to provide a set of principles for linking entities whose existence needs to be independently established in the first place. Neither grammatical relation categories like subject and object, nor thematic role categories like agent and patient can be regarded as linguistic primitives. As with the other theories that posit such categories as basic for linguistic analysis, the goal of the enterprise has become the determination of the mechanisms for linking the various abstract levels.

In the next section $I$ will excuse myself from these concerns and instead propose a simpler, two-level theory which can help us focus attention on the mechanisms of external realization rather than on internal linking. It is different from the other theories in two respects. First, it is based on the assumption that given the mapping problem discussed above, the analyst's task consists in determining the means available in a language and in natural language generally, for constraining the number of possible mapping
solutions. In other words, the question to be answered is what are the means for argument differentiation in natural language. Second, as a consequence of the focus on the mapping/realization problem, only two levels will be utilized and no linking between them will be required ${ }^{11}$.

### 2.2 Predicate Structure

The theory of predicate structure being proposed here posits the existence of two levels of representation, viz. argument structure and lexical semantic structure.

The level of argument structure specifies the number of arguments that the verb can take (i.e.valency). The pertinent notion of argument here is that of a syntactic position or slot which needs to be filled by the linguistic expressions that realize a verb's participant roles. As such 'argument' and 'argument position' are interchangeable. The significant information available in the argument structure concerns the total number of arguments that the verb licenses. For instance, the argument structure of the verb give consists of three argument positions, while that of laugh has only one.

There are various ways across the world's languages in which the number of arguments may be increased or decreased. The best known valency increasing process is causativisation, found in various languages, e.g Turkish, Tagalog, Ewenki (Tungusic, Siberia), Malayalam, Nahuatl (cf. Comrie 1976, Mohanan 1982, Tuggy 1988). The Bantu verb
extensions that increase arguments are the applicative and the causative, discussed in chapters 3 and 4 respectively. The valency decreasers are the passive, stative, and the reciprocal, all discussed in chapter 5. A major problem tackled in this study concerns the limits, if any, that are imposed on these processes of transitivization and detransitivization.

Lexical semantic structure provides, among other idiosyncracies, information concerning the participant roles required by the verb, and in this way partly describes the meaning of the action denoted by the verb. These participant roles are best represented in terms specific to each verb or to groups of closely related verbs. The lexical semantic structure (LSS) of the verb 'give', for instance, states that the verb requires a 'giver', a 'recipient' and a 'gift'.

The predicate structure for the verb 'give' may be represented as in (204).
(204)

PREDICATE: give

ARGUMENT STRUCTURE (AS): 3
LEXICAL SEMANTIC STRUCTURE (LSS): giver, [gift], [recipient]

In (204) the argument structure specifies the number of arguments permitted for the verb, whereas the lexical
semantic structure specifies the participant roles. The brackets around two of the roles indicate that the linguistic expressions that realize these roles are omissible under certain contexts (e.g. 'he gave [the foundation] one hundred dollars' - omissible recipient; 'I already gave' i.e. contributed - omissible gift and recipient). Although the number of participant roles may be equal to the number of argument positions, there is no one-to-one correspondence between the two levels. First, there are argument positions of some verbs which cannot be assigned any semantic content in the form of a participant role, e.g. the sole argument of weather verbs in some languages ('it rained'), or one of the arguments of 'seem' ('it seems that you like my argument'). Second, in Bantu languages, it is possible to increase the number of arguments without simultaneously increasing the number of participant roles. This is precisely the case with the "subjective" interpretation of the applicative and causative discussed in chapters three (section 3.2.2) and four (section 4.2.3) respectively. Third, as the discussion of the reciprocal in chapter five will show, it is possible to reduce the number of arguments while holding constant the number of participant roles.

Still, there is a requirement that every participant role in the lexical semantic structure be realized in a licensed argument position, and it is thus appropriate to speak of 'argument differentiation' as a shorthand for the process of keeping track of the expressions that realize a
verb's participant roles and fill particular syntactic slots. ${ }^{13}$ In other words, there cannot be more participant roles than the number of argument positions in which the roles are to be realized. Apart from this unidirectional matching requirement, there is no universal principle specifying the linking of particular participant roles to certain argument positions.

### 2.3 Linguistic Mapping and Argument Differentiation

Grimshaw (1990) contends that equating argument structure with the number of argument positions related by a predicate makes the construct of limited interest. She goes on to propose a prominence theory of argument structure according to which argument structure is not merely a set of arguments, but "a structured representation over which prominence relations are defined." Information regarding prominence is available from the LSS of the predicate (not to be confused with my LSS above, which lists participant roles in verb specific labels), via the thematic hierarchy. Similarly Alsina (1993) maintains that in addition to information about the number of arguments, the arguments are ordered according to the thematic hierarchy, although thematic information is not included in argument structure.

Grimshaw's and Alsina's prominence theories, which necessitate the enrichment of argument structure, are
motivated by the need to determine the assignment of grammatical relations in a construction. In an earlier section I claimed that there is no basis for positing a level of grammatical relations (subject, object ...) or a level of a hierarchical and finite inventory of thematic roles (agent, patient ...). Prominence is dictated by the need to link the various levels of representation (see Table 2.1). But I have suggested that in order to examine the various mechanisms by which languages solve the mapping problem our concern needs to shift away from this multifarious representation. Such a move puts the real problem in stark relief.

Consider a construction in which the three phrases - a boy, a girl, and a teacher - realize the three arguments of 'give'. Since all three NPs here can be mapped onto any of the participant roles of the verb, there are six possible ways to do the mapping as shown in (205).

| (205) giver |  | recipient | gift |
| :--- | :--- | :--- | :--- |
| i) a boy | gave | a girl | a teacher |
| ii) a boy | gave | a teacher | a girl |
| iii) a girl gave | a boy | a teacher |  |
| iv) a girl gave | a teacher | a boy |  |
| v) a teacher gave | a boy | a girl |  |
| vi) a teacher gave | a girl | a boy |  |

It will be noted that the rules of English stipulate that in a simple, active, declarative sentence, the NP linked to the giver argument must appear before the verb, while the other two appear after the verb. Of these two the recipient NP must precede the gift ${ }^{12}$. Any rearrangement requires concomitant changes in the morphosyntax of some NPs (e.g. te recipient, by giver) and/or of the verb (passive). In effect, the chief resource for argument differentiation in English and many configurational languages is word order. Yet there are variations, even within this group of languages, regarding the ways in which ordering is put to use, as well as the limits imposed on it. Irish, for instance, places all arguments after the verb, as shown in (206) (cf. Rugemalira 1993b).
(206) a) thug an rí an teach mór don bhuachaill gave the king the house big to boy 'the king gave the big house to the boy' 'the king gave the boy the big house'
b) *thug an rí an teach mor an buachaill
c) *thug an rí an buachaill an teach mor (*dative shift)
d) *thug an ri don bhuachaill an teach mor

The argument differentiation rules for Irish require the giver argument to be placed immediately after the verb, followed by the gift, and then the recipient, which is marked with a preposition; without marking the recipient with a
preposition the construction is not acceptable (206b); there is no dative shift version analogous to the English case (206c), and even with the preposition the ordering must not be altered (206d).

Now there are languages that do not make any significant use of the ordering strategy - the so-called nonconfigurational languages like Warlpiri (Hale 1983) and Malayalam (Mohanan 1982). Consider the Malayalam example in (207), glossed as 'the child saw the elephant' (Mohanan 1982:508).
(207)
$\begin{array}{lll}\text { a) } \begin{array}{ll}\text { kutti } & \text { aanaye }\end{array} \text { kantu } \\ \text { child-nom elephant-acc } & \text { saw }\end{array}$
b) aanaye kutti kantu
c) aanaye kantu kutti
d) kantu aanaye kutti
e) kantu kutti aanaye
f) kutti kantu aanaye

There are six word order possibilities in (207) just as in the English example (205) above. But in the Malayalam example word order does not serve the argument differentiation function - in all six arrangements, the child is the 'seer' and the elephant is the 'thing seen', thanks to the case marking.

In some languages ordering serves a different purpose from that of other configurational languages. According to

Bhat (1991), sentence initial position in Kannada is reserved for the topic. In other words, ordering marks a pragmatic relation rather than a grammatical relation, and semantic (role) relations are morphologically marked by case ${ }^{14}$. In general, languages that have a reduced or no role for the ordering strategy usually have extensive nominal morphology (case system) which provides alternative means for differentiating the arguments.

In Bantu languages the syntactic ordering strategy interacts with the semantic features of animacy, person and number (Rugemalira 1991a, 1993a), and as such the autonomous syntax thesis (viz. that the rules of syntax "don't refer to elements of the physical world" (Chomsky 1982:114)), cannot form part of the analytical framework ${ }^{15}$. In addition there is a variety of restrictions on various components of the grammar of these languages so that in the final analysis there is a limited number of things that one can talk about within a single clause. Most of the discussion in this study concerns the restrictions within the verb extension system (distinctions, repetition, cooccurrence and ordering), but other restrictions considered include those on the forms of realization of arguments (marked and unmarked NPs, pronominal affixes, and clitics), omissibility of constituents, and the distinction between arguments and adjuncts.

NOTES TO CHAPTER TWO
1 Terminological variations in this area abound, but the differences in content are more apparent than real. Grammatical relations and grammatical functions are interchangeable. Government and Binding theorists prefer theta roles or $\theta$-roles over thematic or semantic roles, the latter terms being more easily identified with LFG. Essentially the same notions are involved as those of Eillmore's (1968) cases or Starosta's (1988) case roles. But while these may overlap with morphological cases in case marking languages, GB's abstract case is a more general notion set up as a level of representation independent of theta roles.

2 For recent treatments of these issues see Baker (1991) on configurationality and case, and Emonds (1991) on theta role assignment.

3 Note that here the level of argument structure is synonymous with that of thematic roles.

4 See Jackendoff's (1987) discussion of, and counterexamples to, the biuniqueness interpretation of the Theta Criterion of GB theory.

5 See Rugemalira (1991a,1993a) and the subsequent chapters below for a discussion of the limits imposed on argument realization types. In this particular example, only the first person pronominal prefix, but not the second or third, can
realize the "beneficiary" argument and give the egocentric interpretation of the whole event.
i) a -ka - ku -nywe -is -ez - á omwáná amáte
he -PST -you -drink- C - A - FV child milk
*'He made you drink the milk for the child'
'He really made the child drink the milk'
'He made the child drink a lot of milk'
ii) *a- ka - ba - nywe -is-ez-á omwáná amáte he-PST-you/them-drink -C -A -FV child milk
'He made you/them drink the milk for the child'
'He made the child drink the milk for you/them'

Note that although i) is well-formed with the second person singular pronominal prefix, no additional participant role is added, and only the "subjective role" interpretation is available (see chapter 3). This interpretation is not available when the second/third person plural pronominal prefix is used, making ii) unacceptable. In short, then, there are language specific restrictions on the types of expressions (NPs, pronominals, etc.) which can instantiate certain participant roles, thereby facilitating argument differentiation and giving the correct interpretation for a construction. These restrictions defy both the autonomous syntax thesis and any attempt to set up universal linking principles.

6 See the various role inventories and definitions of each role in Fillmore (1968), Jackendoff (1987), Starosta (1988), and a review of the problems of role identification in Dowty (1991). For an anti-thematic role thesis see Ravin (1990).

7 Chomsky (1965:124) took precedence (or linear order) seriously and dismissed the proposal that the elements on the right of the arrow in phrase structure rules be represented as a set rather than as a string. He maintained that strings Convey more information "since they not only define an abstract system of grammatical relations but also assign an abstract underlying order to the elements." In subsequent work special rules had to be devised to derive the surface order of elements in non-SVO and non-configurational languages. For instance, Chomsky (1981:129) takes the position that, for Japanese, the assignment of grammatical functions is random, "which is to say that order is irrelevant." More recently Jackendoff (1990) has argued against a proposal (Larson 1990) to eliminate linear order in the analysis of double complement constructions, maintaining that such a proposal is too constrained because it relies only on dominance relations.

8 Among the early skeptics of the grammatical relations orthodoxy within the generativist tradition, Fillmore (1968:17) "suggested that there are good reasons for questioning the deep structure validity of the traditional
division between subject and predicate, a division assumed by some to underlie the basic form of all sentences in all languages. The position I take seems to be in agreement with that of Tesnière (1959,pp.103-105) who holds that the subject/predicate division is an importation into linguistic theory from formal logic of a concept which is not supported by the facts of language and, furthermore, that the division actually obscures the many structural parallels between 'subjects' and 'objects'".

9 The prestem pronominal affix cannot appear if the postverbal NP is present.

10 Compare the Bantu and Hudson tests above with Chung's (1976) tests for objecthood in Bahasa Indonesia: passive, reflexive, object preposing, control of equi, and relative clause formation.

11 In this regard Construction Grammar (CG) is different from GB and LFG in the amount of concern with the forms of realization (instantiation) of the various arguments. This is reflected in the detailed specifications for each grammatical construction. Like in GB and LFG, the linking problem in CG essentially consists in determining the connection between grammatical functions and semantic roles. But unlike these other theories, CG does not regard grammatical functions as universals of language, although they are considered to be essential in the grammar of languages like English (cf Fillmore \& Kay 1993).

Williams (1981) proposes that this be indicated by underlining the giver. Fillmore \& Kay (1993) set such a participant role apart in bold face as the "Distinguished Argument".

13 For purposes of economy of expression $I$ make use of such terms as "omissible role" and "omissible argument". Omissibility concerns the possibility of leaving a particular role unrealized by any linguistic expression (cf. "null instantiation" in Construction Grammar). Although LFG regards this as "unspecified object deletion", in this study 'deletion' is reserved for the detransitivizing processes of the reciprocal, stative, and passive extensions, whereby the predicate structure is reconstituted by, at the very least, the reduction of the number of argument positions.

14 Consider these examples from Bhat (1991:12):
i) hari rajuvannu hogalida

Hari-nom Raju-acc praised
'Hari praised Raju'
ii) rajuvannu hari hogalida

Raju-acc Hari-nom praised
'Raju was praised by Hari'
"The topic is Hari in (i) and Raju in (ii); this pragmatic difference is represented in these sentences by simply changing the order of the two arguments; their case markers
remain unchanged and the verb also remains unchanged".

15 Hawkinson \& Hyman (1974) discuss animacy, person and number phenomena as representing "the means by which semantic and pragmatic considerations undermine the absolutive power of a grammar". Foley \& Van Valin (1985:287) show how "the information status of NPs [may be] determined by inherent properties of their referents, the most significant of which properties is being one of the immediate speech act participants: the speaker or the addressee", which translates into first and second person pronouns/affixes in the languages of the world.

CHAPTER THREE
THE APPLICATIVE

### 3.0 Introduction

This chapter provides a descriptive account of the applicative extension. Section 3.1 discusses the form of the appiicative as well as the various terms that have been used in the literature in connection with this extension. Section 3.2 presents the thematic roles available with the applicative, while section 3.3 presents the morphosyntactic and semantic patterns associated with the locative role. Section 3.4 takes up the analytical framework proposed in chapter two and argues that the applicative extension is essentially a transitivizer.

### 3.1 Form and Terminology

The applied or applicative extension has been reconstructed for Proto-Bantu as *id (cf. Meinhof 1899, in Schadeberg n.d.:31; Guthrie 1967-71: CB4, CS2188; CB1 p.89). Other terms that have been used include "directive" and "instrumental" (Guthrie 1962:106)", "objective", "prepositional", and "relative" (Doke 1935:52-53). According to Trithart (1983:1), "'Applied affix' is the general linguistic term for a verb affix which allows the non-subject arguments of the verb to be increased", especially when the affix in question "occurs with two or more distinct semantic
relations", as is the case with the Bantu verb extensions, instead of only one, as is the case in nominal case marking systems (e.g. dative marker - recipient NP; accusative marker - patient NP; benefactive marker - benefactive NP). Schadeberg (n.d.:31), however, maintains that "the universally much better known term 'dative' has been circumvented by Bantuists, probably to avoid confusion with (Indoeuropean) nominal case marking".

Trithart's position does indeed blur the distinction between the verbal morphology of the Bantu affix and the nominal morphology of much of the "semantic relations" notions. But by asserting that "dative" is a "better known term", Schadeberg too seems to draw even closer parallels between Bantu verbal affixation and the nominal case marking systems in other languages. It may be that Bantuists promoted/coined the term "applicative" as suggested by Schadeberg and that this term subsequently acquired the general linguistic usage suggested by Trithart. ${ }^{2}$ Ashton et al. (1954:330) suggest that the "applied form ... directs or extends the action of the simple form" to some other object/participant. Alsina (1990:35) states that the "applicative morpheme is a predicate which applies the action of the predicate with which it combines to a new participant, which is benefitted, utilized, involved as a location, etc." Whatever the etiology, the terms "applied" and "applicative" have become standard, used interchangeably, in referring to the -ix- extension (cf. inter alia, Khamisi 1985, Baker

1988, Rubanza 1988, Hyman 1990, Bresnan \& Moshi 1990, Alsina \& Mchombo 1990). In this connection Baker's (1989) reference to the Kinyarwanda -ho locative clitic as an applicative should be considered erroneous. The clitic originates from class 16 of the nominal class prefix system and to incorporate it into the verbal extension system would be highly confusing. Consider (301-303).
(301)

$$
\begin{aligned}
& \text { (aha-ntébe) a - ka - t -a -ho ecitabo } \\
& \text { L - chair he-PST - put -FV -LC book } \\
& \text { '(on the chair) he put a book there' }
\end{aligned}
$$

(302)
a - ka - hunj- ir- á omu- nju
he- PST - flee -A -FV L - house
'he fled into the house'
(303)
(enju) a- ka - ji - hunj-ir- a - mu
house he-PST - it - flee-A - FV- LC
'(the house) he fled into it'

Note that in (301) the locative clitic (LC) -ho takes the place of the omissible locative complement 'chair', and that unlike the applicative in (302) and (303) the locative clitic in (301) and (303) occurs after the final vowel. It falls outside the domain of the verb stem which ends with the final vowel (FV). It is thus a clitic and very different from the verb extensions which are suffixes par excellence. ${ }^{3}$

```
Furthermore in (303) the applicative cooccurs with the
locative clitic.
```


#### Abstract

3.2 Applicative Thematic Roles

In this section $I$ will give a detailed description of the various semantic effects that can be achieved by using the applicative. This description will be cast in terms of the thematic (or semantic) roles licensed by the suffix. Recall the discussion in chapter two regarding the problems related to the identification and definitions of the individual roles. In this section these problems will largely be ignored for the purposes of clarity of exposition. But a later section (3.4) will return to the argument that the analysis of the extensions, and probably general linguistic theory as well, does not need a conventional inventory of thematic roles.


### 3.2.1 Beneficiary role

This is the role most often cited in connection with the applicative extension. Three closely related senses are distinguishable. The first, do something for the benefit of, is illustrated in (304).

```
gur-ir- á abanta4 enyama
buy-A -FV people meat 'buy meat for people'
```

The NP abantu 'people' is licensed by the applicative and carries the beneficiary role.

The second sense of the beneficiary role, do something on behalf of, is illustrated in (305).

$$
\begin{align*}
& \text { n -siij-ir-á omwáná amajúta }  \tag{305}\\
& \text { me-smear-A-FV child oil } \\
& \text { 'smear oil on the child for me' }
\end{align*}
$$

The intended reading is conceivable in a context like this: I am in a hurry dressing up to catch the bus. The child is not ready and I ask someone to smear (apply) oil on him/her. In granting my request this person is doing me a favor. Essentially then this sense is a slight variation of the benefit sense. In many instances constructions are ambiguous, as (306) \& (307) show.
(306)

> handiic -ir - á omukéikurú ebarúha write - A - FV old woman letter
(i) 'write a letter to the old woman'
(ii) 'write a letter on behalf of the old woman'
(307)
twar-ir-á omukékurú améizi carry-A-FV old woman water
(i) 'carry water to the old woman'
(ii) 'carry water for the old woman'

It should be noted that in both (306) \& (307) the new role in the first reading is sometimes referred to as a 'recipient' or a 'goal' (Bresnan \& Moshi 1990, Alsina \& Mchombo 1990, Grimshaw 1990, Emanatian 1991).

A note of caution on the semantics of 'beneficiary' is in order. "Benefit of" is not to be taken literally. In (306), for instance, the letter could be an eviction notice to the old woman, and this can hardly be to her benefit. But as long as the context provides no clue to the contrary, conventional interpretation tends towards the literal benefit sense. Otherwise a third sense, do something to the detriment of, is identified. Although the term "maleficiary" is sometimes used (Mchombo 1992)5 this need not be conceived as a distinct role from the beneficiary, but as one of the available senses of the beneficiary. Consider (308)-(311).
(308)

> reet -er- á omuséfja abasuma bring-A -FV man thieves
> 'bring thieves to the detriment of the man'
(309)

$$
\begin{aligned}
& \text { it -ir-á abantu emipango } \\
& \text { kill-A -FV people plans } \\
& \text { 'kill people's plans' } \\
& \text { i.e. kill plans to the detriment of the people who } \\
& \text { made them. }
\end{aligned}
$$

(310)

> ba - ka-mw - it -ir- a omwana they-pST-her-kill-A -FV child 'they killed her child' i.e. they killed the child to the detriment of its mother.
(311)

$$
\begin{aligned}
& \text { ba - ka-n - som - er - a ebarúha } \\
& \text { they-PST-me-read - A -FV letter } \\
& \text { i) 'they read a letter to me' (benefit/behalf senses) } \\
& \text { ii) 'they read my letter' (disapproval implied: } \\
& \text { detriment sense). }
\end{aligned}
$$

In (308) the detriment sense hinges on the negative connotations associated with the NP abasúma 'thieves'. By contrast the detriment sense in (309) and (310) largely derives from the the verb 'kill' (killing is bad). Kimenyi (1980:45) assigned a 'possessor' role to cases like (309) \& (310). The possessive relation essentially serves to underscore the intensity with which the possessor suffers from the detrimental action. When neither the verb nor the original $N P$ provides sufficient cause for a detriment interpretation as in (311) the neutral/normal reading is the benefit/behalf sense(311i). But the wider sentential as well as extralinguistic context may still signal a detriment sense (311ii).


#### Abstract

3.2.2 Subjective role

There is no equivalent notion in the conventional role inventories to what is termed the "subjective role" here, and illustrated in (312-317). In all these examples the extension creates a new argument position for the verb, but it does not provide an extra participant role to fill the position. The type of constituents that supply the relevant interpretations is limited to the reflexive, and the first and second person pronominal affixes.


(312) (a) a - ka- rwâr - a
he-PST-fall ill-FV 'he fell ill'
(b) a - ké- - rwar -ir- a
he-PST-RF-fall ill-A- FV 'he fell ill' (sympathy)
(313)

$$
\begin{aligned}
& \text { (a) } a-k a ́-f(u)-a \\
& \text { he-PST-die - FV } \\
& \text { (b) a - ké- ef } f(w) e-\text { er-a } \\
& \text { he-PST-RF-die -A -FV 'he died' (sympathy) }
\end{aligned}
$$

The applicative in (312) \& (313) cooccurs with and licenses the reflexive affix. Although both the extended verb and the unextended one are given the same gloss, there is an important difference in nuance describable as a sympathetic point of view; hence the term "subjective" (cf Kimenyi 1992).

Here the applied construction, together with the reflexive morpheme, express the feelings of the speaker.
(314) (a) a - ka- som- á ecitabo he-PST-read-FV book 'he read a book'
(b) a - ke-e -som -er - á ecitabo he-PST-RF-read -A -FV book
'he read a book' (approval/disapproval)

The point of view in (314a) is affectively neutral. With the applicative and the reflexive, (314b) could express approval in the context whereby the reader of the book, instead of participating in a quarrel, went away to read a book quietly. It could be disapproving if instead of lending a hand in a difficult task, the reader went away to read a book.
(315) (a) ba - ka- mu - téer - a they-PST-him - hit -FV 'they hit him'
(b) ba - ka-mu - $\mathbf{n}$ - téér-er-a they -PST- him-me -hit - A -FV 'they gave him a good beating' (satisfaction/glee)
(316) (a) tu- ka- nyw - á amáárwa we-PST-drink-FV beer 'we drank beer'
(b) tu- ka- ku- nyw - er- á amáárwa we-PST-you- drink- A- FV beer 'we really drank a lot of beer' (satisfaction)

The contrasts in (315) \& (316) again illustrate the intensity of feeling that the applicative construction together with the first and second person pronominal affixes help convey a feeling that may be stated thus: 'the action was done to my satisfaction'. Without the applicative there is only a plain statement of fact with no indication of how the speaker feels about it.

As already noted this usage is fairly idiomatic, being available only when the applicative cooccurs with the reflexive affix (312-314) or with the first or second person affixes (315-316), but not with any other affix or NP, as (317) shows.

```
tu- ka- mu- nyw -er - á amáárwa
    we-PST-her -drink-A -FV beer
    'we drank her beer' (beneficiary)
```

Since the new argument introduced by the applicative in (317) is not realized by a reflexive or a first or second person pronominal, only the beneficiary interpretation is available, but not the subjective interpretation.

### 3.2.3 Motive role

Motive NPs licensed by the applicative have been given a variety of labels including reason/cause, and purpose/goal. Trithart (1983:158) defines purpose/goal as "the NP which an action was performed to obtain or accomplish", and a cause/reason as "one which precipitated the action of the verb". This is a rather delicate distinction which at times seems to hinge on tense contrasts: reason/cause if past, and purpose/goal if in the future (cf Satyo 1985:180f). The possibilities available in Runyambo are shown in (318-322) while (323) provides a comparison with the beneficiary role.

```
a - ka- mu - jum - ir- á obusúma
he-PST-her -scold- A -FV stealing
'he scolded her for stealing' (reason/cause)
```

(319)

```
a - ka- mu - jum - ix- áci
he-PST-her -scold- A -FV-what
'why did he scold her' (reason/cause)
```

(320) ba - ka- rwan -ir- á embúzi
they-PST-fight -A -FV goat
'they fought over the goat' (reason/cause)
(321) kor - er- á ensimbi
work- A -FV money
'work for money'
(purpose/goal)
(322)

```
ba - ka-rwan - ir- á obuhúuru
they-PST-fight -A -FV independence
'they fought for independence' (purpose/goal)
```

```
kor - er- á omukáma
```

kor - er- á omukáma
work - A - FV king
work - A - FV king
'work for the king' (beneficiary)

```
'work for the king' (beneficiary)
```

(323)

In (318-320) obusúma 'stealing', -ci 'what/why', and embúzi 'goat' generally fit Trithart's characterization as NPs "which precipitated the action of the verb". Similarly ensimbi 'money' and obuhúuru 'independence' in (321-322) are characterizable as NPs "which the action was performed to obtain". But two observations are pertinent here. First, the distinction between purpose/goal vs reason/cause cannot be definite; there is no evidence, in the structure of the language, to support such a distinction. Rather the distinction is dependent on the extralinguistic context. The role assignments in (320) and (322), for instance, assume that the goat was there to be the cause of the fighting while independence was not there and people had to fight (struggle) to obtain it. Yet we could imagine a context in which the people had to fight in order to merit/win the goat, in which case this would be a goal. Second, as the minimal pair (321) and (323) shows, the assignment of roles relies to a large

```
extent on information regarding the animacy of the relevant
referents (see chapter two).
```

3.2.4 Locative role
The use of the applicative to license a locative role is
illustrated in (324).
(324) zaar - ir- á omu- nju
give birth- A FV L - house
'give birth in a house'

Note that the applicative cooccurs with the locative noun class prefix. As will be shown below, this is the general pattern but by no means the only one with respect to locative complements.
3.2.5 Durative role The applicative may license a durative role, as shown in (325).

```
mer - ér- á ebir6 bisatu
    sprout- A - FV days three 'sprout in three days'6
```

The complement in (325) must be an amount of time, not a point in time like "yesterday" or "in the moraing" which do not need the applicative as (326) shows.
(326)
bi -ka - mer - a ijwééri they-PST-sprout-FV day before yesterday 'they sprouted the day before yesterday'

### 3.2.6 Neutral role

The applicative cooccurs with two fixed expressions busa 'nothing' and cimo 'one' in an idiomatic construction, as shown in (327-330).
(327)

> a-ka -kor - er- a busa he-PST -work-A -FV nothing
> 'he worked for nothing'
(328) a - ka - ci - reeb - er- á busa
he-PST - it - look- A -FV nothing
'he looked at it for free'
(329)

```
    a - ka - jend- er- a cimo
    he- PST- go - A -FV one
    'he went away for good' (i.e. with no intention of
    coming back)
```

(330)

$$
\begin{aligned}
& \text { a - ka- nyw - er- á cimo } \\
& \text { he-PST-drink- A-FV one } \\
& \text { 'he drank even more' (i.e. with no intention of } \\
& \text { wanting to stop) }
\end{aligned}
$$

While (327) seems to be close to the motive role in the sense that the hoped for goal did not materialize, the rest are more difficult to fit in. I will refer to this usage as the "neutral role" and set it apart from the other idiomatic pattern ("subjective role" of section 3.2.2) which requires a different set of constituents and has a more easily classified semantic import, viz. viewpoint. In the case of the "neutral role" the range of interpretation is much narrower and more closely associated with the two expressions busa and cime. The general sense in (327-328) may be characterized as 'the action was accomplished without reward/cost'; the sense in (329-330) is roughly 'the action was accomplished with no prospects of reversal'. It is no coincidence that the expressions busa and cime are not only inanimate, but they are also abstract, lacking the quality of concrete embodiment ${ }^{7}$, which is an important dimension in the assignment of the traditional thematic roles.


#### Abstract

3.3 Locative Patterns

In this section special consideration of the locative role is in order because of the morphosyntactic and semantic patterns available to this particular interpretation but not to any other interpretation discussed in 3.2 above.


### 3.3.1 Morphosyntactic patterns

The morphosyntactic patterns in question are primarily illustrated in (331-333).
(331) (a) gamb - ir - á omu- nju speak - A - FV L - house 'speak in the house'
(b) *gamb -á omu-nju
(332) (a) a - ka - mu -sang- á omu - nju he- PST- her -find-FV $L$-hcuse
'he found her in the house'
(b) *a - ka - mu - sanj - ir - á omu - nju
(333) (a) biik - á omu- nju store-FV L - house 'store (something) in the house'
(b) biic -ir- á omu-nju store-A - FV L - house
'store (something) when in the house'

The issue in (331-333) involves the use or non-use of the applicative to license a locative role. The pattern in (331), i.e. +A , is the most common: as Table 3.1 shows, in the $530-$ verb sample, over $71 \%$ were found to require the applicative in order to take a locative complement. Six per cent of the verbs belong to the pattern in (332), i.e. -A, in prohibiting the applicative before a locative complement. Twenty per cent of the verbs can access either pattern, $+A$ and $-A$, as shown in (333), and the choice will usually have semantic significance. There is a fourth pattern involving 16 verbs
(3\%) whereby the applicative and the locative prefix are in complementary distribution, as (334) shows.

```
(334) (a) sitam- á aha-ntébe
    sit - FV L - chair 'sit on a chair'
    (b) sitam- ir - á entobe
    sit - A - FV chair 'sit on a chair'
```

The choice between the applicative and the locative prefix in (334), i.e. -A or $-L$, does not carry any significant semantic contrast.

Table 3.1 gives a summary of the patterns.

| Group | affixes | pattern name | no. of verbs | \% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | +A +L | +A | 378 | 71 |
| 2 | +A +L | +A | 108 | 20 |
|  | $-\mathrm{A}+\mathrm{L}$ | -A |  |  |
| 3 | $-\mathrm{A}+\mathrm{L}$ | -A | 28 | 6 |
| 4 | $-\mathrm{A}+\mathrm{L}$ | - | 16 | 3 |
|  | +A-L | -L |  |  |
|  |  | Total | 530 | 100 |

TABLE 3.1: Morphosyntactic patterns in applied locatives

Note that pattern -L is more significant than the table suggests: in Runyambo, place names are never marked with the locative prefix. With respect to the marking of locative NPs, some Bantu languages e.g. Kiswahili \& Gitonga, use the suffix -ni, whereas other languages e.g. Runyambo and Kinyarwanda, use the locative prefixes ha-, ku-, mu-, and icorresponding to classes $16,17,18$ and 24 of the noun class prefix system respectively (see footnote 3). But Kiswahili is like Runyambo in not marking place names, whereas Gitonga follows the Kinyarwanda pattern and marks place names (Kapinga 1983; Kimenyi 1980; Lanham 1955).

Group 2, 3, and 4 verbs are listed alphabetically in Tables 3.2, 3.3, and 3.4, respectively. All other verbs found in the Appendix but not listed in these tables belong to group 1.

| kwânga | refuse | kwaka | burn |
| :--- | :--- | :--- | :--- |
| kwara | make bed | kubanza | start |
| kubáza | ask (question) | kubíka | store |
| kubinga | chase | kubóha | tie |
| kubúuza | ask (question) | kucáara | visit |
| kucukura | search | kucumba | cook |
| kucuncumura jerk | kucúngura redeem |  |  |
| kúcwa | cut | kucwéra | spit |
| kweba | forget | kweya | sweep |
| kúfa | die | kufukunkura empty |  |
| kufúmura | pierce | kufûnda | be narrow |
| kufura | wash (clothes) | kugarama | lie on back |
| kugarura | bring back | kugesa | harvest |
| kuguruka | jump | kuhanama | climb |
| kuhandiika write | kuhanika | hang |  |
| kuheeka | carry | kuhíga | search/hunt |
| kuhinda | rouse | kuhunga | flee |
| kúhwa | be finished | kwiba | steal |
| kwibika | emerse/dip | kwiha | remove |
| kwihura | serve food | kwijura | fill up (intr) |
| kwimuka | rise | kujábika | emerse/dip |
| kujuba | fish | kukóma | tie |
| kukômba | lick | kukómera | sow |
| kukonora | pulloff | kukurura | pull |
| kukúura | uproot | kumara | finish |
| kumera | sprout | kumurika | shine/flash |
| kununka | sniff/stink | kunyejera ascend |  |
| kunyurura | pull | kúnywa | drink |
| kwombeka | build | kupácira | load |
| kupágasa | work for a wage | kuraba | pass |
| kuragara | drop (intrans) | kurahuka | hurry |
| kuréga | catch water | kureka | leave alone |
| kurenga | measure | kurênga | go over |
| kuronda | search | kuruga | exit |
|  |  |  |  |


| kúrya | eat | kusáaga | exceed |
| :---: | :---: | :---: | :---: |
| kusaaruura | harvest | kusaba | ask/request |
| kusára | cut | kuséenya | fetch firewood |
| kusemba | wrap | kusereka | hide |
| kusíga | leave behind | kusigisa | stir |
| kusindika | push | kusoma | read |
| kusohora | exit | kusômba | fetch repeatedly |
| kusoroma | harvest | kusoroora | separate |
| kusuka | pour | kusútura | lift |
| kusuuma | descend | kuswêra | marry |
| kúsya | burn (intrans) | kúta | put |
| kutáha | scoop | kutadama | sit astride |
| kutânga | forbid;be first | kutéeka | cook |
| kutéera | nit | kutéma | cut |
| kutemba | ascend | kutiganda | fetch materials |
| kutiiza | borrow/lend | kutobera | sink |
| kutórora | kidnap/take away | kutúma | send |
| kutwânga | pound | kutwéija | press charges |
| kutyâza | sharpen | kuzinga | fold |
| kuzira | avoid | kuzoora | bring out |

TABLE 3.2: Group two verbs

| kwaya | plunder/take | kubúgana meet |  |
| :--- | :--- | :--- | :--- |
| kwereera | float | kwema | start |
| kuheima | gather materials | kwikara | stay |
| kúja | go | kukúrata follow |  |
| kunága | lose; throw away | kwóna | destroy crops |
| kuráara | spend night; (of fire) go out |  |  |
| kurambira stretch out | kurunda heap |  |  |
| kusagara accompany | kusaka | fetch food |  |
| kusanga | find | kusénjeera buy beer |  |
| kusiiba | spend time | kusoora | annihalate |
| kutaaha | go home/enter | kutékama perch |  |
| kuterebura slip off (trans) | kutimba | dig |  |
| kutuuma | heap | kutúura | stay/live |
| kutwara | carry | kuzina | swim |
| kuziika | bury |  |  |

TABLE 3.3: Group three verbs

| kubûnga | wander | kubyâma | lie (down) |
| :--- | :--- | :--- | :--- |
| kucáara | visit | kugoba | reach/arrive |
| kugwa | fall | kuhika | reach/arrive |
| kwija | come | kwinama | bend |
| kujenda | go | kunia | defecate |
| kunyáara urinate | kurárama look up |  |  |
| kuseesa spill | kusíama sit |  |  |
| kutánaka | vomit |  | kutóonya drip |
|  |  |  |  |

TABLE 3.4: Group four verbs
3.3.2 Semantic patterns
(i) Spatial locative:

What may be called a spatial locative sense consists in locating the action expressed by the verb (335c), or locating a particular participant in the event, in some space (335a,b; 337c). This space could be a specific site of the whole event ( $336 \mathrm{a}, \mathrm{b}$ ), or the starting point, i.e. source (337a), or the ending point, i.e. destination, of a particular participant (336c, 337b). The specific details about the location of the various participants in the event can only be supplied by the context - crucially the specific verb semantics as well as the nature of the complements and the relationships among these complements in the real world.
 'peel into the pot' (destination of bananas)
(b) háát - ir - á aha - rutaro peel - A - FV L - tray 'peel onto the tray'
(destination of peels or bananas)
(c) háát - ir - á omu - nju peel - A - FV L - house 'peel in the house' (site of whole event)

```
(336) (a) Y kwit - ir - a X omu - nju
        Y kill - A FV X L - house
            'Y kill \(X\) in the house' (site of \(Y \& X\) or \(X\) )
        (b) Y kwét - er -a \(X\) omu - nju
        Y call - A FV X L - house
            ' \(Y\) call \(X\) in the house' (site of \(Y \& X\) or \(Y\) )
            (c) Y kujer- er- á omu- nyanja
        Y flow - A - FV \(\quad\) L - sea
        'Y flow into the sea' (destination of \(Y\) )
(337) (a) \(Y\) kwih - a \(X\) omu- nju
        \(Y\) remove- FV \(X \quad L\) - house
            'Y remove X from the house' (source of \(\mathrm{Y} \& \mathrm{X}\) or X )
        (b) Y kutwar - a \(X\) omu - nju
        Y carry - FV X L - house
        'Y carry \(X\) into the house' (destination of \(Y \& X\) )
    (c) \(Y\) kut- á \(X\) aha- mútwe
        Y put -FV X L - head
        'Y put \(X\) on the head' (site of \(X\) )
```

The spatial locative is the most common sense of the locative role in that most verbs can be construed to carry this meaning or have only this meaning. As (335) shows, for
most verbs (group 1 ), this sense is obtained with the applicative. For a few verbs (group 3), this sense is available without using the applicative (cf.337).

Extralinguistic context is a crucial factor in the interpretation. In (335), for instance, nothing in the morphosyntax of this group one verb decrees the particular semantic interpretations suggested. Whereas (335a \& b) pick out particular participants for locating, in (335c) it is the whole event, including the peeler, the bananas, and the peels, that gets located in the house. But it is our knowledge of the world which rules out the interpretation which would put the peeler in the pot in (335a), or on the tray in (335b). With the group 1 verbs in (336) the morphosyntax can be construed in different ways: in (a) the site of $Y$ may be left unspecified while in (b) it is the site of $X$ that may be left unspecified. Similarly the destination. sense in (c) is part of the meaning of the verb kujera 'flow'. The three verbs in (337) show that it is possible to obtain source, destination and site interpretations without using the applicative ${ }^{8}$. Again there is considerable room for construal allowed by the semantics of the verbs kwiha 'remove' and kutwâra 'carry'. If in (337a) $Y$ was in the house with $X$, then this is a location of the whole event; but if $Y$ was not in the house (consider suitcase) then only the site of $X$ (source) is being specified. In (337b), however, the verb kutwara 'carry' is understood to imply that both $Y$ (the carrier) and $X$ (the carried) cannot end up in different

```
destinations, but "site of X" is also possible (consider
suitcase again). The verb kuta 'put' in (337c) is understood
to specify the site of X.
```

(ii) Temporal locative:

The most frequent sense obtained with the group 2 verbs consists in a contrast between the spatial locative sense for the -A pattern, and the expression of a broader temporal context of the whole event for +A . Consider (341-342).

```
(341)(a) garám - á omu-nju
    lie on back-FV I - house
    'lie on the back in the house'
                                    (site:spatial locative)
```

    (b) garám - ir-á omu- nju
    lie on back - A - FV L - house
            'Iie on the back when in the house'
                            (temporal locative)
    (342) (a) biik - a $x$ omu - nju
store - FV X L - house
'store $X$ in the house' (site: spatial locative)
(b) biic - ir - á $X$ omu -nju
store - A FV X L - house
'store X when in the house' (temporal locative)


#### Abstract

The difference between (a) and (b) in (341) \& (342) may be captured by saying that (a) is a response to a "where" question while (b) is a response to a "when" question. In the latter case the response does not make reference to conventional time units but to stages relative to the event in question. The temporal location may encompass the period leading up to the specific action, or the period after that action. The connotations may be something like: as early as the time he was in the house he was lying on his back/had stored $X$; or, not until he got to the house did he lie on his back/store X. 9 Most verbs in group 2 basically subcategorize for a spatial locative, but they may take the applicative which is then construed as licensing a temporal locative. In effect the verbs in group three are those that cannot be construed as taking a temporal locative complement.


(iii) Participant locative vs event locative:

Some verbs in group 2 make use of the morphosyntactic contrasts available to signal a contrast between locating a particular participant and locating the whole event as shown in (343-344).
(343) (a) teek - á omu- nyungu
cook -FV I - pot
'cook in the pot' (site of a participant)

```
(b) teec - er- á omu-nju
    cook - A - FV L -house
    'cook in the house' (locating whole event)
(344)(a) semb - á omu - rubabi
        wrap - FV L - leaf
        'wrap in a leaf' (site of a participant)
    (b) semb - ér- á omu - nju
        wrap - A - FV L - house
        'wrap in the house' (locating whole event)
Without the applicative (343a & 344a) the locative complement
is interpreted as the site of a specific participant in the
event. The applicative (343b & 344b) serves to bring in a
different locative complement that is the site of the whole
event.
(iv) Source vs destination:
    Some 11 verbs in group 2 make use of the applicative to
license a new locative complement that is interpreted as the
destination of a participant, by displacing the original
locative complement - a source }\mp@subsup{}{}{10}\mathrm{ - which is part of the verb's
lexical semantic structure. This is illustrated in (345).
(345)(a) furuk - á omu - nju
        move - FV I - house
        'move from the house' (source)
```

(b) furuc-ir - á omu- nju
move - A - FV $L$ - house
'move into the house' (destination)


#### Abstract

A verb like -fúruka 'move' in (345) is subcategorized for an omissible source locative and the applicative has the effect of licensing a destination locative in the position of the source, not in addition to it. The other verbs with this property are listed in Table 3.5 , and are called "displacing verbs".


| kubinga chase | kujuba | fish |
| :--- | :--- | :--- | :--- |
| kugesab | harvest | kuhákuura collect honey |
| kúhwa | be finished | kumarac finish |
| kusoroma harvest | kutáha | scoop |
| kutórora kidnap/take away | kuyoora | scoop |

## Examples:

a kujubá omunyanja 'fish from lake'
kujubirá omucitúkuru 'fish (and put catch) into basket'
b kugesá omundimiro 'harvest from field'
kugeserá omucitúkuru 'harvest into basket'
c kumará amaarwá omunkáaye 'deplete/finish beer out of gourd' kumarirá amaarwá omunkáaye 'fill all beer into gourd'

TABLE 3.5: Displacing verbs

The senses just discussed are the most salient semantic patterns in applied locatives, but there are other minor semantic effects associated with the contrast between the extended and the unextended verb. In a few cases (e.g. kukóma 'tie', kuhiiga 'search', kurába 'pass', kuséenya 'collect firewood', kukora 'work') there is no semantic difference between the extended and the unextended verb with respect to accommodating a locative complement. In a few others there are semantic differences that are specific to each verb, and these need not detain us here.

### 3.3.3 Semantic groups of verbs

One possible line of enquiry into the nature of the morphosyntactic and semantic patterns available with locative complements is to investigate the relationship, if any, between semantic classes of verbs and the patterns. For instance, it is possible to set up a class of "cooking verbs" that fit example (343) above. These verbs would include kucumba 'cook', kugóya 'cook', kukáranga 'fry', kusigisa 'stir'. Similarly a class of "ascent/descent" verbs, all of them in Group 2, would include kunyejera 'ascend', kutemba 'ascend', kuhanama 'climb', kuragara 'drop', kusuma 'descend'. Such classes may be suggestive of what to expect of a related vocabulary item but they can be helpful only to the extent that the class is definable with any precision. It is doubtful, however, that a semantic explanation of the
facts is possiblell. In other words, the question is, what is a "cooking verb" or a "descent/ascent verb" and how does this class differ from the other verb classes in terms of the morphosyntactic and semantic patterns it participates in? Consider examples (343) \& (344) above again. If we set up a class of "cooking verbs" for (343), shall we also set up a class of "wrapping verbs" for (344)?

This issue is significant because of the attempts that have been made in the past to set up a class of motion verbs and to analyse the locative patterns in these terms. Trithart (1983:160f) cites several examples to back up the claim that "the most widely described locative applied affix is the verb of motion + goal locative context". She notes, however, that there are several locative or motion contexts which may not involve a verb of motion. She suggests that the locative notion "to" or "toward" is the basic proto-Bantu locative use, but realizing the inconsistencies in the various locative uses across Bantu languages and within single languages, Trithart concludes that other factors, neither lexical nor syntactic, but related to discourse context (e.g. 'dramatic import', 'new information') influence the appearance of the applied affix (p172).

Schadeberg (n.d.:32) is more sanguine about the "verbs of motion" as a class. He maintains that "with these verbs the locative use is especially frequent for obvious reasons" although he does not state those reasons. He goes on to claim that

The unextended verbs of motion indicate a movement either with or without implying a direction relative to the initial position of the movement. For example, the Ganda verb ddukshould be glossed as 'run off, run away from'. A locative expression accompanying such a verb specifies the place where the action starts. But, movements occur in space, and if they are linear then the need may arise to specify the terminal point. The starting point[,] usually understood in such situations, [...] can be left unmentioned. The use of the applicative extension in such circumstances signals that the locative expression does not refer to the primary place of the action.

Emanatian (1991:304) suggests that in interpreting the 'applicative object' it is possible to generalize over semantic classes of verbs and maintains that "motion verbs and not cognition verbs or existential verbs - take goal applicative objects".

The basic intuition that these scholars seek to capture is that if a verb already encodes the idea of movement as in "come", "go", and "run", then the applicative will be dispensed with since it is the marker of movement in other verbs. But even while assuming the correctness of the assertion that the applicative is a marker of movement, the problem is whether it is possible to make a precise characterization of the notion "motion verb". The difficulty inherent in such an enterprise is visible in Trithart's (1983:160) attempt: "the verbs of motion are primarily 'leave' or 'come'; non-motion verbs are 'eat' or 'drink'". But was Trithart unaware of the fact that eating and drinking involve the movement of something from outside the body into the body normally via the mouth? Indeed it is possible to construe at least one participant in the event described by
any verb as potentially mobile, and in this sense all verbs are potentially motion verbs. Consider (346-347).
(346) (a) Y kugarama omu -nju
'Y lie on the back in the house'
(b) Y kugaram -ir -a omu-muhânda 'Y lie on the back when on the way'
(347) (a) Y kwaka omu -nju 'Y burn in the house'
(b) Y kwac -ir - a omu -nju 'Y burn when in the house'

In (346a) $Y$ lies on his back in the house (spatial locative). In (346b), however, $Y$ is perhaps travelling in a truck and lies on his back at some point on the way. Similarly in (347a) the fire burns in the house (spatial locative), whereas in (347b) there is an understanding that since fire does not make itself burn (does not light itself), some other participant $Z$ was responsible for starting the fire and moving with it to or from the house (temporal locative). It could be that $Z$ was trying to start the fire when he was outside the house but finally succeeded when he got into the house. Or it could be that $z$ did start the fire when he was in the house and then moved out of the house with it. The
important consideration is that at one point in time the fire was not in the house. In (348) the examples in (346b) and (347b) are reproduced with the "underlying" participants in the glosses.
(348) (a) Y ku-garam-ir-a omu-muhãnda
'Y lie on the back [in the truck] when on the way'
(b) Y kw-ac-ir-a omu-nju
'Y (fire) burn when [Z still was/finally got with it] in the house'

The participants that are construed as being in motion in (348) (the truck and 2 ) cannot be represented in the construction but they are indispensable for the interpretation of the sentences. And since there is at least one participant that is in motion, the two verbs, kugarama 'lie on the back' and kwaka 'burn', should be classified as motion verbs. But by this criterion any verb is potentially a motion verb. Erom this perspective the notion of "motion verb" may be even less useful than narrow notions like "cooking verb" and "ascent/descent verb"! Two points need to be noted here. First, at least for Runyambo, there is no useful definition of a semantic class of "motion verbs". Second, whatever provisional definition one adopts for such a class, there are no generalisations to be made with respect to the semantic patterns discussed in section 3.3 .2 , or the
morphosyntactic patterns presented in section 3.3.1. In general, then, such classifications as "motion verb" or "cooking verb" do not facilitate the analysis of the applicative extension.

### 3.4 Argument structure and argument differentiation

In this section $I$ will argue that the applicative creates an extra argument position for the host verb, and that we do not need the elaborate and hierarchical thematic role inventory in analysing it. This will set the stage for the argument, to be developed in chapter four (section 4.3.3), that the search for the "basic meaning" of the applicative is misdirected.

According to LFG theory, the applicative extension is a lexical item with its own argument structure which it fuses into the argument structure of the verb to which it is suffixed. In this way the applicative adds a new thematic role to the thematic structure of the verb, below the highest role (cf Bresnan \& Moshi 1990). This accommodates the observation that the applicative does not introduce an agent. In addition, the thematic hierarchy restricts the types of thematic roles that the applicative can introduce in any thematic structure:
with verbs whose highest thematic role can only be interpreted as a patient, the only possible applied argument is a locative, as it is the only thematic role lower than the patient, which is the case with verbs of involuntary motion like..fall.. (Alsina 1990:36)

The data in (349-350) make this hierarchy-based analysis difficult to sustain.
(350)

```
Yesu a - ka-fe -er- á abantu
Jesus he - PST-die -A -FV people
(patient) (beneficiary)
    'Jesus died for the people'12
```

enjúra e - ka- gw -er - a abarimi
rain it-PST- fall-A -FV farmers
(theme) (beneficary)
'rain fell for the farmers'

In both (349) \& (350) the applicative introduces a beneficiary in a structure that already has a patient/theme role. This casts doubt on the appropriateness of the conventional thematic role hierarchies. As was demonstrated in section 3.2 above, the applicative argument is amenable to a wide range of interpretations, but these interpretations are always made within a given linguistic and extralinguistic context. What is invariable is the fact that the applicative creates one more argument position for the verb it attaches to. Accordingly the crucial function of the applicative should appropriately be characterized as increasing a verb's valence by fusing its argument slot into the argument structure of the host verb. Consider (351-152).

```
(351)(a) Kató a - ka-biik - á ensimbi (omu - mufuko)
    kato he-PST-store-FV money ( L - pocket)
        'Kato stored the money in the pocket'
    (b) Kató a -ka -biic-ir- a Kakúrú ensimbí (omu-mufuko)
    Káto he-PST-store-A-FV kakúru money (L- pocket)
    Káto stored money for Kákúru (in the pocket)'
    (c) Kató a -ka - biic -ir- á ensimbí omu-muhanda
        káto he-PST- store-A -FV money L -path
    'Kato stored the money when on the path'
    (d)*Kató a-ka-biic-ir-á ensimbí omu-mufukó omu-muhânda
    (e)kubiika'store':Y, X,[Z]+ -ir:B->kubiicira:Y, X,[Z],B
```

The verb kubiika 'store' is a group 2 verb that takes an omissible participant locative without requiring the applicative (351a). The applicative may be used to license a beneficiary (351b), or a temporal locative (351c), but not both a participant locative and a temporal locative (351d). In (351e) this is summarized by representing kubiika 'store' as a verb that has three argument positions one of which is omissible; this argument structure fuses with that of the applicative, which has one argument position, to produce an argument structure with four positions. Note that the omissible fourth constituent will only be available if no other constituent instantiates a locative role (cf 351 b vs

351d) ${ }^{13}$. In other words no two positions can be assigned a similar role. This is essentially the same restriction expressed as the Theta Criterion of $G B$ and the FunctionArgument Biuniqueness Principle of LFG (Chomsky 1981, Horrocks 1987). But note that in (352) biuniqueness has been violated.
(352) (a) Kató a-ka-t - á ecitabo aha- ntébe Káto he-PST-put-FV book $L$ - chair
'Káto put a book on the chair'
(b) *Kató (ecitabo) a -ka -ci-te -er-á omu-muhsinda Káto (book) he-PST-it-put-A-FV $L$-path
'Kato put it (the book) when on the path'
(c) Kató (ecitabo) a-ka -ci-te-er- á abajenyi aha-ntébe Káto (book) he-PST-it-put-A-FV guests I -chair
'Káto put it (the book) on the chair for the guests'
(d) Kato (ecitabo) (aha-ntébe) a-ka -ci-te -er- a-hó Káto (book) (L -chair) he-PST-it-put-A -FV-LC omu-muhånda

L - path
'Káto put it (the book) there (on the chair) when on the path'
(e) *Kató (ecitabo) a - ka - ci - te - er - á aha- ntébé omu -muhinda
(f) kúta 'put': Y, X, Z + -ir:B $\rightarrow$ kutéera:Y, X, Z, B

Kúta 'put' is a group 2 verb with a non-omissible participant locative ${ }^{14}$ (352a vs 352 b ; chair cannot be omitted). The applicative may be used to license a beneficiary (352c) or a temporal locative (352d), in which case the participant locative must be replaced by a locative clitic and cannot appear in postverbal position (352e). In (352f) kúta 'put' is represented as a verb with three argument positions which are increased to four by fusing with the applicative position.

The representations in (351e) and (352f) are unordered sets of variables with no meaning attached to them; the random and non-alphabetical arrangement is deliberate. The brackets on $Z$ signal the omissibility of one constituent. As already noted, argument structure contains the crucial information regarding the number of arguments or positions available to the predicate. The information concerning what roles and phrase types can fill these slots is contained in the lexical semantic structure. Therefore there is nothing to distinguish the argument structure of kuta 'put' from that of kúha 'give'. Both have three positions in their argument structures. But the semantic structure specifies that kúta 'put' requires a 'putter' (agent), a 'puttee' (theme) and a site (locative), while kúha 'give' requires a 'giver' (agent), a 'gift' (theme), and a 'recipient' (beneficiary).


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Both (351) and (352) show that as the number of arguments increases, the restrictions on what forms (expressions) can fill those argument positions become more and more strict (specific). This continues up to a point where there are no options left, i.e. no more means for realizing and differentiating arguments. But as (352) clearly shows, it is not proper to formulate such restrictions in terms of biuniqueness, since in this example, there are indeed two locative arguments in the same predicate structure. These arguments are distinguished by their forms of realization: one is a locative clitic (LC), and the other is a locative NP. Still, it is important to note that it is not mere morphological similarity of the complements in (351d) and (352e) that disqualifies these constructions. For it is possible to have two morphologically similar constituents, one filling an argument position, and the other being a mere adjunct, as (353) shows.


```
(353)(a) a - ka - bar- á ensimbi omu_-ciro (adjunct)
    he-PST -count-FV money L -night
    'he counted money at night'
    (b) *a- ka- bar- á ensimbi omu_-nju (argument)
    he-PST-count-FV money L -house
    'he counted money in the house'
```

(c) *a - ka- bar- ir - a ensimbi omu- ciro
he- PST-count-A - FV money I - night
'he counted money at night'
(d) a -ka - bar -ir- á ensimbi omu-nju (omu-ciro)
he-PST-count-A -FV money $L$-house (L -night)
'he counted the money in the house (at night)'

Kubara 'count' is a group 1 verb which requires the applicative to license a locative complement. Without the applicative it is only possible to add a time adjunct to the sentence (353a), but not a locative argument (353b). With the applicative, the extra third argument position cannot be filled by a time adjunct (353c), but may be filled by a locative argument (353d). Note that the morphology of omunju 'in the house' is similar to that of omucire 'in the night', which raises a question that is worth considering at this point, concerning the type of constituents that can fill argument positions. This is a particularly important question because of the role that has been given to matters of form, in the literature, in drawing the distinction between argument and adjunct.

According to Alsina $(1992,1993)$ "obliques are always and only the expression of adjuncts", which are "optional by definition". By "obliques" is meant marked NPs (prepositional phrases and case-marked nouns), which in Runyambo consists of the $L$-marked NPs. It has already been shown that a full

```
unmarked \(N P\), a pronominal prefix (i.e. a prestem affix, cf.305), an NP marked with the locative prefix (324), and a locative clitic alone (301) or in conjunction with a pronominal prefix (302), can fill an argument position. But not all NPs marked with the locative prefix can fill an argument position, as (353c-d) show. A distinction needs to be made within L-marked NPs.
```

| omuciro | at night |
| :--- | :--- |
| aharwakána | on Thursday i.e. on the fourth day |
| omumwâka | in the year |
| omumwêzi | in the month |
| omwihangwe | in the day(time) |
| omukaséese | in the morning |
| omucanda | in the dry season |

TABLE 3.6: Time expressions (adjuncts)

| omunju | in the house |
| :--- | :--- |
| omumwirima | in the dark |
| omunsi | in the country |
| ahansi | below/down/on the ground |
| omumwêzi | on the moon |
| aheiguru | above/high |
| aharubaju | on the side |

TABLE 3.7: Spatial expressions (arguments)

Table 3.6 shows the L-marked NPs that cannot fill argument positions but can only appear as adjuncts. These are time expressions which include day and night and divisions thereof, days of the week, months, years, and seasons. Table 3.7 gives spatial expressions and it is this type of constituents that fill argument positions. This distinction is made in semantic terms and recalls the thematic role labels that were discussed in section 3.2 .5 and 3.3.2. The durative role can only be realized by expressions of duration, and these need not be L-marked NPs (325). The temporal locative role can be realized by spatial expressions of the type in Table 3.7, as well as place names. The latter are never $L$-marked in Runyambo. In sum, only L-marked NPs expressing points or periods in time ${ }^{15}$ cannot fill argument positions and cannot be assigned participant roles. This in effect means that there is a definable but very small class
of linguistic elements that function as adjuncts in Runyambo, and that, contrary to Alsina's position, not all obliques function as adjuncts. This situation may be contrasted with that of languages like English where the same linguistic phrase may be an argument in one construction (e.g. he lives in Paris), but an adjunct in another construction (e.g. he died in Paris).

A final question concerning the distinction between arguments and adjuncts revolves around the cooccurrence of adjuncts. Cooccurrence is generally considered a distinctive feature for adjuncts on the basis of facts from languages like English (e.g. he wrote a poem on a piece of paper in English with a red pen). But cooccurrence is also possible with arguments as long as these multiple realizations are construed as filling one argument position, as shown in (354356).
(354)(a) a- ka -gamb-ir- á omu-nju aha-rwakaná omu-ciro he-PST-speak-A-FV L -house $L$-Thursday L-night 'he spoke in the house on Thursday at night'
(b) a -ka-gamb-ir- á omu-nju omu-ciró aha-rwakána
(355) (a) a -ka -gamb -ir- á omu-motoka omu-ngudo he-PST-speak-A -FV L -car L -road 'he spoke in the car on the road'
(b) a -ka - gamb-ir-á omu-ngudo omu-mbtoka
'he spoke on the road in the car'

```
(356) a -ka-gamb -ir-á abadand abarumunat abakázi
    he-PST-speak-A-FV children brothers wives
    'he spoke to clansmen, brothers, wives'.
```

Two adjuncts can appear in either order (354). Similarly in (355) the two locative complements can appear in either order, filling one argument position in the same way that the noun phrases in (356) fill one argument position. The condition that each cooccurring phrase be construed as filling the same position also applies to adjuncts even though it is not usually acknowledged, the assumption being that there are no adjunct slots to speak of, that adjuncts are obtained free of charge as it were. Note though that each cooccurring adjunct, as is the case with arguments, has to be self-sufficient in the sense that it cannot be interpreted as being dependent on a previous or following adjunct. It may thus be appropriate to posit the existence of a single adjunct slot in the clause.

### 3.5 Summary

The applicative increases, by one, the argument positions of the verb with which it is fused. The variety of thematic roles that may be assigned to this argument position include beneficiary, subjective, motive, locative, temporal, and the neutral role. The various senses of the locative are realized via a number of morphosyntactic patterns which


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involve the use or non-use of the applicative. These senses involve such distinctions as locating the action in space or in time, locating the whole event or a participant in the event, and designating the source or the destination of a participant. It has been shown that the number of argument positions for each verb is strictly enforced but that it is possible to have two instances of the same thematic role in a given predicate structure. And finally it was shown that there is only a small class of time expressions and manner adverbs that may be added to a construction as adjuncts but which cannot fill argument positions. All other marked and unmarked NPs may be assigned roles and fill argument positions.


NOTES TO CHAPTER THREE
1 Note that for Guthrie (1962:104f) there are three different affixes - applicative, directive, and instrumental - which happen to have the same shape: "a different function must always be recognized as a sign of a different extension"

2 Tuggy (1988) shows that one morpheme in Nahuatl performs 'applicative' and 'causative' functions. In the spirit of the Trithart account this morpheme should be called 'applicative'. Perhaps the distinction between causatives and applicatives is warranted in Bantu where these are marked by two distinct extensions. But even in this case there is the


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possibility that the two extensions are historically descended from a single suffix (cf Trihart 1983:97), and as will be argued here, causative and applicative extensions perform the same syntactic function, viz. expanding the argument structure of a verb.


3 The clitic -mu originates from class 18 of the nominal class prefix system (see Trithart 1977 for a description of comparable facts in Ruhaya). A third locative clitic -yo, is associated with the class 17 nominal class prefix in Runyambo. But it appears to have originated from the ilocative prefix found in a few languages (e.g. Kinyarwanda, cf. Kimenyi 1980) and variously assigned to a class 19, 24, or 25 (Cf Gregoire 1975).

4
Henceforth all NPs and pronominal prefixes licensed by the applicative and the causative will be in bold face.

5 Indeed Mchombo (1992) proposes a hierarchy in which his 'malefactive' role is almost at the bottom while the beneficiary is only second from the top:
agent>beneficiary>goal/experiencer>instrument>patient/theme>
locative>malefactive>circumstancial

6 No applicative is involved in constructions equivalent to Engiish 'V for $x$ hours'

7 See Cherry (1992) for a discussion of concepts of animacy and embodiment and how they are represented in language.

8 It is worth noting though that source interpretations are typically obtained without the applicative.

9 Kimenyi 1980:37 described the contrast in terms of old vs new information: "The semantic difference between a [without the -ir- suffix] and the b sentences with the suffix -ir- is that in the former everything is new, whereas in the latter everything except the locative $N P$ is old information. The -ir- suffix is always used in sentences which answer questions that ask where the action took place". While the new vs old information could be an appropriate characterization, Kimenyi's last sentence in this quote must be an oversight. For it is in the a versions that the where question (as well as who and what) arises, while the $b$ versions answer the when question.

10 Schadeberg (n.d.) has suggested that such verbs should be glossed with the appropriate English preposition to indicate the direction of movement, e.g. kufúruka 'move from'.

11 See Fillmore (1986:98) on the limitations of semantic classification: "There are certain semantic groupings of
predicates that allow the two kinds of complement omission [indefinite omissible and definite omissible], but a genuine semantic explanation does not appear to be forthcoming"

12 See comparable data in Chichewa (Alsina \& Mchombo 1990b:501)

13 See the discussion on causee omission in the next chapter.

14 Other verbs with non-omissible participant locatives include kwêma 'commence', kwiha 'remove', kuja 'go', kuruga 'leave', kutaaha 'enter', kurába 'pass', kusanga 'find'/'come upon'

15 To this we may add the adverbs bwangu 'quickly', mpora 'slowly', bwémi 'upright', kúbi 'badly', kurunji 'nicely', and the clitic -je 'nicely'.

CHAPTER FOUR
THE CAUSATIVE


#### Abstract

4.0 Introduction

This chapter deals with the other transitivizing suffix, the causative. Section 4.1 discusses the various forms of the extension and their distribution in Runyambo. The semantic roles associated with the extension are presented in section 4.2. In section 4.3 it is argued that the causative extension is a valency increaser distinguishable from the applicative by the fact that it licenses an actor while the applicative licenses a nonactor role. The conclusion in section 4.4 states that this distinction provides a basis for an analytical framework that makes use of only these two thematic macro-roles in stating grammatical generalizations, instead of the detailed and hierarchical semantic role inventories in various current theories.


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4.1 Forms of the Causative Extension

Like many other Bantu languages, Runyambo has two forms of what is generally called the causative extension, viz. -iand -isi-. Schadeberg (n.d:27f) provides an excellent summary of the "conflicting historical explanations [that] have been offered to account for the complex present distribution of the causative suffixes". The controversy has usually revolved around the question of whether we should reconstruct one causative extension or two for Proto-Bantu, and the related


question of which of the two forms is older. By focussing on the patterns of distribution, Bastin's (1986) detailed and extensive investigation has provided strong support for the reconstruction of two suffixes, even if the shape of the reconstructions themselves remains uncertain:
...l'usage des suffixes *ici et ${ }^{*}$; était en première lieu déterminé par le contexte formel en protobantou. Le suffixe polyphone était obligatoire après voyelle tandis qu'après consonne le suffixe monophone était utilisé de manière reguliere. (p.130)
[The use of the suffixes $\mathrm{*ici}_{\mathrm{i}} \mathrm{and} \mathrm{A}_{\mathrm{i}}$ was in the first place determined by the formal context in proto-Bantu. The polyphonic suffix was obligatory after a vowel whereas after a consonant the monophonic suffix was used in a regular manner.]

This complementary distribution is illustrated in Table 4.1 where only the -is;- causative is available, and in Table 4.2 with verbs that appear to have $-i^{-}$as the primary causative suffix.

| kugwa 'fall' | kugwisa 'cause to fall' |
| :--- | :--- |
| kúcwa 'cut' | kucwisa 'cause to cut' |
| kuja 'go' | kujiisa 'cause to go' |
| kusa 'grind' | kuseisa 'cause to grind' |
| kúca 'dawn' | kucéisa 'cause to dawn' |

TABLE 4.1: -isi- causative in $C V$ roots

As Table 4.1 shows, the. CV roots take the -isicausative only (see Table 1.2 in chapter one for a complete list of the $C V$ roots and their causative and applicative
derivations).


TABLE 4.2: -i- and -isi- causatives in C-final roots

The consonant-final roots in Table 4.2 take the -icausative. With the exception of r-final roots, they may also take the -isi- causative, in which case there will usually be
a different sense, so that the two derivations are not synonymous. ${ }^{1}$ This means that the complementary distribution is perfect only in the case of r-final roots. The question that arises here is what factors led to the blurring of this complementarity. It appears that the basic factor was the loss of distinctiveness among the various forms as a result of the consonant alternations initiated by the -i- causative. These final-consonant alternations are shown in Table 4.2
 $m$ $\rightarrow$ my. The resulting blurring of the distinctiveness is best illustrated with the Kiswahili data in Table 4.3. The claim here is that this development affected all the Bantu languages at some early stage in their development.

| Basic stem | -i- derivation | -is;- derivation |
| :---: | :---: | :---: |
| 1 pita | pisha | pitisha |
| pass | give way | cause to pass |
| pika | *pisha | pikisha |
| cook | - | cause to cook |
| piga | *pisha | pigisha |
| hit | - | cause to hit |
| 2 pata get | pasha <br> cause to get (news) | patisha cause to get |
| paka <br> smear | *pasha | pakisha <br> cause to smear |
| $\begin{aligned} & 3 \text { oga } \\ & \text { wash (intr) } \end{aligned}$ | osha <br> wash (tr) | ogesha <br> cause to wash |
| oka <br> bake | *osha | okesha cause to bake |
| ota dream/sprout | *osha | otesha cause to dream/sprout |
| 4 waka be aflame | washa set aflame | *wakisha |
| anguka <br> fall | angusha <br> cause to fall | *angukist.a |

TABLE 4.3: Selective use of -i- in Kiswahili

As Table 4.3 shows, in Kiswahili, the consonant alternations brought about by -i- are: k,g,t -> f. But because of the potential mergers, the use of -i- is selective. In the first three groups of verbs in the table the use of -i- after $/ k /, / g /$ and $/ t /$ is blocked whenever this would result in a merger and create confusion. In the fourth group there are no minimal pairs (*wata, *waga; *anguta, *anguga) that would be the source of confusion, and so the -i- forms are available, but not the -isi- forms. In short then, it may be concluded that it was the need to avoid the potential confusion arising from the consonant mergers initiated by -i- that worked in favor of the -isi- causative: since this form of the suffix did not induce any of these consonant alternations -isi- could be relied upon to preserve the requisite distinctiveness. In this way -isi- acquired a measure of regularity and productivity not previously available to it.

Recall from Table 4.2 that the -i- causative has the effect, roughly, of palatalizing and/or spirantizing the preceding consonant. Now what would happen to roots ending in the "new consonants" which did not exist in Proto-Bantu ${ }^{2}$ and which appear to have been by-products of the consonant alternation process? Table 4.4 shows that the potential conflict, again, was resolved by regularizing the -isicausative.

| Basic stem | -isi- derivation |
| :---: | :---: |
| kugaya 'snub' | kugayisa 'cause to snub' |
| kugoya 'cook' | kugoyesa 'cause to cook' |
| kucanca 'get busy' | kucáncisa 'cause to get busy' |
| kumânca 'wander' | kumáncisa 'cause to wander' |
| kubeija 'carve' | kubeijesa 'cause to carve' |
| kwija 'come' | kwizisa 'cause to come' |
| kusígisa 'stir' | kusigisisa 'cause to stir' |
| kuhéesa 'forge' | kuhéesesa 'cause to forge' |
| kubáza 'ask' (question) | kubázisa 'cause to ask' |
| kubúuza 'ask' (question) | kubúúzisa 'cause to ask' |
| kuzaana 'play' | kuzaanisa 'cause to play' |
| kutiina 'fear' | kutiinisa 'cause to fear' |
| kufunya 'fold' | kufunyisa 'cause to fold' |
| kunyúunya 'suck' | kunyúúnyisa 'cause to suck' |

TABLE 4.4: -isi- causative in "new consonants"

The derived or "new consonants" /y, $c, j, z /$ and /s/. as well as the dental and palatal nasals $/ n /$ and $/ \tilde{n} / 3$, can only take the -isi- causative. It should be noted here that we are not committed to the view that every occurrence of the "new consonants" is to be traced to the consonant alternation process initiated by -i-. The important point here is that the expanded consonant inventory, whatever the source of that expansion was, disturbed the existing equilibrium and made it difficult for consonant alternation to be maintained in its original form.

In short, the net result of the selective use of $-i$ in
order to preserve relevant distinctions is that the -isicausative has become the regular and productive form of the causative while the -i- causative is more idiosyncratic and more likely to be encountered in archaic senses. Still, compared to the more idiosyncratic and restricted occurrence of the $-i^{-}$causative in some languages (such as Kiswahili), in Runyambo this form is still fairly widespread. Table 4.5 summarizes the relevant data.

| Suffix form | Number of verbs |
| :--- | :--- |
| -isi- only | 216 |
| $-i-$ only | $194^{a}$ |
| Both -i- and -isi- | 28 |
| Total | 438 |

a 37 of these verbs do not have r/d as final consonant, which means that there are $28+37=65-i-$ causative forms without a /z/ ending in the sample

TABLE 4.5: Distribution of -i- and -is;- causative forms

In the verb sample there are altogether 438 verbs that take the causative extension. Of these, 216 (i.e. 49.3\%) take -isi- only, while 194 (i.e 44.3\%) take -i-. The vast majority of this latter group (157) have /r/ as the final consonant. Only 28 verbs (i.e. 6.4\%) take both forms of the extension.

The surface form of the long causative in most cases is -is- or -es- and will be represented in this way in most of
the examples here. But there is sufficient evidence to show the presence of a superclose front vowel -i- (cf Trithart 1977). Runyambo has two such pieces of evidence in this regard. The first involves the appearance of the passive suffix after the causative as shown in (401).

```
(401) a) bón - es-i- a -> bónesa 'cause to see'
    b) bon - u - a -> bonwa 'be seen'
    c) bón - es -i - u - a -> bónesibwa 'be caused to see'
                            *bóneswa, *bónesiwa
```

The superclose vowel in (401a) is deleted before the final vowel. In (401b) the passive extension -u- turns into a glide before the final vowel. When the passive cooccurs with the causative as in (401c), the consonant /b/ is inserted before the passive in order to break up the threevowel sequence, and as a result, the superclose vowel is preserved. Note that this vowel is not subject to vowel harmony.

The second piece of evidence is presented in (402) which shows that the applicative extension -ir-/-er- appears between the two parts of the causative -is-i-.
(402)
a) bón-es-er-i-a -> boneseza 'cause to see for'
(*bónesera)
b) many-is-ir-i-a $\rightarrow$ manyisiza 'cause to know for,
i.e. inform for' (*manyisira).

The derived forms in (402) show that there is a superclose vowel that mutates the consonant in the applicative ( $x \rightarrow z$ ) and support the position that the long form of the causative suffix is composite and discontinuous. For the purposes of this discussion, however, $I$ will ignore the details of the underlying forms and only include the superclose vowel in the examples when it actually appears in the surface forms. The consequence of this is that in giving a morpheme by morpheme gloss, the history of the mutated consonants such as the $/ z /$ in (402) above will not be pursued.

### 4.2 Causative Thematic Roles

The causative suffix is associated with two broad thematic roles, viz. the causee and the instrument roles. In addition an attitudinal interpretation, dubbed the 'subjective role' is also available.
4.2.1 Causee role

There are two closely related senses of the causee, manipulatee and helpee (comitative), as illustrated in (403405) .

```
(403) som - és - a Namará ecitabo
    read- C -FV Namara book
```

a) 'make Namara read a book'
b) 'help Namara read a book' i.e. read with her

```
(404) kom - es - á Namará énku
    tie - C - FV Namára firewood
    a) 'make Namára tie firewood'
    b) 'help Namára tie firewood' i.e. tie with her
(405) ri - is - á abajenyi
    eat- C - FV guests
a) 'cause the guests to eat' i.e. feed them
b) 'help the guests to eat' i.e. eat with them
```

The (a) interpretations in (403-405) illustrate the manipulatee sense in which the participant in question carries out the action described by the verb under some kind of control or instigation from another participant who does not take part in the said action. The (b) interpretations however illustrate the helpee sense in which both the causee and the causer take part in the action of the verb together. Note though that even in the case of the manipulatee sense the amount of control attributable to the causer may vary with the verb or with the noun phrase filling the actual position. For instance in (405a) the sense involves making it possible for guests to eat i.e. setting them up for a meal. If instead of abajenyi 'guests', we had abáana 'children', it would also be possible to construe a situation in which someone physically puts food in their mouths. As (405a) stands we are assuming the guests are adults who do not need

```
to be physically/force fed.
    The semantics of individual verbs may not allow the
distinction between manipulatee and helpee senses to be made.
This is illustrated in (406-408).
(406) caaz - á abajenyi
    visit+C-FV guests
    'take the guests around'
(407) koroz - á omurweire
    cough+C-FV patient
    'make a patient cough'
(408) yeg -es -á omwana
    learn-C-FV child
    'teach a child'
Only the helpee sense is available in (406), while in (407-
408) only the manipulatee sense is available.
```


### 4.2.2 Instrument role

```
The various senses of the instrument role viz. tool,
means, and manner, are illustrated in (409-413).
(409) nywe -is -á orusece
    drink-C- FV straw
    'drink with a straw' (tool)
```

```
(410) háát - is -á omúsyo
    peel - C -FV knife
    'peel with a knife' (tool)
The causative in (409) and (410) licenses arguments (straw
and knife) that are interpreted as tools.
(411) jenz - á amaguru
    go+C -FV legs
    'go on foot' (means)
(412) somb -es -á egáari
    carry-C -FV bicycle
    'carry by bicycle' (means)
In (411)-(412) the arguments licensed by the causative
(amaguru and egáari) are interpreted as means.
(413)a) gamb -is -á eciníga
    speak-C -FV anger
    'speak with anger' (manner)
    b) vuj - is - á amáani
        ride- C - FV force
        'ride with force' (manner)
```

The arguments licensed by the causative in (413) are interpreted as the manner sense of the instrument role. In general these labels are dependent on the nature of the entity to which the noun phrase filling the position in question refers. As such the distinctions among the senses in (409)-(413) are of little consequence.

### 4.2.3 Subjective role

As with the applicative, the causative extension too can license an argument position without a substantive participant role to go with it. This is what is called the subjective role because it signals the speaker's attitude or point of view. This is illustrated in (414).
(414) a - ka- - som - es- á ecitabo she-PST-RF -read - C - FV book 'she pretended to read a book'

The argument position created by the causative extension in (414) must be filled by the reflexive affix. The semantic effect is to express the speaker's disapproval of the actor's behavior - pretending to read a book instead of attending to some other pertinent issue.

The foregoing discussion has shown, once more, the role of construal in the interpretation of the various senses of the causee and instrument roles. In the next subsection $I$
will show that even the distinction between causee and instrument has no specific linguistic marking, but that it is dependent on the meaning of the verb as well as the meanings of the constituents that realize particular participant roles.


#### Abstract

4.2.4 Causee vs instrument

The causative suffix introduces one argument that is interpreted as causee or as instrument. There is no possibility of there being in the same predicate structure both a causee and an instrument. As such there is no basis, in the morphology of the verb, for a distinction between causee and instrument. What is required is a mechanism for identifying the constituent realizing the 'causative role' in any construction. The examples in (415)-(417) show that the mechanism relies on the semantics of the verb as well as the semantics of the individual constituents that realize the verb's participant roles.


(415) a) a - ka - mu - kom - es - a énku he-PST - her - tie - C - FV firewood 'he made her tie the firewood'
b) a - ka - mu - kom - es -a omuguha he-PST -her - tie - C -FV rope
'he tied her with a rope'
*'he made her tie a rope'


#### Abstract

In (415a) -mu- 'her' is assigned the causee role on the understanding that enku 'firewood' is the thing that is tied (theme), a role required by the semantic structure of the basic verb kóma 'tie'. But in (415b) omuguha 'rope' is assigned the instrument role (the thing with which you tie), which leaves -mu- 'her' as the theme (the person tied).


(416) a) a - ka - mu - tem - es- a omuti
he-PST - her- cut - C - FV tree
'he made/helped her cut a tree'
*'he cut her with a tree'
b) a - ka - mu - tem - es- á ecísyo
he-PST - her- cut - C - FV machete
'he cut her with a machete'
*he made her cut a machete'

The interpretations in (416) are based on the understanding that omuti 'tree' is the thing that is cut (theme), not the thing with which one cuts (instrument), while ecisyo 'machete' is understood as the thing with which one cuts (instrument), not the thing that is cut.
(417) a) a - ka - handiic - is -á ebarúha
he-PST - write - C -FV letter
'he had [someone] write a letter' (causee omission)
b) a -ka - handiic - is - á ekaráamu he-PST- write - C -FV pen
'he wrote with a pen'
*'he had someone write a pen'

An example of causee omission ${ }^{4}$ is given in (417a): a letter is something you write (theme), not something you write with (instrument). In (417b) we have an instance of theme omission (unspecified object deletion in LFG, or indefinite null instantiation in Construction Grammar): a pen is not the theme (something you write), but the instrument.

To recapitulate: the distinction between causee and instrument is not linguistically marked in the same way as, for instance, locatives are distinguished from non-locatives (see chapter three), or the way applicative roles are distinguished from causative roles. In the next section $I$ dwell on the latter distinction and argue that it provides the basis for a theory that recognises only two thematic roles.
4.3 Argument Structure and Argument Differentiation
4.3.1 Valency increaser
Like the applicative, the causative extension increases the valency of $a$ verb by creating one extra slot in the verb's argument structure. This is illustrated in (418)-
(420).

```
(418) a) Kató a- ka -gw - á [omu- méizi]
    Káto he- PST-fall-FV L - water
    'Kato fell in the water'
```

b) Kató a- ka- gw -is -á omuti [omu- méizi]

Káto he-PST-fall-C -FV tree $\quad$ I - water
'Káto felled the tree into the water'
c) kugwa 'fall': Y, [Z]+ -is-: T -> kugwisa: Y, [Z],T

The verb kugwa 'fall' has two argument positions one of which is omissible (418a). Recall from Table 3.4 (chapter 3) that this is one of the verbs on which the applicative alternates with the locative prefix when a locative complement is involved. Without the applicative the locative complement is omissible; with the applicative, the bare noun phrase must fill the slot. The causative in (418b) creates a third argument position. The representation in (418c) states that the two arguments of the verb fuse with the argument of the causative extension to form a structure with three arguments.
(419) a) a - ka-beij - á obwâto he-PST- carve-FV canoe'
'he carved a canoe'
b) a - ka - beij - es -á amwant obwâto he-PST - carve- C -FV child canoe
'he made the child carve a canoe'
C) kubeija 'carve': Y, X + -es-: $\mathbf{T} \rightarrow$ kubeijesa: Y, X, T


#### Abstract

The verb kubeija 'carve' has two arguments, both of which are non-omissible (419a). A third argument is added to this argument structure by the causative (419b). This is represented in (419c) which shows that the two arguments of the base verb fuse with the causative argument to form a three-place argument structure.


(420) a) a -ka -hend -á omwáná [omugôngo] he-PST-break-FV child back
'he broke the child's back'
b) a -ka - henz -á omwáná emirimo he-PST-break+C -FV child work
'he broke the child with work'
c) a - ka - m - penz - á omwáná [omugôngo] he-PST - me-break+C-FV child back 'he made me break the child's back'
d) *a-ka - henz - á omwáná omugóngó amirimo he-PST- break+C-FV child back work 'he broke the child's back with work'
e) kuhênda 'break':Y,X,[Z]+-i-:T $\rightarrow$ kuhénza:Y,X,[Z],T


#### Abstract

The verb kuhenda 'break' has three arguments, one of which is omissible (420a). Only a body part (an inalienable part of one of the other two participants) ${ }^{5}$ can fill this position, although other verbs with omissible arguments e.g. kutéeka 'cook' (see example 428 below), kúrya 'eat', kufura 'wash (clothes)', take constituents other than the body part type. Non-omissible arguments can be increased by means of the causative (420b). If the omissible argument has been filled this valency increase is possible only under restricted conditions: the fourth argument can only be a first person pronominal prefix (420c), but not a postverbal noun phrase (420d). The representation in (420e) states that the threeplace argument structure of this verb can be expanded to four thanks to the causative.

As an example of an argument structure in which all four arguments are non-omissible consider (421).


(421) a) a -ka - siig -á omwáná ebyondo he-PST-smear-FV child mud 'he smeared the child with mud'

```
b) \(a-k a-b i-m u-s i i j-i s-a\) a cinige
he-PST- it - her- smear-C - EV anger
'he smeared it on her with anger'
```

C) kusiiga 'smear': Y, X, Z + -is-:T $\rightarrow$ kusiijisa: Y, $X, Z, T$


#### Abstract

Kusiiga 'smear' is a verb with three non-omissible arguments. The causative (421b) adds a fourth argument. These arguments may be realized by a combination of noun phrases and pronominal prefixes: the significance of striking an appropriate mix of these forms, as well as the relative ordering of the noun phrases on one hand, and of the prefixes on the other, are discussed in detail in Rugemalira (1991a, 1993a) as the means by which arguments are kept distinct. The representation in (421c) states that the argument structure of this verb may be expanded to contain up to four positions.

Again, as is the case with the applicative, when all possibilities and restrictions are considered, there appears to be a limit on the number of distinct participants that can be mentioned in one clause. So far clauses appear to allow up to four such participants. In the next subsection $I$ will seek to determine whether omissible constituents have any effect of relaxing this constraint.


4.3.2 Causee omission

The fact that the causee role may be unrealized in some cases has already been mentioned. This is illustrated in (422)-(423).
(422) a - ka- son -es -á omwênda
he-PST- sew -C -FV dress
'he made [someone] sew a dress'
(i.e. he had a dress made)
(423) a - ka- se -is - á ebicóori
he-PST-grind- C -FV maize
'he had [someone] grind the maize'
(i.e. he had the maize milled)

In both (422) and (423) the causative licenses an argument that is nevertherless not realized in the construction. An examination of the verb sample brought up some thirty-seven verbs, out of 530, that are amenable to causee omission. These are listed in Table 4.6.

| kubánjura | cultivate | kubeija | carve |
| :--- | :--- | :--- | :--- |
| kubíka | store | kucúgura | have diarrhoea |
| kucumba | cook | kucúuka | be weaned |
| kwêga | learn | kwéra | be clean/abundant |
| kwereera | float | kúfa | die |
| kufunga | lock | kugaba | fill breasts |
| kugaga | go bad | kúha | give |
| kúsya | be cooked | kuhóma | plaster |
| kwíma | deny | kujúga | pay dowry |
| kujúma | insult | kujwa | flow/shine |
| kunógoora | mould | kwôma | dry |
| kwônka | suck | bupima | measure |
| kurába | weave | kurima | cultivate |
| kuruka | cut | kúrya | eat |
| kusára | busa | grind |  |
| kusinda | sew | kusoma | read |
| kusona | cook | kutámba | treat |
| kutéeka | kutumba |  | hit |

TABLE 4.6: Causee omission verbs

As Table 4.6 shows, causee omission verbs include verbs with more than one argument (transitives) as well as verbs with only one argument (intransitives). Two examples of the
latter are provided in (424)-(425).

```
(424) a) abantu ba - sind -a
        people they-be drunk-FV
        'people get drunk'
    b) amaarwá ga - sinz -a
    beer it -be drunk+C-FV
    'beer causes [people] to be drunk'
```

(425) a) omwénda gu - ko - om - a
dress it -PST -dry -FV
'the dress dried'
b) omusana gw- om - és -a
sunshine it- dry- C -FV
'The sunshine causes [things] to dry'

The single argument verbs kusinda 'be drunk' and kwôma 'dry' in (424) and (425) are expanded into two-place verbs by means of the causative, but the second argument in these constructions is omitted. In this respect Runyambo may be different from a language like Turkish where all causatives derived from transitive verbs, but not causatives from intransitive verbs, allow causee omission (Orgun, personal comunication). Alsina (1992) reports that in Chichewa too only causatives derived from transitive verbs (some of them
in fact) "allow the causee to alternate between an object and an oblique expression", which in Alsina's theory translates into the possibility of leaving the causee unrealized. It seems to me, however, that even in Chichewa and other Bantu languages, causee omission is a lexical property of certain causative verbs (irrespective of the transitivity of the basic stem) as suggested in Table 4.6. In Runyambo, of course, we cannot treat causee omission as a variant of the oblique causee - the par-phrase in French (Zubizarreta 1985)
 no such construction as oblique causee in this language ${ }^{6}$. And there is even less motivation for what Alsina (1992) calls a "passive analysis" (cf. Kayne 1975, Baker 1988, Alsina 1992). Such an analysis assumes "that passive morphology was effectively absorbed into the causative morphology" (Baker 1988:487). The discussion in chapter six, on the cooccurrence of the causative and passive extensions, will show that absorption of one extension by another, leaving no morphophonological traces, does not exist in the language. As Baker aknowledges, a passive analysis is adopted on the basis of a passive-like gloss (see alternate glosses for examples (422) and (423) above): "the causee appears either in a passive-like by-phrase or not at all (as an implicit argument)" (Baker 1988:487).

The predicate structures of causee omission verbs are like those of other verbs with omissible arguments (see examples 351 and 420). In the case of causee omission, the


#### Abstract

omissible argument is part of the predicate structure of the extended verb, whereas in the other cases the omissible argument is part of the predicate structure of the unextended verb. But in all cases an argument may or may not be realized (instantiated) by any linguistic constituent. If it is not realized, this may be because the identity of the participant is understood and recoverable from the context (definite omissible) or because it is unknown and/or irrelevant (indefinite omissible) (cf. Fillmore 1986:96).

One might be led to believe that if a constituent realizing a particular participant role has been omitted, then this should create room for the realization of other participant roles on which information is desirable. But omissibility does not create such room. Consider (426).


> a) a -ka -sar -á omwáná [isóce] [aha-mútwe] he-PST-cut-FV child hair L -head 'he cut the child's hair from the head'
b) a - ka-saz - á omwana/omwáná isóce he-PST-cut+C-FV child hair
i) 'he made the child cut the hair'
ii) 'he had [someone] cut the child's hair'
c) *a-ka- saz - á omwáná isóce aktsyo he-PST- cut+C -FV child hair razor
*'he had [someone] cut the child's hair with a razor'
d) (akasyó) a-ka-ka- saz - a omwáná [isócé] [aha-mútwe] (razor)he-PST-it-cut+C-FV child hair $L$ - head '(the razor) he cut the child's hair from the head with it'

Kusára 'cut' can appear with up to four arguments, only two of which are non-omissible. The body part and the locative complement are omissible (426a). Two readings are possible in (426b), one involving omwana 'child' as causee (hence the bold face), and the other involving causee omission (no bold face). The basic point illustrated in (426c) is that it is not possible to omit the causee and at the same time fill the slot with an instrument. The other problem with this construction concerns the piling up of postverbal unmarked noun phrases even if we were to read akasyo 'razor' as the sole causative argument (i.e. instrument). Three unmarked NPs after the verb stretch the system too far. Instead (426d) provides an appropriate mix of argument realization types marked and unmarked noun phrases, and prefixes. In addition it shows that it is possible to have a construction with up to five arguments. Still it is important to note the highly restricted nature of these arguments: the causative argument is topicalized and realized as a prefix (i.e. this is old information). Of the two omissible arguments, one must be a body part, and the other must be a participant locative, not an event locative (cf chapter 3). And we must keep in mind
the fact that the causative creates only one argument position.

Now if the causative and the applicative can create one argument position each, would a combination of the two extensions expand the argument structure of kusára 'cut' any further given the restrictions on argument realization types shown here? Whatever the answer to this question, again, it does seem that there exists a limit on the expandability of argument structures. Further discussion of this question must wait until the final chapter (see section 6.3).

A question that is of immediate relevance here concerns the limits (if any) that are imposed on the omissibility of arguments in any one construction. Without any such limits, a verb like kutéeka 'cook' with two omissible arguments - the stuff being cooked ('patient/theme') and the container of that stuff (participant locative) - could be causativized and placed in a construction where only one argument was realized (after causee omission). However, as (427) shows, this is not a well-formed construction (see also Alsina 1992, example 14).
(427) *a - ka - tééc- es - a
he -PST - cook -C -FV
'he had [someone] cook [something ] [in some container]'

The causative verb in (427) has four argument positions, one of which is a creation of the causative extension. Only one of these arguments is actually realized, and the other three
are omitted, which makes the construction ill-formed. As already mentioned, omissibility has to do with pragmatic considerations of whether a participant is known in the context or unknown and irrelevant. In this particular case if the omitted arguments were known in the context they would have to be realized as pronominal ('object') prefixes, and in this sense topicalized. As such the construction in (427) lacks a pragmatic motivation: why create a fourth argument position when three of them are unknown? For the unextended verb can handle up to three arguments very well. Note that if at least one more of the arguments in (427) is realized, the construction will be acceptable as (428) shows.

```
(428) a) a - ka - teec - es-á abáana
        he-PST - cook - C -FV children
        'he made the children cook'
```

    b) a - ka - teec - es-a ebitooce
        he- PST- cook - C -FV bananas
        'he made [someone] cook bananas'
    c) \(\quad a-k a-t e e c-e s-a \quad o m u-n y u n g u ́ ~ y a n j e\)
        he-PST - cook - C -FV L -pot my
        'he made [someone] cook [something] in my pot'
    The acceptability of (428) suggests that a four-place
argument structure must have at least two of these arguments
realized. Two-place argument structures such as that of kwómesa 'cause to dry' in (425) must have at least one argument realized, and this would appear to be the lower limit. More generally, these constructions show that besides the restrictions on argument realization types, there is a restriction on the omissibility of arguments, and that this restriction is sensitive to the number of arguments in any one argument structure.

The notion of a lower limit on the omissibility of arguments is related to that of a lower limit on the number of arguments in any argument structure. The conception of predicate structure proposed in chapter two requires that a verb have at least one argument position, even if that position is not matched by a participant role, i.e. it has no semantic content. This is a familiar condition of predication theory. It is expressed as the 'subject requirement' of the Extended Projection Principle of GB, the 'Subject Condition' of LFG, and the 'Subject Principle' of Construction Grammar (cf. Horrocks 1987, Bresnan \& Moshi 1990, Fillmore \& Kay 1993). If we set aside the grammatical relations terminology in these formulations, then our notion of a lower limit on the number of arguments can be better appreciated: by definition, a verb must have at least one argument position. From this perspective, the verbal status of Portuguese chove 'its raining', would be shaky (cf. Fillmore \& Kay 1993:8.22). In general, "weather verbs" in languages like Portuguese, may be regarded as, at best, defective verbs.

The discussion on the detransitivizing extensions in chapter five, as well as the discussion on cooccurrence in chapter six, will show that these devices for contracting argument structures cannot bring about the equivalent of verbal suicide by stripping the verb of all its argument positions. But before that we need to consider the nature of the distinction between the two transitivising extensions, the causative and the applicative, which have been the subject of discussion in this and the previous chapter.

### 4.3.3 Distinguishing causative from applicative

If both the causative and the applicative are transitivizers, how are the two extensions distinct? In order to appreciate the difference between them it is important to emphasize their similarity ${ }^{7}$. The first step in this direction is to abandon the 'higher cause'/'biclausal' analysis of the Bantu causative extension (cf. Jones 1971, Vitale 1981, Baker 1988, Li 1990, Alsina 1992). In many respects this analysis is a legacy of a linguistic theory based on the sentence, and the English sentence at that. In this tradition (Chomsky 1957, 1965) the sentence became the basic unit of analysis. The theory sought to determine the rules for distinguishing grammatical from ungrammatical sentences, and to formalize the relationships between sentences. Among the most engaging sentence relations were those of active vs passive (Chomsky 1957), dative shift vs non-dative shift (Fillmore 1965), causative vs non-causative (Fodor 1970, Shibatani 1976).

In arguing for a lexical theory, Mchombo (1978, 1980) maintained that there could not be a syntactic rule of dative shift since in Chichewa, and Bantu generally, only the morphological process of the applicative suffix existed, without a counterpart prepositional version available in languages like English. In a similar vein it could be argued that, in Runyambo at least ${ }^{8}$, we cannot posit, a la Baker (1988:149), a biclausal "analysis in which a lexical item undergoes syntactic movement to combine with another lexical item in its structure". For in Runyambo only the morphological causative is available, but not the periphrastic causative. Such an argument, however, plays in the hands of the biclausal analysts by foregoing an effort to present a general analysis of the Bantu causative extension, and by putting undue emphasis on a fact of the syntax of English and related languages. The fact that the English glosses of the examples above are biclausal does not warrant the imputation of biclausal structures on the Runyambo constructions.

It should be noted that in spite of the theoretical differences between the syntactic approach of Baker (1988) and the lexical approach of Alsina (1992), in both cases the representations of the causative extension are essentially notational variants. Alsina (1992) "proposes to analyze causative morphemes in many languages as three-place predicates in which the causer (or agent) acts on an individual, the patient, in bringing about an event, of
which this individual is itself an argument". Baker's (1988) focus is on the movement of the root verb to combine with the causative affix, while Alsina speaks of the fusion of two thematic roles into one "fused argument". But in both theories the underlying assumption is identical to that behind the attempt to derive "kill" from "cause to die", namely "that word-to-phrase synonymies [even across languages] can ... be handled as instances of syntactic relations..." (Fodor 1970:430-31; also see Shibatani 1976).

Fodor's "three reasons" for rejecting the assumption are based on the differential behavior of 'kill' and 'cause to die' with respect to :
(i) do so substitution - 'kill' allows only one antecedent, whereas 'cause to die' allows two;
(ii) time adverbials - 'kill' allows only one adverbial of time, while 'cause to die' allows two (one indicating the time of the patient's death, the other indicating the time of the agent's causing activity);
(iii) instrumental adverbs - 'kill' allows only one noun phrase to control the subject of a modifying instrumental adverb, whereas 'cause to die' allows two noun phrases to alternately control that subject.

From this Fodor concludes that 'kill' should not be analysed as being derived from 'cause to die'.

Fodor's arguments were developed against the Generative Semantics analysis of English lexical causatives. Today, probably no linguist takes the Generative Semantics analysis
seriously. Yet the biclausal analysis of Bantu causative verbs is essentially that of Generative Semantics, the only difference being that now the synonymy is traced across languages thus: English 'cause' = Chichewa -its-; 'cause to cook' = 'phikitsa'. The biclausal analysis of 'cause to cook' is, in this way, extended to 'phikitsa'. I do not think this attempt to cast Chichewa, and Bantu generally, in the English mould is justified. I will instead propose an analysis of the Runyambo causative extension that seeks to advance "less typologically parochial concepts"9 related to the nature of argument structure (cf. Bresnan \& Moshi 1990).

The position being advanced here is that there is no 'causative sentence' any more than there is an 'applicative sentence'. In (418), for instance, sentence (b) is not derived from sentence (a). Rather, as (418c) shows, the extended or causative verb kugwisa is derived from the unextended or non-causative verb kugwa 'fall'. It is at this level of predicate composition that the distinction between causative and applicative has to be delineated by analysing the distinctions available within lexical semantic structures. This requires a redrawing of the lines of thematic role analysis.

The roles that can be assigned to arguments licensed by the causative in Runyambo and some other Bantu languages e.g. Luganda (Ashton et al. 1954), Ruhaya (Trithart 1977), Kinyarwanda (Kimenyi 1980), and Cishona (Hawkinson \& Hyman 1974), are causee and instrument. Any other participant role
that is rot part of the lexical semantic structure of the basic verb can only be assigned by the applicative (cf Chapter 3). In a number of Bantu languages, e.g. Luhyia (Kanyoro 1983), Kichaga (Bresnan \& Moshi 1990), Kiswahili (Khamisi 1985), Chichewa (Alsina \& Mchombo 1990), and Kuria (Gould 1987), this division of labor between causative and applicative is more clearcut: the causative licenses a causee role, while the applicative licenses all other roles including the instrument. This is fairly strong linguistic evidence in support of the hypothesis that, in Runyambo and Bantu generally, the relevant grammatical generalizations can be adequately captured by means of only a binary distinction in thematic roles, viz. actor vs nonactor.

The position $I$ will advance here is comparable to Dowty's (1991), who uses the terms "agent proto-role" and "patient proto-role" and suggests that "role types are simply not discrete categories at all, but rather are cluster concepts", and "that arguments may have different degrees of membership in a role type". In these terms the causative extension licenses a proto-agent i.e. an actor, while the applicative licenses a proto-patient, i.e. a nonactor. ${ }^{10}$

The cluster concept of thematic roles entails a level of indeterminacy in assigning participants between the two proto-roles. This indeterminacy is illustrated very well in the cross-linguistic variations with regard to the classification of what is traditionally referred to as the instrument role. In Jackendoff's (1987:401) conceptual
structures view of thematic roles, "instrument is not a new primitive role but an intermediary between Actor and Patient..." Weighing instruments against Dowty's (1991) "preliminary list of entailments" for proto-agents shows how languages can reach different results: instruments lack volitional involvement and sentience; but they cause events/changes, move, and exist independently of the event named by the verb. Languages that mark instruments with the applicative, thus classifying them with proto-patients, appear to disqualify instruments from the class of protoagents on account of lacking the first two entailments. And languages that mark instruments with the causative, thus classifying them as proto-agents, apparently give more weight to the last three qualities.

Even within individual languages there is linguistic evidence of this indeterminacy in assigning participants to one or the other of the proto-roles. In Runyambo, for instance, it is possible to use either the causative or the applicative to license an argument that may be interpreted as an instrument (and therefore a proto-agent) or as a locative (and therefore a proto-patient). This is illustrated in (429).
(429) a) a - ka - nywe -is- a onkaye he-PST -drink -C - FV gourd 'he drank from a gourd'
b) a - ka - nywe -er- á omu-nkaye
he-PST -drink -A -FV L - gourd
'he drank from a gourd'

In (429a) the container of the drink is licensed by the causative while in (429b) it is licensed by the applicative and marked with the locative prefix. Yet, as the gloss indicates, there are no semantic differences between the two constructions.

Recall that in the argument differentiation framework adopted here, the predicate structure identifies the participant roles specific to each verb. Thus the lexical semantic structure of the verb 'give' specifies a giver, recipient, and gift. But the lexical semantic structure of the transitivizing suffixes, the applicative and the causative, is presented in terms of these thematic protoroles, as (430) shows.

```
(430) a) -is- ; Argument Structure: 1
Lexical Semantic Structure: [actor]
b) -ir- ; Argument Structure: 1
Lexical Semantic Structure: [nonactor]
```

Compared to the predicate structure of the normal verbs, the lexical semantic structure of the transitivers in (430) is highly underspecified, giving just enough information to
distinguish the causative from the applicative, and indicating by means of brackets, the possibility of increasing the arguments without increasing the number of participant roles (cf. 'subjective role' above). These thematic protoroles are the concepts that enable us to make syntactic and semantic generalizations across verbs and languages. It is in these terms that the morpholexical operations performed by the verb extensions under discussion in this study are to be analysed.

Given the representations in (430) it follows that the search for the "basic meaning" of the applicative does not make much sense. The nonactor thematic role label is not only too broad, but it is also a negative label, including any participant role that is not an actor. In the search for the "basic meaning" of the applicative, the tendency has usually been to adopt narrower terms. Thus Trithart (1983) picks "beneficiary", Schadeberg (n.d.) picks "locative", and Emanatian (1991) settles for "recipient". But as I have argued, such terms are best regarded as being descriptive of the participant roles of specific verbs or groups of verbs. The assignment of these role labels is partly dependent on the verbs, and partly dependent on the complements. As such there is no justification for choosing any one of these labels as representing the "basic meaning" of a verbal extension. Such a stance compromises the level of generality demanded of the analysis of the verbal extensions.


#### Abstract

4.4 Conclusion

The causative, like the applicative increases the valency of the verb by fusing its single argument into the verb's argument structure. The two extensions are in complementary distribution: the causative licenses an actor while the applicative licenses a nonactor. This binary division suggests, that at least for the purposes of analysing the transitivising extensions, it is not necessary to set up an elaborate inventory of semantic roles, let alone to posit a hierarchy of such roles. In the next chapter I will show that this binary scheme may be extended to the analysis of the detransitivizing suffixes as well.


NOTES TO CHAPTER FOUR
1 Givon (1976:336) has expressed this "economy principle in the lexicon" thus: "Basically, what is involved is the contention that there are no real synonyms in a language, but only various degrees of partial synonymy. When the speaker is faced with a potential synonymy as a result of a derivation, borrowing, or semantic change, one of several things may happen: a) one of the items changes in meaning; b) one of the items becomes obsolete (i.e. gets relegated to an 'archaic dialect level'); c) one of the items becomes identified with another stylistic, social, educational, age, or geographic dialect; d) in the case of a lexical derivation

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rule, the rule skips that particular item whose derivation
would have brought about synonymy."
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2 Meeussen's (1967:83) consonant reconstructions for Proto-Bantu are:

| $m$ | $n$ | $\tilde{n}$ |  |
| :--- | :--- | :--- | :--- |
| $b$ | $d$ | $j$ | $g$ |
| $p$ | $t$ | $c$ | $k$ |

"Instead of /c/ one might just as well use the symbol /s/; likewise, /z/ or /y/ instead of /j/, and /l/ instead of /d/".

3 There are frozen forms, e.g. from Kiswahili, showing that $n \rightarrow \tilde{n} / \_i$ : ona 'see' onya 'warn', onyesha 'show'; pona 'recover', ponya 'cure'. Runyambo has only bóna 'see', "ónyabonya 'inflict hardship' i.e. cause to see hardship, torture. The -is- derivation is bónesa 'cause to see'.

4 Causee omission has been documented for a number of the Bantu languages including Kongo (Bentley 1887:663), Chibemba (Givon 1976:338), Kimeru (Hodges 1977:121, 133, 135), Lingala (Guthrie 1935:23), and Kiswahili (Scotton 1967a, b).

5 See Hyman (1977) on body part syntax.

6 The Chichewa and French 'oblique causee' constructions are illustrated in (i) and (ii) respectively.
(i) Nungu $i$-na-phik-its-a maungu kwa kadzidzi
porcupine it-PR-cook- C -FV pumpkins to owl
'The porcupine had the pumpkins cooked by owl'
(ii) L'architecte a faire tracer le plan méticuleusement par son associc
'The architect made design the plan carefully by his partner' (Zubizarreta 1985:262)

The kwa-phrase in (i) and the par-phrase in (ii) may be omitted. There is no Runyambo construction similar to these.

7 On the diachronic basis of the relationship between causative and applicative, Trithart (1983:97) states that "it seems likely that causative and applied extensions of similar phonological shape did, in fact, exist for proto-Bantu, although no Bantu causative extension has previously been reconstructed with this form [-1-]".

8 Periphrastic (analytical) causative constructions are available in some Bantu languages such as Chichewa (Baker 1988) and Kiswahili (Vitale 1981, Rugemalira 1986). Note though that in both cases the verb of the matrix clause (chititsa in Chichewa, and fanya in Kiswahili) is a derivation with the causative extension, which raises the interesting question of which construction is prior to which.

9 The issue concerning the influence of particular languages in the formulation of supposedly universal linguistic principles is not to be taken lightly. It raises
fundamental questions, not only about linguistic methodology and theory, but also about the "production of knowledge" in general. Baker (1991), for instance, seeks to show "that it is correct to attribute configurational representations to Mohawk" similar to those posited for English in (i).
(i)

(object)
The author goes on to accuse some researchers of being "motivated by a kind of positivism and a desire to avoid forcing the structure of English onto other languages ... From this perspective, the null hypothesis is that (i) is not valid, and one asks whether there are facts that force one to posit (i). Other researchers are motivated by the assumption that the underlying structure of languages should be as similar as possible in order to account for the fact that any language can be learned without explicit training. From this perspective, the null hypothesis is that (i) is valid, and one asks whether there are facts which force one to abandon (i)." In other words, the agenda is about the validity or otherwise of (i), not the validity of some other representation, say, for the sake of argument, a flat structure (e.g. Mohanan's 1982 Flat Structure Hypothesis). The burden of proof is on the dissenter, and since positivism should be ruled out, as Baker seems to suggest, there is no
way that (i) can be proved not valid - for it is always possible to posit some abstract property that will make every recalcitrant piece of data fall in place. Briefly, even if we accept "the assumption that the underlying structure of all languages should be as similar as possible", why should this structure be assumed to be that posited for English, and not that of Mohawk?.

10 This binary scheme is comparable to that of Role and Reference Grammar (Foley \& Van Valin 1984, Van Valin 1993) where the terms 'actor' and 'undergoer' are used. Note, however, that in the analysis sketched in the present study, I do not attempt to present actor and nonactor as part of an array of levels that have to be linked via a variety of mechanisms, as is the case in RRG (cf. figure (i)).
SYNTACTIC FUNCTIONS: Pivot Other core arguments
SEMANTIC MACROROLES: Actor Undergoer
THEMATIC RELATIONS: agt-effector-experiencer-loc-theme-pat
LOGICAL STRUCTURE: argument positions

Figure (i): Levels of representation of predicate structure (from Van Valin 1993:84)

RRG regards the "thematic relations" as not "independently meaningful... Their primary function resides in their role in the algorithm which links syntactic and semantic
representations" (Van Valin 1993:43). By contrast, in the current study, the participant roles of the lexical semantic structure (cf. (204) in chapter two) are conceived as expressions of an individual verb's meaning while the macroroles (actor and nonactor) capture the syntactic and semantic generalizations about verbs in general.

## CHAPTER FIVE

## DETRANSITIVIZING EXTENSIONS

### 5.0 Introduction

This chapter presents the facts about the three extensions that decrease the number of a verb's arguments. The reciprocal extension is discussed in section 5.1 , the stative in section 5.2, and the passive in section 5.3. I argue that the syntactic and semantic requirements of these extensions demonstrate the appropriateness of the actor vs nonactor distinction.

### 5.1 The Reciprocal

5.1.1 Forms of the reciprocal extension

Runyambo has two forms of the reciprocal extension, the productive -angan- and the frozen -an-1. The latter is found on a small number of verb stems whose roots may or may not currently exist independently in the language as the examples in (501)-(502) show.
(501)

| a) -bag+an-a | share, divide up |
| :--- | :--- |
| b) -búg+an-a | meet |
| c) -bweij+an-a | be lonely |
| d) -ega+an-a | deny |
| e) -fuka+an-a | wrestle, struggle |
| f) -fút+an-a | chew |

g) -hak+an-a argue
h) -ing+an-a
be equal
i) -rw+an-a
j) -tátan-a
(502)
$\begin{array}{ll}\text { a) -tông-a } & \text { demand payme } \\ \text {-tong-an-a } & \text { quarrel } \\ \text { b) -tond-a } & \text { create } \\ \text {-tond-an-a } & \text { discriminate } \\ \text { c) -nyw-a } & \text { drink } \\ \text {-nyw-an-a } & \text { become frien } \\ \text { d) -jend-a } & \text { go, walk } \\ \text {-jend-an-a } & \text { go together }\end{array}$

The examples in (501) show all ten verb stems (from the verb sample) that exist only with the -an- suffix and which, judging from their meanings, appear to have some connection with the reciprocal extension. In (502) however, the basic root exists independently of the suffix; with the suffix a special meaning that cannot be deduced from the basic root, is created. Note that the root in (502d) is not even transitive. In the verb sample there are 21 formations of the type in (502).

Occasionally a long vowel appears in this frozen form as (503) shows.
(503)
a) -rag-a
bid farewell, bequeath
-rag-aan-a
agree on some appointment
b) $\begin{aligned} & \text {-sang-a } \\ & \text {-sang-aan-a }\end{aligned}$
find, come upon
get together, convene

In spite of the vowel length, the meanings of the derivations in (503) are still transparent enough to warrant our recognizing the suffix as being related to the -an- suffix.

The regular and productive form, -angan-, can be attached to most transitive verb roots, provided the derivation makes sense. This is illustrated in (504).
a) -nob-angan-a hate each other b) -jun-angan-a help each other

Here and subsequently, I gloss this regular derivation using the same gloss for the root verb. Frozen or lexicalized reciprocal formations will appear with a gloss other than this standard 'V each other'.

There are verbs that have both the frozen formation with -an- and the regular derivation with -angan-, as (505) illustrates.
(505)


#### Abstract

a) -reeb-a -reeb-an-a keep in touch -reeb-angan-a look look at each other b) -kwât-a -kwát-an-a -kwát-angan-a hold/touch/sieze be related; stick together; own together hold/sieze each other $$
\begin{aligned} & \text { C) -rás-a } \\ & \text {-rás-an-a } \\ & \text {-rás-angan-a } \\ & \text {-rás-angan-a } \end{aligned}
$$ throw/shoot fight, struggle shoot/throw at each other

In (505) the -an- derivation has specialized or lexicalized meanings while the -angan- derivation carries the standard reciprocal 'V each other' meaning. This distinction between -an- formations and -angan- formations has crucial implications for the claims that have been made on the basis of languages where only one form of the suffix (-an-) exists and it is difficult to separate lexicalized forms from regular derivations of the reciprocal. Contrary to the evidence that both $R+C$ and $C+R$ ordering is possiblein some Bantu languages (cf.Khamisi 1985, Alsina 1990, Hyman \& Mchombo 1992) it does appear that a tendency to have a fixed $C+R$ sequence exists in different Bantu languages (see chapter


 six).5.1.2 Syntax and semantics of the reciprocal

The standard reciprocal construction requires a plurality of participants that are simultaneously actors and nonactors (undergoers), which is a classical violation of LFG's Function-Argument Biuniqueness (see section 2.1.1 for a discussion of this principle). This is illustrated in (506).
(506)
a) abakázi ba - ka-reeb-angan-a
women they-PST-look- R - FV
'the women looked at each other'
b) Namará na Neema ba -ka- kwat-angan-á emikono Namára and Neema they-PST-hold- R- FV arms 'Namára and Neema held each other's arms'

The required cluster of participants may be realized by a plural NP, as in (506a), or by its subtype, a coordinate NP, as in (506b).

Note that the -an- derivations also partake of the same constructions as those in (506), but may in addition separate the participant cluster and allow the part after the conjunction to occur post-verbally.
a) Namará na Neema ba -kwat-án-a

N and N they-hold-R-FV
' $N$ and $N$ are related'
b) Namará a -kwat-an-a na Neema

N she-hold-R -FV and Neema
' N is related to N '


#### Abstract

In (507a) both NPs are marked on the verb by the plural pronominal prefix. But in (507b) only the preverbal noun phrase is marked on the verb, while the second noun phrase, together with its coordinating conjunction, occurs after the verb.


The semantics of the standard reciprocal construction (506) inherently place restrictions on possible derivations and constructions. This is due to the fact that reciprocity involves a 'golden rule' (do unto others what you would like them to do to you) or a tit-for-tat situation (depending on the circumstances) and thus requires a measure of symmetry or equality amongst the participants in the event described by the verb, such that in a two-argument verb, each of two NPs should occur equally well in either participant role. But the linguistic system is generally organized in such a way as to maximize asymmetry (inequality) among the participants. This is evident in two sub-systems.

First, the lexical semantic structure (LSS) of the verb sub-system specifies the different participant roles that are
crucial for argument differentiation, and this is the spirit of the Function-Argument Biuniqueness Principle and the Theta Criterion. But reciprocalization, by suppressing one argument position, forces two participant roles to be realized in one argument position. This is represented in (508).


The representation in (508) states that the verb kukwâta 'hold' consists of two argument positions and two participant roles - a holder and a holdee (for simplicity ignore the omissible argument position that must be filled by an inalienable part, cf. example (506b) above). The extension -angan- has a negative specification for argument positions, meaning that it suppresses one position from the verb to which it attaches ${ }^{2}$. The LSS is null, meaning that there is no change in the LSS of the host verb. The derivation is left with one argument position and two participant roles ${ }^{3}$. This means that each of the participants must also have relevant qualities of the other, i.e capable of realizing either role. In this way potential reciprocal derivations of many verbs are ruled out as semantically odd (e.g. *-nywángana 'drink each other').

Second, the noun class sub-system organizes the linguistic elements that realize the participant roles into
sets of more or less equal members apparently on the basis of semantic features (see chapter one). Reciprocalization essentially involves NPs belonging to the same class. If they belong to different classes, they will be of the singular/plural pair (e.g. 1\&2, 3\&4, etc.). Gender conflict rules out reciprocal constructions involving constituents belonging to semantically different sets. This is illustrated in (509).
509) abantu na enjoka *ba/*zi/?bi-ka -nob-angan-a people and snakes they -PST-hate -R -FV 'people and snakes hated each other'

Abantu 'people' (class 2) and enjoka 'snakes' (class 10) do not have a common pronominal prefix with which to be marked on the verb. One occasionally, but rarely, hears the class 8 prefix -bi- (for 'things') used to resolve gender conflicts like these. A more reliable strategy is to avoid unequal conjuncts, particularly human and non-human noun phrases. Accordingly, the Runyambo rendering of the English gloss in (509) would avoid use of the reciprocal, preferring the equivalent of "people hated snakes and snakes hated people" (Cf Givon 1970, 1972; Corbett \& Mtenje 1987). What manifests itself as gender conflict is, of course, a reflection of the basic classification of the entities in the different classes as unequal, a classification that serves argument differentiation. The conflict is a manifestation of two
tendencies: reciprocalization attempts to create some symmetry in the linguistic system, but the effort is undermined by the asymmetrical classification system in the nouns.

In general, then, the restrictions on reciprocalization have their basis in the asymmetrical organization of the linguistic system.

### 5.1.3 Comparison with the reflexive

The reflexive morpheme deserves special mention here because there have been attempts to unify it with the reciprocal extension. For instance, Khamisi (1985) treats the reflexive affix, along with the reciprocal, as an instance of case subtraction i.e. detransitivization.

The reflexive morpheme is an invariant pronominal prefix -e-, and, in this way, is different from the verb extensions ${ }^{4}$. Consider (510).
(510) Neema a - ka- é - tem -a $\mathrm{N} \quad$ she-PST- RF- cut -FV
'Neema cut herself'

Like the reciprocal, the reflexive must be attached to a verb with more than one argument (transitive verb). such as kutéma 'cut' in (510). Reflexivization however does not reduce the number of argument positions (or case relations á la Khamisi): the reflexive affix itself occupies one of the
minimum two positions that must be filled. In other words, reflexivization does not modify predicate structure in any way. Rather the reflexive morpheme is, like the personal pronoun prefixes (especially the first person pronoun), an argument realization type. What is special about it is that it indicates that the two participant roles bound by it have one referent in the world.

### 5.1.4 Summary

The regular reciprocal extension derives reciprocal verbs. It is a detransitivizer that reduces the number of a predicate's arguments by one and in this way requires the matching of one argument position with two participant roles.
5.2 The Stative
5.2.1 Forms and terminology

The forms that $I$ will call the stative extension (following Ashton 1944, Scotton 1967a, Khamisi 1985, Mchombo 1992) display some variation and a measure of confusion, but the names are even more varied. The forms in question are presented in (511-514). In (511) are presented all ten -ik-/-ek- derivations found in the verb sample.
(511)
a) -bon-ek-a
'be visible/available/seen/found'
b) -hend-ek-a
'break' (intr)
c) -som-ek-a
'be legible'
d) -sees-ek-a
e) -Cw-êk-a
f) -át-ik-a
g) -báás-ik-a
h) -kwát-ik-a
i) -many-ik-a
j) -ragar-ik-a
'spill' (intr)
'become extinct'
'be shattered'
'be possible'
'be available'
'be known/famous'
'fall/scatter'

The vowel in the extension participates in the usual height harmony. This is the extension that has been referred to by a wide variety of labels including neuter, stative, intransitive, neuter(neutro)-passive, quasi-passive, neuterstative, metastatic-potential (cf. Satyo 1985:159, Schadeberg n.d.:141). Other languages with severe limitations on the productivity of -ik- have been noted in the literature ${ }^{5}$. But there are many languages where -ik- is a very productive extension, even if not on the same level as the other extensions under discussion here (e.g. Kiswahili).

The foregoing extension must not be confused with the homophonous and totally unproductive "impositive" extension (Schadeberg's term) illustrated in (512).
a) -tánd+ik-a 'start'
b) -éj+ek-a 'put something leaning'
c) -robb+ek-a 'soak'

All examples in (512) are transitive and the roots do not currently exist independently in the language ${ }^{6}$

In this study I will depart from conventional practice and treat the -uk-/-ok- derivations illustrated in (513-514) as statives similar to those in (511).

| a) -cinga | -cing-ur-a | -cing-uk-a |
| :--- | :--- | :--- |
| 'close' | 'open'(trans) | 'open'(intr) |
| b) -céba | -céb-ur-a | -céb-uk-a |
| 'mash' | 'cut into pieces' 'splinter'(intrans) |  |
| c) - | -hem-ur-a | -hem-uk-a |
|  | 'disgrace' | 'be ashamed' |

The traditional "reversive" -ur-/-uk- pair is shown in (513a), but no such "reversive" interpretation is available in (513b). Similarly in (513c) there is no root verb on which. a reversive interpretation can be based. But common to all three examples is the fact that the -uk- detransitivizes the -ur-formation. There are 84 (16\%) such derivations in the verb sample (not counting -uk- forms that are independent entries or that appear in other suffix combinations). While recognizing the common syntactic and semantic properties of -uk-/-ok- and -ik-/-ek-, certain morphophonological peculiarities of -uk-/-ok- deserve mention. First, as (513) shows, the -uk-/-ok- form is not added to the -ur-/-or-form (*-cing-ur-uk-a). Second, note that the -uk- formations display their own vowel harmony pattern (with -ur-) different
from the height harmony of -ik-/-ek- and the other extensions (see chapter one). Third, there are more -ur- stems that do not have corresponding -uk-/-ok- stems than the other way round (see Appendix). And finally, reduplicated forms exist for -ur-/or- but not for -uk-/-ok-. Consider (514)7.
a) -koma -kóm-ooror-a
-kom-oorok-a
'tie' 'untie' 'become untied'
b) -téga -tég-uurur-a -tég-uuruk-a
'trap' 'untrap' 'become untrapped'
$\begin{array}{ll}\text { c) -homa -hom-oor-a } & \text {-hom-ook-a } \\ \text { 'plaster' 'unplaster' } & \text { 'become unplastered' }\end{array}$

The examples in (514) show that reduplication involves the doubling of -ur-/-or- and the initial vowel of the suffix (514a-b), or only the vowel (514c). But the -uk-/-okextension does not participate in this morphological alternation, which reinforces the position that, syntactically, this extension is simply a detransitivizer that applies to given -ur-/-or- formations ${ }^{8}$.

```
5.2.2 Syntax and semantics of the stative The syntactic pattern for the stative extension is exemplified in (515).
```

```
(515) a) a - ka - bon-a izooba
        he-PST - see-FV sun
        'he saw the sun'
        b) izo\deltaba li- ka- bon-ek-a
    sun it-PST -see-S -FV
    'the sun was visible'
```

The stative extension in (515b) has modified the predicate structure of -bona 'see' by deleting one argument position and one participant role. The result is a one-argument predicate -boneka. This is shown in the predicate structure representation in (516).
(516) PRED: kubóna 'see' + ek -> kuboneka AS: 2 - $\quad->\quad 1$ LSS: actor, nonactor -actor -> nonactor

In this representation the verb kubona 'see' loses one argument position when it combines with the stative extension which has a negative specification for argument structure. In addition, the verb loses the actor thematic role, leaving only the nonactor in the LSS.

It was earlier argued (chapter four) that linguistic theory need only set up a binary set of thematic roles viz. actor and nonactor (cf. Foley and Van Valin's actor and undergoer; Dowty's proto-agent and proto-patient). These
facts about the syntax and semantics of the stative extension provide additional evidence that this binary system is wellgrounded in the structure of language. Mchombo (1992) argues from the same facts for a theory that recognizes a detailed and hierarchical inventory of thematic roles. He notes that "the stative is restricted to applying to configurations with agent and patient/theme in the thematic structure, such that it eliminates the agent, making the patient/theme the sole and highest expressed role...". Now for such an inventory of thematic roles to be established beyond reasonable doubt, we need to determine the basis on which the stative extension would choose to operate on constructions with agent and patient only, excluding all other role combinations e.g. agent and beneficiary, patient and locative, etc. The hypothesis of a binary distinction in thematic roles preempts the search for such a justification by subsuming all those minor thematic roles into the two macro- or proto-roles. The stative extension then removes the actor role and leaves only the nonactor ${ }^{9}$. The resulting construction is amenable to two interpretations, traditionally referred to as "stative" and "potential"10. As the gloss for kuboneka 'be visible/available/seen/found' amply shows, these senses need not be mutually exclusive (cf Schadeberg n.d:43, Scotton 1967a:110-111). The appropriate semantic interpretation may be determined by each specific verb. For instance kusomeka 'be legible' has only the potential sense, while kumanyika 'be known/famous' has only the stative sense. In other
instances the tense/aspect may determine the appropriate reading as Schadeberg notes:

A general tendency exists to express the "potential" and "state" connotations with different tenses, the first of these with "present" or "habitual", and the second with "perfective" of [sic] "past". In negative sentences, too, the "potential" interpretation is by far the most natural one. (p.43)

### 5.2.3 Summary

The stative extension is a detransitivizer that decreases the number of a verb's arguments by one and removes the actor role from the lexical semantic structure.

### 5.3 The Passive

5.3.1 Forms and distribution of the passive extension

The shape of the passive extension in Runyambo is a virtually invariant -w-, reconstructed as *-u- (Guthrie 1970:217 CB4). Only in two other environments does a consonant /b/ precede this glide. These are i) after CV roots (517), and ii) after causative -i-, which includes frozen forms such as (518a), as well as productive forms such as (518b).
a) -rya 'eat' -riibwa 'be eaten'
b) -sa 'grind' -seebwa 'be ground'
(518) a) -héesa : -héésibwa (from *-héet-i-u-a) : -héeswa
'forge' 'be forged' 'be forged'
b) -bonesibwa (-bon-es+i-u-a) 'be caused to see'

In (517) the consonant $/ \mathrm{b} /$ is inserted after the root-final vowel, and before passive -u-. The final consonant of the root in (518a) is considered to be a product of the -ialternation process ( $t \rightarrow>s$; see chapters $1 \& 4$ above), but the root -hées- is so frozen that some speakers allow -héeswa as the passive (implying the absence of -i- and the originality of $/ \mathrm{s} /)^{11}$. In (518b) we have a genuine passive of a causative derivation. In both cases the $/ \mathrm{b} /$ is inserted to break up the vowel sequence ${ }^{12}$.

The passive extension is quite regular: in the 530 -verb sample, 318 (60\%) accept the passive extension (without counting cooccurrences with other extensions).


#### Abstract

5.3.2 Syntax and semantics of the passive

The passive extension derives passive verbs, but in the overwhelming majority of cases, this has no effect on the predicate structure, in the sense that the number of arguments remains unchanged. As such the only significant effect is to rearrange the order of the participant roles, as (519) shows.


(519) a) omwáná a -ka -kom-a enjoka child he-PST-tie-FV snake 'the child tied a snake'

```
b) enjóká e -ka- kom-w-á omwåna
    snake it-PST-tie-P-FV child
    'the snake was tied by the child'
```

In both the active (519a) and passive (519b) versions, both arguments are obligatory. The difference lies in the order of the arguments. The active form requires that the actor (the participant doing the tying) occur in preverbal position, while the passive form requires this actor in post-verbal position, and the nonactor in preverbal position. Preverbal position for the actor is incompatible with the passive form of the verb, as (520) shows.

```
a) Omwáná enjoka a - ka - ji - kom-a
    child snake he-PST - it - tie-FV
    'the snake, the child tied it'
b) *omwáná enjoka e -ka -mu -kom-w-a
    child snake it-PST-him-tie-P-FV
```

In (520) the positions of the NPs omwána 'child' and enjoka 'snake' are interchangeable, but their pronominal forms on the verb cannot be so tampered with. Even if the actor is unknown and/or irrelevant, the passive form cannot be used. Instead the impersonal construction with the third person plural pronominal is used. This is illustrated in (521).

$$
\begin{array}{ll}
\text { a) *enjoka e-ka-kom-w-a } & \text { 'the snake was tied' }  \tag{521}\\
\text { b) enjoka ba -ka -ji-kom-a } & \text { 'the snake was tied' } \\
\text { snake they-PST-it-tie-FV } &
\end{array}
$$

Without the actor argument, (52la) is not acceptable (cf.519b). The pronominal form -ba- stands in for the required actor argument and covers up the speakers ignorance or reluctance to state the identity of the actor (521b).

In short then, for the vast majority of Runyambo verbs that behave like kukoma 'tie', the passive extension derives a passive verb whose predicate structure requires that the actor occur in postverbal position ${ }^{13}$. In this respect the Runyambo passive is an information-packaging device that assigns prominence to a nonactor argument (Keenan 1985, Foley \& Van Valin 1985). The argumenthood of the actor (after losing prominence) varies across and within languages and may be indeterminate. This is why Grimshaw (1990) sets up the intermediate notion of "argument adjuncts" which "like arguments and unlike adjuncts, are regulated by relationship to an a[rgument]-structure, yet like adjuncts and unlike arguments, they do not satisfy a-structure positions" p.107. I will disagree with Grimshaw on this point and maintain that, at least for Runyambo, there is no need for this hybrid notion (argument adjunct), which, by the definition of arguments as obligatory and adjuncts as optional, would be contradictory.

The significant difference regarding the status of the actor argument in Runyambo is provided by a small class of verbs that justifies the inclusion of the passive among detransitivizing suffixes. These verbs fall into two groups, and in each case one argument is deleted.

The first group consists of fourteen passive forms which are more or less frozen with a meaning of their own. Their argument structures may contain an omissible argument and a non-omissible one as illustrated in (522).
(522)

$$
\begin{aligned}
& \text { a) amate ga-ke - eb -a [abáana] } \\
& \text { milk it-PST-forget-FV children } \\
& \text { 'the milk was forgotten [by the children]' } \\
& \text { b) abáana ba -ke - eb -w-á [amáte] } \\
& \text { children they-PST-forget-P-FV } \\
& \text { 'the children forgot [the milk]' }
\end{aligned}
$$

The verb in (522) is a bit peculiar because it does not conform to a direct morpheme-by-morpheme gloss (cf. French: ma mère me manque 'I miss my mother') ${ }^{14}$. This appears to be a reflection of the difficulty of imposing an actor/nonactor dichotomy on the verb's participant roles. Its LSS requires the sentient participant capable of forgetting to appear in postverbal position where it is optional (522a), while the thing that is forgotten occurs in preverbal position. The passive (522b) reverses this ordering, but omissibility
remains a property of the argument occurring in postverbal position. The relevant point here is that, unlike the majority of verbs already discussed, this verb's passive derivation need not have two arguments. Passive verbs with a similar property are listed in (523).
(523)
a) kugeitwa
be wed (in church)
b) kusingwa
be defeated, lose
C) kuswêrwa
be married (of a woman)
d) kuténdekwa
e) kuzáarwa
be ordained/consecrated (of clergy)
be born

The remaining eight passive derivations have two senses each. In each case one of the senses requires only one argument as illustrated in (524).

> a) abáana ba - ka-rem -w-a ecisisi
> children they-PST-beat-P-FV calabash
> 'the children were overwhelmed by the calabash'
b) abáána ba - ka - rem-w-a
children they-PST -beat-P-FV
'the children got tired'
The verb kurema 'beat, be too much, be beyond capacities of' does have a regular passive derivation that requires two arguments (524a). But the derivation also has a special sense that does not allow two arguments (524b). Table 5.1 summarizes the relevant information in this group of verbs.

| Basic stem | 2-arg. passive | 1-arg. passive |
| :---: | :---: | :---: |
| -báza | -bázibwa | bázibwa |
| ask/question | be asked | be examined (catechism) |
| -bátiza | n.a.a | -bátizibwa |
| baptize |  | be baptized |
| - canda | -candwa | -candwa |
| shake | be shaken | be tormented |
| -goba | -gobwa (ho) ${ }^{\text {b }}$ | -gobwa |
| reach; suffice | be reached | be satisfied (each getting their share) |
| -hika | -hikwa (ho) ${ }^{\text {b }}$ | -hikwa |
| reach; suffice | be reached | be satisfied |
| -rema | -remwa | -remwa |
| beat | be beaten | be tired |
| -rúma | -rúmwa | -rúmwa |
| bite | be bitten | be in labor |
| -sanga | -sangwa (mu) ${ }^{\text {b }}$ | sángwa! ${ }^{\text {c }}$ |
| find/come upon | be found | be found home |
| Notes: |  |  |
| ${ }^{\text {a }}$ This is a loan word with only one passive sense. |  |  |
| b Verbs with non-omissible locative arguments take a locative |  |  |
| c This is a formulaic guest's response to a host's nyejera |  |  |
| TABLE 5.1: Pass requi | ives with variab rements. | grument structure |

The second group of verbs in which the passive functions as a detransitivizer is more difficult to determine. This is because the detransitivizing effect comes as a result of a combination of the passive with tense/aspect, and possibly,intonation. This combination produces a "stative" sense of the verb ${ }^{15}$. This may be achieved by combining the today past (TP) tense with an interrogative intonation.
a) embúzi zá -á -kom-w-a?
goats they-TP-tie-P-FV
'have the goats been tied'?
b) *embúzi zi -ka -kóm-w-a?
goats they-PST-tie-P-FV

In (525a) the today past tense and the question intonation make it possible for the passive derivation to express a stative sense, thus dropping the actor argument. With a different tense in (525b), the construction is not acceptable without the actor argument.

The present and habitual tenses can also express the stative sense with the appropriate passive derivations. Consider (526-527).
(526)

> a) endwára ne-e -támb-w-a disease PR-it-cure-P-FV
> 'the disease is curable'
> b) *endwára e -ka -tamb-w-a disease it-PST-cure-P-FV
(527)
a) obutúzi bu -riib-w-a mushrooms they-eat $-\mathrm{P}-\mathrm{FV}$ 'mushrooms are edible'
b) *obutúzi bu -ka -ríib-w-a mushrooms they-PST-eat -P-FV

The present tense is illustrated in (526a) while the habitual tense, with no overt morphological marking, is illustrated in (527a). Again any other tense is unacceptable without the actor argument (526b, 527b).

It does not seem possible, however, to make any significant generalization about the use of tense with the passive derivations to express a stative sense. It is not clear how many verbs are amenable to such formations. Attempts to determine this are hampered by the fact that no single tense is consistent in expressing a stative sense across verbs. For instance, the today past tense cannot salvage (526b) and the present tense cannot redeem (525b). In
addition, as (525) suggests, pragmatic considerations associated with intonation complicate the situation.

### 5.3.3 Summary

The detransitivizing function of the passive extension is severely restricted, being available in only a small fraction of verbs, some of which require the combination of the extension with an appropriate tense and/or intonation. In this respect we may represent the passive as we did the stative above, even though the actor/nonactor distinction is rather dubious here.
(528) PRED: kurema 'beat' + w
AS:

LSS: actor, nonactor

The representation in (528) is meant to show the similarity of the stative extension and the passive extension only in those few cases where the passive functions as a detransitivizer. Like the stative, in such cases the passive has a negative specification for argument structure, and it deletes the actor role. This similarity, however, is more significant because it may shed light on the root cause of the restrictions imposed on the passive as detransitivizer. It is possible that, at least in Runyambo, the passive has moved away from the detransitivizing function because of the existence of the stative. For most verbs, the passive is a
prominence assigner that rearranges the participant roles in the typical case, by putting the actor in postverbal position, and the nonactor in preverbal position.

### 5.4 Conclusion

Of the three Runyambo extensions considered in this chapter, the stative represents the best case of a detransitivizer by getting rid of one of the two original argument positions and participant roles. The resulting stative verb is truly intransitive, with no actor role. As we shall see in the next chapter, this absence of an actor will constrain the range of extension combinations that the stative can participate in.

The reciprocal gets rid of an argument position but retains the participant roles in the LSS. This imposes the restriction of a measure of parity (or symmetry) on the participant roles that must share an argument position: they must share some qualities of an actor. Beyond this, any other participant role with its argument position - whether new or original (relative to the reciprocalization process) - is not affected. This means that reciprocal verbs may be left with more than one argument, and in this sense need not be intransitive. Reciprocalization only decreases the number of arguments by one.

The passive, even when it does not detransitivize a verb, modifies the syntactic specifications in the LSS by
requiring a nonactor to occur in preverbal position. In the appropriate context (verb, tense), the actor may also be removed together with its argument position.

In chapter four it was argued that the distinction between the causative and the applicative extensions is rooted in the binary distinction between thematic roles viz. actor vs nonactor. This discussion of the detransitivizing extensions, especially the stative and the passive, again clearly demonstrates how basic this thematic scheme is. In Runyambo, and in Bantu generally, the stative extension can only apply to predicate structures with two arguments, actor and nonactor. Similarly, in Runyambo and many Bantu languages, the passivization process can only involve two specific arguments, even if the host predicate structure has more than two arguments (cf. Rugemalira 1991a).

Although the reciprocal is designed to blur the distinction between actor and nonactor (since it requires some parity between them), this extension too works on the basis of this binary distinction: even in verbs with more than two arguments, there are only two specific arguments that can participate in reciprocalization.

In short, whatever the number of argument positions in a predicate structure, and whatever the participant roles (which are represented in verb-specific labeis), the processes of increasing and decreasing arguments, implemented via the verb extensions, appear to support a basic thematic role distinction between actor and nonactor.

So far the discussion has focussed on the properties of individual extensions. These syntactic/semantic properties of the individual extensions in themselves impose restrictions on the repetition and cooccurrence of the extensions. The number and type of extensions that can occur on any one verb root conform to the general properties of predicate structures. The ordering of the extensions, however, may be conditioned by morphophonology. The next chapter will tackle these issues.

NOTES TO CHAPTER EIVE
1 Generally in Bantu -an- is the more widely attested form, while -angan- appears to be restricted to only a few zones (cf Schadeberg n.d.). In Ciyao -angan- is the frozen form (Whiteley 1966).

2 Noting Guthrie's (1962) indeciseveness regarding the status of the reciprocal extension as a detransitivizer or as a pronominal that replaces "the direct object of the simplex radical", Mchombo \& Ngunga (1992) see the need to devise additional arguments (beyond showing its difference from pronominals and its similarity to other verb extensions) to prove that it is a detransitivizer. But it seems to me that this is an unnecessary burden imposed by the 'each other' gloss and the theory of anaphors built around it by
generative grammar (cf Chomsky 1981, Brame 1981, Lebeaux 1983, Heim, Lasnik \& May 1991).

3 This provides additional motivation for a dual representation of predicate structure - argument structure and lexical semantic structure (see chapter two).

4 Mchombo (1993) shows that the "reflexive and the reciprocal in Chichewa have different distributional properties": the former is a syntactic argument bound to the subject, while the latter is a morpholexical element that changes argument structures. It is maintained that even within English generative grammar the identification of the reflexive and reciprocal (each other) as the variety of NPS governed by principles of bound anaphora is relatively recent, and that this identification "has not only led to misanalyses but is also openly contradicted by the facts about Bantu languages. As such not only do the two have to be kept separate, but they must also be included, and dealt with, within different components of the grammar". (See also Mchombo 1991.)

5 Schadeberg (n.d) mentions Mfinu (B83), Herero (R31), Mongo (C61), Kongo-Ntanda (H16g), Mbunda (K15) and Dciriku (K33) . existing roots were found in the verb sample:
-arika 'set up fruit to ripen'; seclude a bride; (from -ara
'make the bed')
-ijika 'cause to seek shelter from rain' (trans); (from -iga
'make rain')
-rúmika 'cup/bleed (trans); (from -rúma 'bite')
-sibika 'tie/tether'; (from -siba 'lock up)
-toneka 'arouse pain from a wound'; (?from -tóna 'announce the arrival of a surprise'
-tumbika 'soak' (trans); (from -tumba 'increase' (intrans))
In the appendix the "impositive" formations like those in (512) are generally listed as independent entries.

7 Schadeberg (n.d:69)calls -uk- the "separative" extension and notes that "its syntactic characteristics are similar to the neutro-passive" (i.e. -ik-). He also maintains that "in most present-day languages productivity is from *-ud- to *-uk- rather than the other way round". Whiteley (1966:39) too groups -uk-/-ok- with -ik-/-ek-.

8 In languages where the -ik-/-ek- form is more productive, it is possible for such formations to coexist with -uk-/-ok- formations, as this Swahili example shows:
-fung-a 'close'; -fung-ik-a 'be closable'
-fug-u-a 'open'; -fung-uk-a 'be openable/open'

9 Verb roots with three non-omissible arguments like -ha 'give' do not have stative derivations.

10 Khamisi (1985) uses this distinction to set up two homophonous extensions, the stative and the potential.

11 Determining whether a root-final consonant is historically a product of the -i- mutating process or not can be tricky as the example in (i) shows.
(i) a) -batiza 'baptize'
b) -bátizibwa 'be baptized' (??-bátir-i-u-a)
c) -batiriza 'baptize for/at' (??-bátir-ir-i-a)

The passive (ib) and the applicative (ic) treat the final consonant of the root -z- as if it were a product of the familiar $r$-> 2 alternation before -i-; but we know that the verb is a loan from English, and the $-z-$ is original. There is no root *-batir- in the language.

12 But see a different position by Schadeberg (n.d.) who reconstructs a short form *-u- and a long form *-ibu- of the passive extension in Proto-Bantu.

13 Even verbs with three non-omissible arguments (e.g. kúha 'give') have only one passive version (Cf Rugemalira 1991a).

14 Other verbs with a similar property include kutáma 'disgust'/'displease', kurema 'beat'/'overwhelm', kubúra 'lack'/'disappear'.

15 cf. English:
i) The glass was broken by Peter (PROCESS)
ii) (We realized that) the glass was broken (STATE)

CHAPTER SIX
COOCCURRENCE RESTRICTIONS

### 6.0 Introduction

Whiteley (1966:47) maintains that "In theory each of the single extensions may combine with any other in any order, but in practice there are a number of restrictions on this... However, even when such restrictions are accounted for, there are vastly more forms possible than have as yet been recorded". In this chapter I will argue that such a "theory" is invariably wrong and that besides what Whiteley considers to be mere practical restrictions (e.g. passive must be final), there are ordering and cooccurrence restrictions that must be considered to be part and parcel of an adequate theory for analysing the extensions. It will be shown that when these latter restrictions are considered, the number of possible forms is much smaller than Whiteley has speculated, and that this is a desirable result for a theory of argument differentiation.

Section 6.1 discusses the impossibility of repeating an extension. In 6.2 I discuss cooccurrence and ordering restrictions involving two or more extensions. The significance of these restrictions within the system of mutually reinforcing mechanisms for minimizing mapping options is discussed in section 6.3.

### 6.1 Extension Repetition

There exists a strong restriction against repeating an extension anywhere in the derivation. This means that there are no derivations with the extension sequences in (601).
(601) a) ${ }^{1} A A^{1}, * C C, * S S, * P P, * R R$
b) *ACA, *CAC, *PAP, *SAS, *RAR etc.

Following MacWhinney and Menn (1984), the restriction in (601) has been attributed to the Repeated Morph Constraint (RMC) by Hyman and Mchombo (1992). Note though that, in the case of Chichewa, it is possible to repeat an extension when a different extension intervenes, i.e. some sequences in (601b) are permitted in Chichewa. According to MacWhinney and Menn the RMC is a "weak morphological universal... which tends to prohibit sequences of phonologically identical morphs" (p.529). This is because "repetition creates some inconvenience for language processing" (p.519). As 1 will demonstrate presently, phonological considerations play a role in extension combinations. But $I$ want to argue that the restriction on suffix repetition is not a phonological restriction, and thus not a case of the RMC. Rather this is a basic constraint on the size (number of argument slots) and (lexical semantic) content of predicate structures.

If the restriction were merely phonological, we would not expect the language to tolerate its large scale violation within the same suffix system. Consider (602).
(602) a) kwira 'grow dark' kwirira 'grow dark at'
b) kuseesa 'spill' kuseesesa 'cause to spill'
c) kubinga 'chase' kubingangana 'chase each other'

The verbs in (602) are illustrative of a large number of roots with endings that are phonologically identical to the applicative (602a), the causative (602b), and the reciprocal (602c) extensions. The similarity is only partial in the case of (602c), but the -ir-/-er- cases (602a) are particularly numerous. Yet there is no attempt to delete or to avoid these forms.

In addition, the Intensive and Reversive extensions have forms that duplicate segments, as (603) shows.

| (603) a) kujenda 'go' | kujenderera 'progress' |  |
| ---: | :--- | :--- |
| b) kúca 'dawn' | kucéerererwa 'be late' |  |
| c) kurira 'cry' | kuririirira 'inconvenience with too <br>  <br>  <br> much crying' |  |
|  |  | kukómeerera 'pack up' |
|  |  |  |

The intensive forms in (603a-d) as well as the reversive form in (603d) show that a particular sequence of segments can be repeated two or three times, even when part of the root shares in this similarity.

Note that the Appendix does have a few derivations entered under the $A+A$ code (kucúricirira 'cover for', from kucúrika 'tilt', kucúricira 'cover'; kurecerera 'cease at', from kureka 'let alone', kurecera 'cease'; kutwéjerera 'press charges for', from kutweija 'press charges', kutweijera 'press charges against'). Essentially these forms are of the same type as (602a) where the root contains a form similar to the applicative extension, the only difference being that the A derivation in these three cases carries a special sense which is amenable to independent applicativization. In other cases where this special sense seems to have no relationship to the original root, I have given such a derivation a separate entry (e.g. kukomera 'sow', independent of kukóma 'tie'; kunajira 'sleep', independent of kunaga 'throw'). With the three $A+A$ derivations there is sufficient semantic transparency to warrant the lexicographic decision to list them under their supposed roots. That these forms exist is quite revealing. From all this $I$ conclude that there is no phonological restriction on sequences of identical elements and that the restriction on extension repetition must be sought elsewhere.

Recall from chapter four, that the distinction between causative and applicative reflects the binary distinction between actor and nonactor thematic roles. Now if the repetition of any of these transitivizers was allowed, this would seriously undermine the system of argument differentiation which is partly based on the inequality
between causative and applicative arguments. Indeed the repetition prohibition is quite problematic for an analysis that utilizes a detailed inventory of thematic roles. If an inventory such as (201) above had a basis in linguistic structure, it would be reasonable to expect multiple occurrences of, say, the $A$ extension, each such occurrence licensing a distinct role from among the possibilities allowed (beneficiary, locative, etc. cf. chapter three). But, as (604) shows, this is not possible.
(604) a) *a - ka - tu - zaar -ir -ir- a omwáná omunju she- PST- us -deliver-A -A -FV child in house 'she gave birth to a child for us in the house'
b) a - ka - tu - zaar -ir - a omwana she-PST - us -deliver-A - FV child 'she gave birth to a child for us'
c) a - ka - zaar - ir- a omunju she-PST- deliver-A - FV in house 'she gave birth in the house'

The unacceptable double applicative is illustrated in (604a); the first A licenses the beneficiary (-tu- 'us'), while the second A licenses the locative (omunju 'in the house'). In contrast the acceptable constructions in (604b, c) show that only one applicative suffix per verb is possible and that
this may license one and, in our terms, the only applicative thematic role - the nonactor ${ }^{2}$.

Similarly the $C$ extension can occur only once, and will license the actor role. Consider (605).
(605) a) *ba -ka -ji- baaj -is -is-a omwana omúsyo
they-PST-it-slaughter- C - C-FV child knife 'they made the child slaughter it with a knife'
b) ba -ka -ji- baaj -is- a omúsyo
they-PST-it-slaughter-C - FV knife
'they slaughtered it with a knife'
c) ba -ka -mu - baaj -is - á enkoko
they-PST-him-slaughter-C -FV chicken
'they made/helped him slaughter the chicken'

As (605a) shows, the $C$ extension cannot be doubled in order to allow two extra arguments (causee and instrument) ${ }^{3}$. Rather only one causative argument can be added to any predicate structure (605b,c).

As with the transitivizing extensions, the prohibition against repeating the detransitivizers conforms to the binary thematic organization of the verb extension system. Recall from chapter five, that both the stative and the passive target the actor thematic role. Once this role is removed from the predicate structure (or, in the case of the passives
of most verbs, deprived of prominence) then the process cannot be repeated since the requisite environment is no longer present. In the case of the reciprocal, which in effect blurs the distinction between actor and nonactor and requires participants that can simultaneously fit both thematic roles, repetition would extend this blurring effect even further, implicating more participant roles, and in this way undermining the argument differentiation scheme. Consider (606).
(606)
a) $X$ verb $Y \quad Z$
b) $X \& Y$ verb+ -angan- $Z$
c) *X\& $Y$ and $Z$ verbt -angan- + -angan-

A double reciprocal would require a construction with at least three arguments to start with, as shown in (606a: e.g. $X$ reetera 'bring for' $Y$ ( ). The first reciprocalization would reduce the number of argument positions to two (606b:e.g. X \& $Y$ reeterangana 'bring for each other' $Z$ ). The second reciprocalization would further reduce the argument positions to one only. Now this one argument slot would have to be shared by three participant roles. These participants would have to have some common qualities (some degree of equality). The prohibition against double reciprocals then indicates that such a predicate cannot exist because its arguments would be indistinguishable from each other (606c).

In short, then, the prohibition against the repetition of extensions is not a morphophonological restriction, but a predicate structure constraint that preserves the asymmetrical argument differentiation scheme.


#### Abstract

6.2 Extension Cooccurrence and Ordering

If there were no restrictions at all, there would be 325 different ways of selecting and arranging the five extensions under consideration, assuming that in any one derivation each suffix occurs only once. As the Appendix makes clear, however, the actual number of arrangements possible is much smaller. It has been argued that a different order implies a different meaning (cf Guthrie 1962, Satyo 1985, Baker 1985, 1988, Alsina 1990, Hyman \& Mchombo 1992). In this section $I$ will argue that the significance of variable verb suffix ordering has been overestimated. I will present evidence that accommodates both an "analytic, 'beadstringing' model" and a "holistic template-matching view of affixation" (MacWhinney \& Menn 1984:529), thus undermining the significance of ordering. I will then argue that in most cases, it is the content of the combinations (cooccurrence), rather than their order, that is of significance to predicate structure.


### 6.2.1 Phonological conditioning

It has been noted in several Bantu languages that the "single vowel suffixes", the passive $-u-$ and causative -i-,
are placed at the end ${ }^{5}$. As a result of this phonological requirement, combinations of the $A$ extension with either the $C$ or $P$ are very instructive. Since the *PA sequence is ruled out the AP sequence is amenable to two interpretations, as (607) shows.
(607) a) a - ka - ji- kom -er-w- a Kakúru
she-PST - it- tie -A -P-FV Kakúru
'she was tied it for by Kakúru'

```
b) a - ka - rem - er-w- a omunju
    she-PST - beat- A -P-FV in house
    'she got exhausted in the house'
```

The sequence in (607a) follows the scope interpretation (tie for + passive). But in (607b) the order is the opposite of what is expected from the scope interpretation (be exhausted + applicative) ${ }^{6}$.

Similarly the $A C$ sequence (where $C=-i^{-}$) has two interpretations, just as the CA sequence (where $C=-i s-$ ) has two interpretations (for the distribution of -i- and -isrefer to chapter four). Consider (608).

```
(608) a) a - ka- mu- kor - ez-á egáari (ez <- er-i-)
    she-PST-him-repair-A+C-FV bicycle
    'she had the bicycle repaired for him'
```

b) a - ka- tu - son - es -ez - a emyênda she-PST- us - sew - C -A -FV dresses 'she had dresses made for us'

The glosses in (608) include two scope interpretations:'cause to $V$-for' (causative of applicative) and 'on behalf of, cause to $V^{\prime}$ (applicative of causative). This means that the ordering of $A$ and $C$ is phonologically conditioned, and that it has no syntactic/semantic significance.

Combinations of causative and passive always have the $P$ last, as (609) shows.
(609)

> a) serikári e-ka-rez -a abaataní omwana government it-PST-raise+C-FV neighbors child 'government made neighbors raise the child'
b) abaataní (omwána) ba - ka-mu -rez -i-bw-a serikári neighbors child they-PST-him-raise-C-P-FV government 'neighbors were caused by govt to raise him'
c) *omwáná (abaataní) a-ka-ba -rez -i-bw-a serikári child neighbors he-PST-they-raise-C-P-FV government '?the child was caused to be raised by them (neighbors) by govt.'

The causative allows a third argument in the predicate structure of rera 'raise' (609a). As expected, the passive of the causative in (609b) has the passive extension after the causative extension. There is no possibility of a PC sequence (*rerwesa). As (609c) shows, a second passive version is not available in Runyambo, and even its purported English gloss is suspect to me ${ }^{7}$. In this sense, the prohibition against the PC sequence is not merely phonological, but is also based on predicate structure constraints (see the discussion on *PR and *PS in section 6.2 .4 below).

### 6.2.2 Morphologically fixed sequences

Now, consider non-phonologically determined fixed sequences. The $C R$ sequence, at least in Runyambo, is the productive possibility, whereas $R C$ sequences exist only in frozen reciprocals. As (610) shows, the CR sequence is amenable to two interpretations.
(610) ba - ka - kom -es -angan- á énku/omuguha
they-PST- tie -C - R -FV firewood/rope
'they caused/helped each other to tie firewood'
'they caused the rope to tie each other, i.e. they tied each other with a rope'

The variable glosses in (610) are not matched by variable extension order. This makes me skeptical of the analytical and comparative (to English) approach for the $C R / R C$
combination (recall the discussion on biclausal analysis in chapter four). Hyman \& Mchombo (1992) represent the sequences as in (611).
(611) a) RC: [[[mang]an]its] 'cause to tie each other'
b) CR: [[[mang]its]an] 'cause each other to tie'

But in spite of the considerable confusion that often arises in the discussion of these arrangements and their English glosses, it appears that a bracketed (hierarchical) representation for the $R$ and $C$ combination is not appropriate, at least in Runyambo. Rather an unbracketed string (a flat structure), shown in (612), is all that is needed.
(612) CR: -kom-es-angan-

What (612) suggests is that there is no structure to dictate the interpretation. It argues for a holistic perspective whereby the full array of the suffixes in the derivation is scanned before an appropriate interpretation is made. In support of this view, note that there is no productive $R C$ (*-angan-is-) sequence in Runyambo. Instead all RC sequences are based on frozen reciprocals, illustrated in (613) (refer to the earlier examples in (501) and (502)).
(613)

| a) bagtan-is-a | divide up (trans) |
| :--- | :--- |
| b) rwtan-is-a | attack; cause to fight |
| c) tong-an-is-a | pick a quarrel with (*cause to |
|  | demand payment from each other) |
| d) nyw-an-is-a | cause to become friends (*cause to <br> drink each other) |

In (613), whether or not the root exists independently of the -an- suffix, the causative transitivizes the frozen reciprocal ${ }^{8}$. An examination of the Appendix will show that there are no causatives of productive -angan- reciprocal derivations (see footnote 1 for -angan- forms carrying an intensive meaning and amenable to causativization).
6.2.3 Variable order

Only the AR/RA combination exhibits a truly variable sequencing, and, in this sense requires an analytical step-by-step approach. Consider (614).
(614)

> a) ba -ka -bon -angan-ir-a omunju
> they-PST-see - R -A -FV in house
> 'they saw each other when in the house'
> b) ba - ka - bon - er-angan- a enju
> they-PST - see - A - R -FV house
> 'they saw/found a house for each other'

In (614) the order of the extensions determines the way in which they are interpreted, i.e. their scope: (614a) is an applicative of a reciprocal, while (614b) is a reciprocal of an applicative.

6.2.4 Predicate structure constraints<br>Finally, all the remaining suffix combinations are constrained by predicate structure to occur in only one sequence (SA/*AS), or not to occur at all (615).

$$
\begin{equation*}
\star S P, \quad * R P, \quad * S R / * R S, \quad * C S / * S C \tag{615}
\end{equation*}
$$

Each of the combinations in (615), except that of causative and stative, involves two detransitivizers, each of which targets the actor. When one of the extensions has applied, the next cannot apply because the requisite environment has been destroyed by the first extension (bleeding). After the stative has removed the actor, the passive has no actor to target for removal or whose prominence is to be taken away; and the reciprocal has no other participant role to bind to the nonactor. And after the reciprocal has applied, binding two participant roles into one argument position, even when a third role exists, passive cannot apply since this third role cannot be assigned the requisite prominence in the first place. This is illustrated in (616).
(616) a) abáana ba -ka -siig -angan-á amajúta children they-PST-smear- R -FV oil
'the children smeared oil on each other'
b) *amajúta ga-ka -siig -angan-w- á abáana oil it-PST-smear - R -P-FV children 'the oil was smeared on each other by the children'

Note that even without the reciprocal, a verb with three arguments like siiga 'smear' in (616) allows only one passive version which assigns prominence to the other human/animate participant, but never to the inanimate one. In (616a) the reciprocal has already bound the two animate participants into one argument position. Since the passive targets the actor for removal or demotion to non-prominence, the process of passivization should fail in (616b) on account of there being a composite argument with actor and nonactor properties simultaneously ${ }^{9}$. Of course, if a third participant role does not exist, then passivization cannot even be attempted since there is no candidate to assign prominence to.

Similarly after the $R$ extension, the stative should not apply because of the inseparable actor/nonactor argument created by reciprocalization. Recall that the $S$ extension targets the actor for removal.

This analysis of the non-occurrence of the *SP, *RP, *RS and $* S R$ sequences is also pertinent to the *PR and *PS sequences which violate the phonological requirement that the
passive be placed last. It is certainly the case that, irrespective of ordering considerations, detransitivizing extensions do not cooccur. In particular, the requirements of the $R$ extension are irreconcilable with those of the $S$ and $P$ extensions. While the $R$ wants to bind actor and nonactor to each other, the $S$ and $P$ want the two roles to remain separate, with the nonactor in a prominent position and the actor actually eliminated or, at least, in a non-prominent position.

The *CS/*SC combination is prohibited because, simply put, it involves a useless playing around with the same thematic role, viz. the actor. The causative adds the actor, while the stative removes the actor. Since the stative applies to structures with two arguments only, this disqualifies the majority of causative structures, which have three arguments because they are based on transitive verbs. But even causative constructions with two arguments like gwisa 'cause to fall' cannot be stativized since all that is needed in order to remove the actor is to get rid of the causative extension. Conversely, stative constructions like hendeka 'break', which must have one argument, cannot be causativized since all that is needed in order to introduce an actor is to get rid of the stative extension.

The only combination remaining in this choice of two extensions is that involving the applicative and the stative. It is the only combination which allows one sequence (SA) AND whose prohibition of the other sequence (*AS) can be solely
described as a predicate structure constraint. Some combinations do not occur in either sequence at all; others occur in one sequence, but can be regarded as being restricted by phonological requirements as well as predicate structure constraints; and one (CR/*RC) can be regarded as being morphologically fixed.

Recall that the stative applies to two-argument structures only. We assume that only those verbs that can take the $S$ extension on their own, can be expected to allow the AS sequence. But note that if a two-place predicate structure takes the applicative, it will have three arguments, and therefore be automatically disqualified from taking the stative. On the other hand, if a predicate structure has lost the actor argument via the stative extension, it can happily be expanded by the applicative and take another nonactor argument (SA). There may be restrictions on this added argument for purposes of distinguishing it from the other arguments. Hence the observation that this new argument must be a "locative" or a "reason" role (Mchombo 1992). But these restrictions on the interpretation of the $A$ participant role in SA constructions do not, contrary to Mchombo's position, require that we posit a thematic hierarchy. If the $A$ cannot introduce a "beneficiary" after the $S$ has applied, this is because the said "beneficiary" role by definition implies the presence of an actor ("agent") who carries out the action for the benefit of, or on behalf of, the "beneficiary". Hence the observation
that the "beneficiary", and any role introduced by the $A$, cannot be the highest role at the point of its introduction. Because there is no actor, as a result of the $s$, there cannot be a "beneficiary". In short, there is no basis here for a further fragmentation of the nonactor macro-role.

### 6.2.5 Summary

The foregoing discussion has dealt with the nature of the restrictions on combinations of two extensions. Table 6.1 is a summary of that discussion.

| SEQUENCE | NATURE OF RESTRICTION | REMARKS |
| :---: | :---: | :---: |
| $\begin{array}{rl} 1 & * A A, * C C \\ & * R R, * S S \\ & * P P \end{array}$ | Pred.Structure | Non-cooccurring |
| $2 \mathrm{CA}, \mathrm{AC}$ | Phonology | Fixed order; two interpretations for each sequence |
| $3 \mathrm{AP}, * \mathrm{PA}$ | Phonology | Fixed order; two interpretations for one sequence |
| $4 C P, * P C$ |  <br> Pred. Structure | ```Fixed order; causee omission option for some verbs has effect of second interpretation``` |
| 5 CR , *RC | Morphology | Fixed order; two interpretations for one sequence; ignore frozen RC forms |
| 6 AR, RA | Sem. scope | Variable order; analysable |
| $\begin{gathered} 7 \text { *SP /*PS } \\ \text { *RP/*PR } \\ \text { *SR/*RS } \end{gathered}$ | Pred.structure Phonology | Non-cooccurring detransitivizers |
| 8 *CS/*SC | Pred.structure | Non-cooccurring |
| $9 \mathrm{SA} /{ }^{\text {A }}$ S | Pred.structure | One order, one interpretation |

Two observations are in order. First, if we ignore the three rows $(1,7, \& 8)$ where the combinations do not occur, we are left with four rows displaying a fixed order (2, 3, 4, \& 5) as against two (6, \& 9) where variable sequencing is significant. But since only one of the sequences in row 9 is acceptable, this means that only two arrangements, out of the 25 possible, actually make use of the ordering option for semantic effect. Overall only eight arrangements can occur. This is certainly not what Baker's (1985) "Mirror Principle" would lead us to expect ${ }^{10}$.

Second, whatever the nature of the restriction on permissible combinations and sequences, the overall effect is to minimize the options, NOT to maximize them. Hence the use of one fixed sequence to achieve two intepretations in rows 2, 3, 5, and possibly 4. Also where variable sequencing is phonologically permissible, the interpretation may be kept constant (cf. row 2; Chichewa $P A=A P$ (Hyman \& Mchombo 1992); Xhosa, see footnote 10 ). This holistic, non-analytical tendency has reached its extreme level in frozen forms where each form has to be learnt separately. This is not an insignificant aspect of the verb extensions (see Appendix), but it tends to be downgraded whenever we focus on the productive aspect. With this in mind we should not be surprised if Bantu lexicographers continue to list all verb suffixes and their derivations in contradiction to Shepardson's (1986) suggestion.
6.2.6 Combining three extensions

Permissible combinations involving three or more extensions will be extremely rare since they can only be based on what is permissible in Table 6.1. As Table 6.2 shows, only four arrangements are all that is possible when three extensions are selected.
SEQUENCE EXAMPLE

1 CAR son-es-ez-angan-a 'cause to sew for each other'
ACR búr-iz-angan-a 'cause to disappear for each other' noj-ez-angan-a 'crush thoroughly for each other'

2 CAP son-es-ezi-bw-a 'cause to be sewn for'
ACP noj-ezi-bw-a 'cause to be crushed for'

3 *CRA bón-es-angan-ir-a ?'cause to see each other at'
4 *SAR bon-ec-er-angan-a ?'become visible to e.o.'
5 *SAC bón-ec-ez-a 'cause to be visible at'
6 *RAC bon-angan-iz-a ?'cause to see each other at'

TABLE 6.2: Cooccurrence and ordering restrictions: choice of three extensions

Table 6.2 lists only those sequences that on the basis of Table 6.1 contain no prohibited sequences of two
extensions. Only four of the possible eight arrangements are acceptable. In fact, however, the variation in ordering is insignificant since the CA/AC variation is phonologically determined. The sequences in rows 4,5 , and 6 seem to suggest that, even if another extension intervenes to break up a prohibited sequence of two, there is still no chance for the combination with three extensions - a position that reinforces the holistic perspective. Furthermore it is significant that only one arrangement of the three extensions C, A, and $R$ should be acceptable (cf rows 1,3 , and 6). As the question marks on the glosses indicate, it is not even certain what the interpretations should be and whether there should be any difference between the CRA and the RAC sequences. These facts clearly reinforce the holistic perspective by according significance to the content of the combination and attaching little or no significance to variable ordering.

As it happens the most felicitous three-extension combinations involve the two transitivizers and the reciprocal (cf row 1). And given the restrictive nature of the reciprocal, there is not much room for maneuver in interpreting such forms. Consider (617).
(617) a) ba -ka -son-es-ez-angan-á emyenda they-PST-sew-C -A - R - FV dresses
'for each other they had dresses sewn'
b) *a - ka -son-es-ez-angan-á abááná emyênda he-PST -sew-C -A -R -FV children dresses 'he had the children sew dresses for each other'

The verb sona 'sew' in (617) allows causee omission. In (617a) the composite argument created by reciprocalization is -ba- 'they'. But in (617b) abáana 'children' cannot be interpreted as a composite argument since there is no predicate structure that could sustain such an interpretation. I will demonstrate this step by step:
(618) a)
$X$ son - es- ez -a $Y$ emyênda : Causee omission; 3 args max.
sew - C - A -FV
'X cause [someone] to sew dresses for Y'
b)
$X \& Y$ son-es-ez-angan-a emyenda: Causee omission and sew-C -A -R -FV reciproc.; 2 args max.
'for each other $X \& Y$ cause [someone] to sew dresses'

Clearly a construction like (617b) is not possible. As (618) shows, there cannot exist a sufficient number of arguments with the appropriate properties to give the interpretation 'X cause $Y j$ to Verb (Z) for each otheri'. Note from Table 6.2 that the examples in row 1 consist of verbs with a maximum of three non-omissible arguments after the
applicative and causative have expanded the structures (618a). After reciprocalization, only two non-omissible arguments should be available (618b). It was noted in chapter four that, as the number of arguments in a predicate structure increases, so do the restrictions on the respective arguments, all this for the purpose of argument differentiation. In a construction with four non-omissible arguments, one of the arguments must be a first person pronominal affix (see example (203) and footnote 5 in chapter two). Now reciprocalization will require that this first person pronominal affix be interpreted as the composite argument (actor and nonactor). As (619) shows, this is problematic.
(619) a) ?tu - ka- tem-es-ez-angan- á omuséíjá emiti we -PST- cut-C -A -R -FV man trees 'wei made the man cut trees for each otheri'
b) *a -ka -tu-tem-es-ez-angan- a emiti he-PST-us-cut-C -A - R -FV trees 'he made us; cut trees for each otheri'

Although there is uncertainty on the acceptability of (619a), its restricted nature is not in doubt: no form other than -tu- 'us' can realize the composite argument obtained after reciprocalization. The unacceptability of (619b), on the other hand, is in conformity with the tendency to minimize
the options: in a reciprocal construction, the composite argument, which must be a plural form, must occupy the neutral actor position before the tense marker.

Finally the combination of causative, applicative and passive is also equally restricted to predicate structures with at most three non-omissible arguments. This is illustrated with a causee omission verb in (620).
(620) a) (omwénda) a -ka -gu-son-es-ezi-bw- a Káto
dress she-PST-it-sew-C -A+C-P -FV Káto
'for her Kato had it (the dress) sewn'
b) *omwénda gu-ka -mu -son-es-ezi-bw- a Káto
dress it-PST-her-sew-C -A -P -FV Káto
'the dress was caused to be sewn for her by Káto'
i.e. it was Káto who had the dress sewn for her.

As already discussed, the actor (Káto) is required in (620a), and the causee is omissible. But there is only one passive version, and (620b) which assigns prominence to the other argument is not acceptable. Indeed this is the only option since constructions that must have four arguments cannot be passivized. Consider (621).

Kato a -ka -ba -tu-bon-es-ez-á ensimbi
Káto he-PST-them-us-see-C -A -FV money
'for us Káto made them obtain money'

For best results (621) has the appropriate mix of noun phrases and pronominal prefixes. In (622) I show that no attempt to assign prominence to any of the three other arguments via passivization can succeed.
a) * (ensimbi) tu-ka -zi-ba - bon-es-ezi-bw-a Káto money we-PST-it-them-see-C -A -P-FV Káto 'we were made to obtain it (the money) for them by Kato ${ }^{\prime}$
b) *(ensimbi) ba -ka -zi-tu-bon-es-ezi-bw-a Káto money they-PST-it-us-see-C -A -P-FV Káto 'they were made to obtain it (the money) for us by Káto'
c) *ensimbi zi-ka -ba -tu-bon-es-ezi-bw-a Káto money it-PST-them-us-see-A - P -FV Káto 'the money was made to be obtained by them for us by Káto'

In all three attempts to use the passive to assign prominence to a different argument in the construction is not acceptable. In general, the examples in (619) and (622) appear to indicate that it is not possible to reciprocalize or passivize a structure with four non-omissible arguments.

Considering the limited number of arrangements available in Table 6.2 it should be apparent that three extensions is the limit of possibilities on any single verb root. Any combination of four would have to repeat a causative or an applicative, or force a cooccurrence of detransitivizers all of which options are prohibited. In this connection Satyo's (1985) observation is pertinent:

Combinations occur freely ... up to three in a sequence with regular semantic predictability ... Combinations involving four, five and (rarely) six tend to be less predictable in meaning, ... [showing] a gentle curve towards lexicalization in their development (p.298).

In the light of the foregoing discussion, it should be added that combinations of three extensions showing regular semantic predictability are considerably constrained, at least in Runyambo. But even across the various Bantu languages, after the variations in phonological restrictions have been considered, it does appear that predicate structure constraints alone severely cut down the number of possible combinations.

### 6.3 Conclusion

The foregoing discussion has demonstrated that the means for expanding predicate structures have inbuilt restrictions which are part and parcel of the mechanisms for argument differentiation. The transitivizers, the applicative and causative extensions, can cooccur, but neither can be repeated. Consequently the maximum number of new arguments
possible in any predicate structure must be two. For instance, in a one-argument verb like imuka 'rise' the maximum number of arguments after applicativization and causativization is three - X imuciza Y Z 'X caused Y to rise for $Z^{\prime}$. For a verb with four arguments the upper limit will be six. Consider (623).
(623) a -ka -ka-n -sar-iz - á omwáná [isócé] [ahamútwe] he-PST-it-me-cut-A+C-FV child hair on head $\begin{array}{llllll}X & Y & Z & B & T & M\end{array}$
'he cut the child's hair on the head with it for me'

The predicate structure for the unextended verb sara 'cut' accommodates up to four arguments (cf. example (426a) above). Two of these arguments are omissible. In (623) this structure has been expanded to accommodate two more arguments by means of the $A$ and $C$ extensions. At this point the structure has reached the limit of expandability since neither $A$ nor $C$ can be repeated. And the restricted nature of the arguments cannot be overemphasized. Two of the arguments ( $Y$ and 2 ) are realized as pronominal affixes, one of which (Z) must be a first person affix ${ }^{11}$. Of the two omissible arguments, one must be an inalienable part (T) and the other a participant locative ( $M$ ) . Considering the severity of these restrictions, it appears that such structures must be very rare indeed. In the entire verb sample $I$ have not found a verb that can beat sara 'cut' with regard to the number of arguments it can be
made to accommodate. Yet it is not the number six that is of significance. Rather what (623) illustrates so well is that the requirement that arguments be distinguishable from each other is the basis of all these restrictions. It appears that, for any language, the greater the number and types of resources for argument differentiation, the greater the possibility of obtaining predicate structures with multiple arguments, and ultimately, the more things that can be talked about within the confines of a single clause. For instance, in English it is possible to hang many things around a single verb by using the many prepositions which, in addition, may be repeated. The constituents so formed will appear as adjuncts in the clause. In Runyambo, however, similar things can only be incorporated into the structure of the verb by means of the transitivizing extensions which, moreover, cannot be repeated. As was argued in chapter three, the items added in this way need to be regarded as arguments.

Since I went out of my way to test the limits in (623), it should be pointed out that argument differentiation demands that the number of arguments in any predicate structure be kept to the necessary minimum. If one predicate structure rather than two must be employed, then the most likely arguments to get early discharge will be the omissible ones. This is why it was claimed, rather tentatively, in Rugemalira (1992), that the highest number of arguments possible for any predicate structure is four ${ }^{12}$. That appears to be true only when omissible arguments are ignored. So
consider the verb kúha 'give' which has three non-omissible arguments.
(624)
a) Kato a - ka - m- pe - er -á abááá amáte
Káto he-PST -me-give- A -FV children milk
'Káto gave the children milk for me'
b) Kato a- ka- m- pe - is- á abááná amáte
Káto he-PST-me-give- c -FV children milk
'Káto made me give the children milk'
c) *Kato a -ka - ku -m - pe - is-ez- á abááná amáte
Káto he-PST- you-me-give- C -A -FV children milk
i) 'Káto made you give the children milk for me'
ii) 'Káto made you give me milk for the children'
iii) 'Káto made me give you milk for the children'
iv) 'Káto made me give the children milk for you'
v) 'Káto made the children give me milk for you'
vi) 'Káto made the children give you milk for me'

As (624) shows, the argument structure of kúha 'give', can accommodate at most one more argument, by means of the applicative (624a) or the causative (624b), thereby becoming a four-argument structure. Although the resource for adding another argument exists, viz. cooccurrence of the applicative and causative extensions, the resulting structure, under all six imaginable interpretations is not acceptable (624c). This
suggests that non-omissible arguments cannot exceed an upper limit of four. Note that kúha 'give' is not a causee omission verb. In a sense, the unacceptability of (624c) is based on the fact that the resources for constraining the number of possible mappings are overstretched by the number of arguments available.

Similar complexities are involved in the reciprocalization of four-argument constructions. Consider (625).
(625) a) a-ka-n-tem -es-ez-a omuséjá emiti
she-PST-me-cut -C-A-FV man trees
'for me she made the man cut trees'
b) ?tu-ka-tem-es-ez-angan-a omuséfja emiti we-PST-cut-C -A - R - FV man trees 'for each other we made the man cut trees'
?i) cause-cut for each of us ?ii) cause-cut for us and himself
c) *ba -ka -n -tem-es-ez-angan-á emiti they-PST-me-cut- C-A - R -FV trees 'for each other they made me cut trees'
d) *mu -ka -n -tem-es-ez-angan-a emiti you(pl.)-PST-me-cut-C-A - R - FV trees 'for each other you made me cut trees'

It will be recalled that the reciprocalization of a fourargument structure like (625a) will produce a structure with a maximum of three arguments $(625 b-d)$. And also recall that the mapping options have already been reduced by the restriction that the composite argument be realized in initial ('subject') position. Even then we are left with at least two different interpretations, (i) and (ii), in each of the three constructions that can be formed out of (625a). The first person pronominal affix in (625b) seems to help the chances of acceptability for the construction. But on the whole, the intended meanings in all three reciprocal constructions cannot be expressed within the confines of a single clause. The general point deserves restatement: predicate structures with four non-omissible arguments cannot be expanded or contracted without violating the general requirement that arguments be distiguishable from each other.

## NOTES TO CHAPTER SIX

1 The Intensive (I) extension (-irir-, see example 603 and the appendix) should not be regarded as a double applicative (AA), as Johnson (1939) (who called it a "double prepositional") and Satyo (1985:231) do. The Intensive extension usually derives a new lexical item with the meaning "keep V-ing", although in a number of cases such a relationship is too remote to be of much significance. The peculiarity of the intensive lies in the fact that it has no
common form across Bantu languages, and that rather than being a fixed form, it is a semantic notion that assumes various forms. In Runyambo the chief form is like a double A, but other forms include $I+C, R$ (cf kugumangana 'become hard'; kwomangana 'become really dry', kutemangana 'fight'), and a variety of other forms included in the Appendix under the $x$ (Other) category. In Chichewa, on the other hand, the chief form is similar to the $C$ extension with the addition of $a$ high tone, but this is doubled if another suffix follows (cf Hyman \& Mchombo 1992). In Xhosa the intensive meaning may be expressed with forms that are similar to a double $A$ or $a$ double $C$ (cf Satyo 1985:231).

2 Hyman \& Mchombo (1992) have an example that apparently contradicts this position:
mang-ir-an-ir-an- 'tie for each other at (a place)'
This example is problematic because it is not presented in a sentence context, which makes it difficult to evaluate its acceptability together with all the arguments licensed. Sam Mchombo (personal communication) considers the examples in (i) and (ii) to have a very low "likelihood of occurrence" (hence the question mark; see also note 3 below).
(i) ? a -na -zond-er-an-ir-an-a njoka ku-ulaya they-PST-hate-A -R -A -R -FV snakes in-Europe
'they hated snakes for each other in Europe'

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(ii) ? a -na -ph -er-an-ir-an-a njoka ku-ulaya they-PST-kill-A -R -A -R -FV snakes in-Europe 'they killed snakes for each other in Europe?
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Mchombo's judgements represent one type of two typical responses researchers get from native speakers with respect to marginal structures on which important theoretical claims seem to hinge. Charles Fillmore (personal communication), in connection with the possibility of doubling the Japanese causative suffix sase, notes that the responses are "No, that is not Japanese" and "I can see what you mean (but I would not say that)". The analytical framework proposed in this study follows the first type of response. Mchombo's theoretical position, however, follows the second type of response. There are two aspects to Mchombo's theoretical position which favor the plausibility of suffix doubling. The first aspect concerns the relevance of the competence/performance distinction. It is claimed that the rules of the language do not prohibit sentences (i) and (ii) above (and those in note 3 below, with double causative extensions), but that performance factors related to memory and processing mechanisms are the source of the trouble. Second, given the importance attached to a detailed (and hierarchical) inventory of thematic roles in LFG, it follows that a double applicative construction, licensing a beneficiary and a locative, should be acceptable.

Baker (1988:370) has the following Chichewa examples with two causative suffixes but he rates their grammaticality questionable:
i) ?Asilikali a - na - vin - its-its-a atsikana kwa kaidi soldiers they-PST-dance- C -C -FV girls to prisoners
'The soldiers made the prisoners make the girls dance'
ii) ?Mkango u -na -meny-ets-ets-a mbuzi kwa anyani
lion it-PST-hit -C -C -FV goat to baboons
'The lion made someone make the baboons hit the goats'

4 Note that Hyman \& Mchombo's (1992) examples that have a repeated -an- suffix do not involve a double reciprocalization, but are instances of an ordering requirement that "-an- must be spelled out a second time when added to a base that has an applicative in it". See also Satyo (1985:232-3) on Xhosa where both $A$ and $C$ require double spellout of -an-.

5 "....un suffixe monophone -y- ou -w- tend à être représenté après tout autre suffixe" ["a monophone suffix -yor -w- tends to be represented after all other suffixes] (Meeussen 1959:58). Hyman (1990) notes that in several languages this tendency applies despite scope considerations, and despite the fact that the causative form has been lexicalized and the non-causative does not occur alone. In

Runyambo, for instance, the applicative forms of verbs with frozen causatives show non-occurring root forms:
báza 'ask', báriza 'ask for' (from *bár-ir-i-a)
búuza 'ask', búúriza 'ask for' (from *búúr-ir-i-a)
banza 'start', bandiza 'start for' (from *band-ir-i-a) But see chapter five, footnote 11, for the possibility of overgeneralization to environments without any frozen causative.

In Kiswahili the $A$ is a vowel, which leads to the unavailability of the A+C sequence (cf Khamisi 1985).

6 In Chichewa where the phonological restriction does not apply because the passive extension -idw- is not a vowel, both $A P$ and $P A$ sequences are allowed, with $A P$ amenable to both scope interpretations (cf Hyman \& Mchombo 1992).

7 See the discussion on causee omission in chapter four.

8 Khamisi (1985, example 78b) uses the causative (patanisha 'reconcile') of a frozen form (pat-an-a 'agree'; *'get each other') to show that the $R+C$ sequence is productively available. This must be an oversight on the author's part since in a different context (example 68) he does note that pig-an-w-a '(e.g. of war) be fought', from pig-a 'hit', is formed on a frozen reciprocal, and that therefore the $R+P$ sequence is not a productive possibility.

Satyo (1985:237,247) gives two examples of the $R+C$ sequence which appear to me to be frozen and quite comparable to the Runyambo examples in $(613 a, b)$ :
-hlukanisa 'cause to separate'
-khandanisa 'cause to hit each other'
The example sentence reinforces this view:
índoda ikhandánisa ámátye ngómatshíni
'the man maikes the stones grind each other by means of a machine'

Note that in this Xhosa sentence khandanisa is glossed as 'make/cause to grind each other', not as 'cause to hit each other', an indication that there may be a special sense associated with this derivation. In addition Satyo (1985:250) contains some evidence of $R$ doubling in Xhosa $R C$ combinations: -bonanisana 'cause to see each other'. Satyo notes "a very high frequency of occurrence of combinations of extensions in which -is- is the initial component of a string" p. 243 .

I have a suspicion that a similar situation holds in Chichewa: a reexamination of the examples used by Alsina (1990) (meny-an-its-a 'cause to hit each other'), and by Hyman and Mchombo (1992) (mang-an-its-a 'cause to tie each other'), might reveal a frozen aspect in their meanings. Sam Mchombo (personal communication) notes that he is inclined to double the $R$ in the $R C$ combination, obtaining $R C R$. The significant point to be noted is that even though there is neither a phonological nor a predicate structure constraint
against the $R C / C R$ combination, it appears that there is a strong tendency in various languages to allow only one of the two possible sequences to appear productively.

9 It is not clear to me whether languages which allow a second passive version allow the RP sequence.

10 "More generally, it has often been observed that the order of affixes on the verb corresponds to the semantic scope of those affixes, with outermost affixes interpreted as superordinated predicates ... This strict parallelism between the order of the morphemes on the verb and the way that the form is interpreted is an example of what Baker (1985a) calls the MIRROR PRINCIPLE effect, where the morphology "reflects" the syntax in a perspicuous way" (Baker 1988:373).

Satyo (1985:282) makes a similar claim in his analysis of Xhosa verb extensions but fails to demonstrate the validity of that claim: "The manoeuvring of these extensions in a sequence has the associated change in communicative value. In other words, the order that one selects in a combination reflects appropriately the manner in which an idea is conceptualised." Indeed the author seems to be unaware of statements in the same chapter to the effect that sequencing is irrelevant (that $P A=A P ; R P=P R ; P C=C P$ ):
(iii) /-w-/ + /-el-/

> Example:
-bhal-w-él- 'be written for'
This combination is rather restricted in its occurrence. It is used alternatively or interchangeably with its reverse /-el-+-w-/ without any semantic changes or differences. In this behaviour, it resembles the combinations /-an-/+/-w-/ and /-w-/t/-an-/ mentioned above...
(iv) /-w-/+/-is-/

This combination is interchangeable with /-is-/+/w/. (Satyo 1985:245)

Apparently the phonological requirement to place the passive at the end does not hold in Xhosa.

11 In Kirimi the second 'object' prefix slot can only be available if it is filled by the first person affix (Hualde 1989). In Runyambo it is the third slot that must be filled by the first person affix. Note in this connection, that Machobane's (1989) GB framework forces her to adopt a peculiar position. By her "Internal Argument Principal" (IAP), "the maximum number of internal arguments that a verb can take is two". So a construction with three NPs as internal arguments is not acceptable. But if one of the NPs is replaced by a pronominal affix, the construction is acceptable. Machobane adopts the admittedly problematic position that three cases have been assigned, but has to maintain that the affix is not an argument because this would violate the IAP (Pp.139-44).

12 See also the discussion in chapter two about the upper limit on possible grammatical functions in LFG. Similarly

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descriptions of other Bantu languages within a grammatical
relations framework show an upper limit of four grammatical
relations (cf. inter alia Byarushengo et al. 1977 on Ruhaya,
Satyo 1985 on Xhosa, and Machobane 1989 on Sesotho).
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## LEXICON OF RUNYAMBO EXTENDED VERBS

KEY:

| A - applicative | $C$ - causative |
| :--- | :--- |
| D - double stem | I - intensive |
| P - passive | $R$ - reciprocal |
| S - stative | $V$ - reversive |
| $X$ - other |  |

kwagura scratch
A- kwagurira scratch for
C- kwagura cause to scratch
P- kwagurwa be scratched
R- kwagurangana scratch each other
A+P- kwagurirwa be scratched something
$C+R-k w a g u z a n g a n a$ cause to scratch each other
kwaka shine, (of fire) give flame, (of car) start; deprive of
A- kwacira give flame/start at; deprive of for
C- kwaca cause to give flame/start

- kwacisa be caused to deprive of/to be deprived of

R- kwakangana deprive each other of
P- kwakwa be deprived of
I- kwaciira receive
kwambuka cross (water)
A- kwambucira cross at
C- kwambuca take across
P- kwambukwa be crossed
C+A- kwambuciza take across for/at
C+R- kwambucangana take each other across
kwana - (of banana tree) give fruit; (of grasshoppers) chirp
A- kwanira give fruit at
C- kwanisa cause to give fruit
I- kwaniira groan
kwtaga refuse, dislike
A- kwfajira refuse for/at
C- kwinjisa cause to refuse/dislike
R- kwhagana (of wife) temporarily go away from husband

- kwengangana dislike each other

P- kwéngwa be disliked
I- kwánjirira refuse for, withhold help
$A+R-k w i n j i r a n g a n a ~ r e f u s e ~ a t ~ e a c h ~ o t h e r ~$
A+P- kwenjirwa be refused at
$C+R-k w a n j i s a n g a n a$ cause each other to refuse something
$C+P-k w a n j i s i b w a ~ b e ~ c a u s e d ~ t o ~ r e f u s e / d i s l i k e ~$
$R+A-k w a n g a n i r a ~(o f ~ w i f e) ~ g o ~ t o ~(p l a c e) ~ a w a y ~ f r o m ~ h u s b a n d ~$ - kwanganganira dislike each other at

R+C- kwinganisa cause to go away from husband
kwara make a bed, spread out (a sheet)
A- kwarira make a bed for;spread out (esp.grass) on floor
C- kwaza cause to make bed
P- kwarwa (of bed) be made
X- kwarika cover bananas to ripen; keep a bride secluded
V- kwarura bring a bride out of seclusion

- kwaruura uncover

I- kwariirira spread out grass on floor
A+R- kwarirangana make bed for each other
$A+P-k w a r i r w a$ be made $a$ bed for
kwisa chop, split
A- kwfisima chop for/at
C- kwasisa cause to chop
P- kwasibwa be chopped
X- kwasama open one's mouth
X+V- kwasamura open someone's mouth
kwata crack, shatter
A- kwitira crack for/at
C- kwttisa cause to crack
S- kwatika crack (intr.)
P- kwatwa be cracked
$A+R-k w d t i r a n g a n a$ crack for each other
A+P- kwetirwa be cracked for
$C+R-k w t t i s a n g a n a$ cause each other to crack
C+P- kwitisibwa be caused to crack
S+A- kwaticira crack at
kwaya plunder,take away everything
A- kwayira plunder for
C- kwayisa cause to plunder
P- kwaywe be plundered
A+P- kwayirwe be plundered for
kúba be
A- kubiera be for; help
$C$ - kubeisa cause to be
$A+P-k u b \neq r w a$ be fortunate; be helped
$A+R-$ kubedrangana help each other
kubłaga slaughter
A- kubatijira slaughter for/at
C- kubatijisa cause to slaughter
P- kubdagwa be slaughtered
$A+R-k u b \notin j i r a n g a n a$ slaughter for each other
$C+R-k u b a d j i s a n g a n a$ cause each other to slaughter
kubdasa be able, be strong enough to
A- kubdasiza stand up to someone for
p- kubadsibwa be decisively challenged/stopped
S- kubatsika be possible

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R- kubaksangana cope with each other
kubaba (of certain plants & insects) prick
A- kubabira prick for/at
C- kubábisa cause to prick
P- kubabwa be pricked
R- kubibangana prick each other
V- kubabura scorch; spank
S- kubabuke be scorched
I- kubdbiirira scorch; cause to feel itchy
C+A- kubabisiza cause to prick for
C+R- kubabisangana prick each other with
V+A- kububurira scorch for/at; spank for/at
V+R- kubaburangana spank each other
V+P- kubaburwa be scorched; be spanked
kubagana share, divide up
A- kubaganira share at, divide up for
C- kubaganisa divide up
P- kubaganwa be shared
S- kubaganuka come apart
V- kubaganura cause to come apart
C+A- kubaganisiza divide up for
kubinjura clear the ground before sowing
A- kubanjurira clear the ground for
C- kubanjura cause to clear the ground
P- kubanjurwa be cleared
A+R- kubdnjurirangana clear the ground for each other
C+P- kubdnjuribwa be caused to clear the ground
kubanze do first, start
A- kubandiza start for/at
C- kubanzisa cause to start
P- kubanzibwa be started
A+R- kubandizangana start for each other
kubara count
A- kubarira count for; estimate
C- kubasa cause to count
P- kubarwa be counted
R- kubarangana count each other
V- kubaruura tell a tale
I- kubariirira estimate
A+C- kubariza cause to count/ be counted for
A+P- kubarizwa be counted for
A+R- kubarirangana count for each other
C+P- kubaribwa be caused to count
C+R- kubazangana cause each other to count
kubdrura burst (trans)
A- kubdrurira burst for
C- kubderuza cause to burst
S- kubaruka burst (intr)
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A+R- kubdrurirangana burst for each other
C+R- kubaruzangana cause each other to burst
S+A- kubarucira burst at
kubama ask, inquire,examine
A- kubdriza inquire for/at
C- kubazisa cause to inquire
P- kubdzibwa be asked/examined
R- kublzangana ask each other
I- kubfriirriza be too inquisitive
A+R- kubdrizangana inquire for each other
kubaziira sew
A- kubaziirira sew for/at
C- kubmziiza cause to sew
P- kubaziirwa be sewn
C+R- kubaziizangana cause each other to sew
kubatiza baptize
A- kubatiriza baptize for/at
P- kub&tizibwa be baptized
R- kubatizangana baptize each other
A+R- kubatirizangana baptize for each other,
    baptize each other at
kub@iha tell lies, deceive
A- kubdihera deceive for/at
C- kub@ihesa cause to tell lies
P- kub@ihwa be deceived
R- kubबihangana deceive each other
I- kub@iherera accuse unjustly
D- kub@ihabeiha persuade, coax gently/by deception
A+P- kub@iherwa be deceived at
A+R- kubaiherangana deceive for each other
R+A- kub@ihanganixa deceive each other at
I+P- kub@ibererwa be accused unjustly
I+R- kubeihererangana accuse each other unjustly
kubeija carve, do carpentry
A- kubeijera carve for/at
C- kubeijesa cause to carve
P- kubeijwa be carved
A+C- kubeijesexa cause to carve for
A+P- kubeijerwa be carved something
C+P- kubeijesibwa be caused to carve
kubiika store, put away
A- kubilcira store for
C- kubifcisa cause to store, entrust with
    - kubiica entrust with
p- kubiikwa be stored
I+C- kubilcirima be fond of storing things
A+P- kubificirwa be stored something
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kubika bring news of death of
A- kubicira bring news of death of someone to
A+R- kubicirangana bring news of death to each other
kubinga drive away, chase
A- kubinjira chase for/at/into
C- kubinjisa cause to chase
P- kubingwa be chased
R- kubingangama chase each other
A+P- kubinjirwa be chased something
A+R- kubinjirangana chase for each other
R+A- kubinganganixa chase each other at
kubira foam & overflow
A- kubirirs foam at
C- kubiza cause to foam
kuboha bind
A- kubohera bind for/at
C- kubohesa cause to bind
P- kubohwa be bound
R- kubohangana bind each other
V- kubbhoorora unbind
S- kubohooroka become unbound
I- kubbheerera bind severely
A+P- kuboherwa be bound for/at
A+R- kuboherangana bind for each other, bind e.o. at
C+P- kub6hesibwa be cause to bind
C+R- kubohesangana cause each other to bind
V+C- kub6hooroza cause to unbind
V+P- kub6hoororwa be unbound
S+A- kubohoorocera become unbound at
kubona see
A- kubonera see for/at
C- kubonesa cause to see
P- kubonwa be seen
R- kubbnangana see each other; meet
S- kuboneka be visible, be available
D- kubónabona suffer
A+P- kubonerwa be found something
A+R- kubonerangana see/find for each other
S+A- kubonecera be visible at
C+A- kub6neseza cause to see for
C+P- kubonesibwa be caused to see
C+R- kubonesangana cause each other to see
R+A- kubonanganira see each other at
R+C- kubonanganisa cause to meet
D+A- kubonabonera suffer at
D+C- kubónabonesal cause to suffer
    - kubonyabonya cause to suffer
kuboya be a bully
A- kuboyera bully, be a bully at
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C- kuboyesa cause to be a bully
A+P- kubbyerwa be bullied
C+P- kuboyasibwa be caused to be a bully
kubuggana meet
A- kubrganira meet for
C- kubGgamisa cause to meet
P- kubluganwe be met
R- kubugangana meet/encounter each other
kubamba mould
A- kubumbira mould for/at
C- kubumbisa cause to mould
P- kubombwa be moulded
A+P- kubumbirwa be moulded something
A+R- kubumbirangana mould for each other
C+A- kubumbisiza cause to mould for
C+R- kubumbisangana cause each other mould
kubunga wander off idly, visit
A- kublinjira wander idly for/ to
C- kubunjisa cause to wander idly
    - kubunja cause to wander; peddle
X- kubunguza make frequent and idle visits
C+P- kubunjibwa be caused to wander
kubunga treat fracture medically
A- kubunjira treat for/at
C- kubunjisa cause grain, wood etc. to be bored into by
        insects
P- kubungwa be treated; (of grain, wood) be bored into by
    insects
kubura be lost, disappear, be lacking
A- kuburira disappear at/into
C- kubusa lose, cause to disappear
P- kubúrwa lack something
D+C- kubGzabuza (also kubúrabuza) bewilder, pester with
    too many demands
D+A+P- kubúraburirwa suffer, be bewildered
kubuuza ask, inquire
A- kubuuriza inquire for/at
C- kubuuzisa cause to inquire
P- kubuGgibwa be asked
R- kubuGzangana ask each other
I- kubGúririza be too inquisitive
A+R- kubúurizangana inquire for each other, ask e.o. at
kubwefigora bark
A- kubweigorera bark at
C- kubweigora cause to bark
C+P- kubw@igozibwa be caused to bark
C+R- kubweigozangana cause each other to bark
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kubweijana be lonely
A- kubweijanira be lonely at
C- kubweijanisa cause to be lonely
C+P- kubweijanisibwa be caused to be lonely
kubyame lie down, go to bed
A- kubydmira lie on
C- kubyamya put to bed

- kubytmisa cause to go to bed

X- kubydmisiriza lure into sleep
A+P- kubydmirwa be laid on
A+R- kubydmirana (of many) lie helplessly
e.g. the sick, fallen trees
kubyara plant
A- kubydrira plant for
C- kubyaza cause to plant
P- kubyarwa be planted
A+P- kubydrirwa be planted something
C+P- kubyazibwa be caused to plant
kúca dawn
A- kuccera dawn while at
C- kuçisa cause to dawn; pass a sleepless night; greet, wish good day
C+A- kuceiseza greet for (also:kukeiseza)
I+P- kucdérererwa be late (i.e. be thoroughly dawned upon by the day)
I+C- kuçerereza cause to be late
I+C+P kucérerexibwa be caused to be late
kucaara go for a walk, visit
A- kuctarira go for a walk to, visit a person/place
C- kucalara take someone for a walk/visit
D- kucadracaara walk about
A+C- kucadriza take someone around for
A+P- kuckarirwa be visited
A+R- kucadrirangana visit each other
C+P- kucadzibwa be taken around
C+R- kucadzangana take each other around
kuceba mash
A- kucebera mash at; examine, check on
C- kucebesa cause to mash
P- kucebwa be mashed
S- kucebuka splinter into pieces
V- kucebura cut into pieces
D- kucebaceba pound/cut into many little pieces
A+P- kuceberwa be mashed something, be mashed at; be examined
A+R- kuceberangana mash for e.o.;check on each other
S+A- kucebucira splinter into pieces at
V+A- kuceburira cut into pieces for/at
$V+A+R-k u c ف b u r i r a n g a n a$ cut into pieces for each other
kucencura sift
A- kucdncurira sift for/at
C- kucéncuza cause to sift
P- kuchncurwa be sifted
S- kucóncuka be siftable
A+P- kucencurirwa be sifted something, be sifted at
$A+R-k u c o n c u r i r a n g a n a$ sift for each other
kuconena filter
A- kucenenera filter for/into
$C$ - kuconenesa cause to filter
P- kucenenwa be filtered
S- kucenonuka trickle through a filter
X- kuceneka suck blood out of body
X- kucenenuza squeeze the last drops through the filter
A+P- kucenenerwa be filtered something, be filtered at
A+R- kuconenerangana filter for each other
$C+P-$ kucenenesibwa be caused to filter
$C+R-$ kuconenesangana cause each other to filter
S+A- kucenenucira trickle through a filter at/into
kucinga shut, close
A- kucinjira shut for, obstruct view
C- kucinjisa cause to shut
P- kucingwa be shut
V- kucingura open
S- kucinguka open (intransitive)
$C+A-k u c i n j i s i z a$ cause to be shut for
A+P- kucinjirwa be shut something, be obstructed in view
A+R- kucinjirana shut in/out

- kucinjirangana obstruct each other's view

C+P- kucinjisibwa be caused to shut
$C+R-k u c i n j i s a n g a n a$ cause each other to shut
$V+A-k u c i n g u r i r a ~ o p e n ~ f o r ~$
$V+C-$ kucinguza cause to open
$V+P-$ kucingurwa be opened
S+A- kucingucira open at
kucira recover, escape danger; exceed
A- kucirira recover at/for
C- kuciza cause to recover; exceed with
P- kucirwa be exceeded
R- kucirana be unequal
I- kuciriirira escape very narrowly from danger
A+C- kuciriza cause to recover for/at
$C+R-k u c i z a n g a n a$ be unequal with respect to
kucugura have diarrhoea
A- kucugurira have diarrhoea on/at
C- kucGgusa cause to have diarrhoea
p- kucagurwa be ....

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kucukura search intensively
A- kucukurira search for
C- kucukura cause to search
P- kucukurwa be searched
A+R- kucukurirangans search(dig out) for each other
A+C- kucukuzangana cause to search(dig out) for each other
kucumba cook
A- kucumbira cook for
C- kucumbisa cause to cook
p- kucumbwa be cooked
I- kucumbirira care for someone by providing good meals
A+P- kucumbirwa be cooked something, be cooked at
A+R- kucumbirangana cook for each other
C+A- kucumbisisa cause to be cooked something
C+P- kucumbisibwa be caused to cook
C+R- kucumbisangana cause each other to cook
kucumbajira limp
A- kucumbajirira limp at
C- kucGmbajiza cause to limp
C+P- kucumbajizibwa be caused to limp
C+R- kucumbajizangana cause each other to limp
kucumita spear, pierce
A- kucumitira spear for; cut down some young banana trees
C- kucúmisa cause to spear
P- kucumitwa be speared
R- kucumitangana spear each other
A+P- kucGmitirwa be speared something, be speared at
A+R- kucumitirangana spear for each other
C+P- kucumisibwa be caused to spear
\(C+R-\) kucúmisangana cause each other to spear
R+A- kucumitanganira spear each other at
kucuncumura jerk
A- kucuncumurira jerk for/at
C- kucuncumura cause to jerk
P- kucuncumurwa be jerked
R- kucuncumurangana jerk each other
S- kucuncumuka be jerked
A+P- kucuncumurirwa be jerked something,be jerked at
A+R- kucuncumuxirangana jerk for each other
\(C+P-\) kucuncumuzibwa be caused to jerk
\(C+R-k u c u n c u m u z a n g a n a\) cause each other to jerk
kucande shake, churn (butter)
A- kucundira shake for/at
C- kucanza cause to shake; torment
P- kucandwa be shaken; be tormented
\(X-\) kuctindagura shake repeatedly
A+P- kucundirwa be shaken something, be shaken at
\(A+R-k u c u n d i r a n g a n a\) shake for each other
\(C+P-\) kucúnzibwa be caused to shake; be tormented
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C+R- kucunzangana cause each other to shake;
    torment each other
X+S- kucundagurika shake (intransitive)
kucúngura redeem
A- kucungurira redeem for/at
C- kucGngusa redeem with
P- kucungurwa be redeemed
R- kucungurangama redeem each other
A+P- kucangurirwa be redeemed something, be redeemed at
A+R- kucungurirangana redeem for each other
C+R- kucungurangana cause each other to redeem
kucúra wail
A- kucurixa wail for/at
C- kucura cause to wail (e.g. by mentioning name of deceased)
A+P- kucurirwa be mourned
A+R- kucGrirangana mourn for each other
C+P- kucuzibwa be caused to wail
C+R- kucuzangana cause each other to wail
kucúreara be quiet, be humble
A- kucureerera quieten at
C- kucureeza quieten
C+A- kucureereze quieten for
C+P- kucGreezibwa be caused to quieten
C+R- kucureazangana quieten each other
kucurika tilt, turn upside down
A- kucuricira tilt for/at; cover
P- kucurrikwa be tilted
V- kucaruura turn upside up
A+A- kucGricirira cover for/at
A+P- kucuricirwa be covered
kucúriza whistle
A- kucuririza whistle at
C- kucurizisa cause to whistle
p- kucqrizwa be whistled
kucúuka be weaned
A- kucuucira be weaned at
C- kucruca wean
V- kuc{Gkura wean
C+A- kucuqciza wean in (duration)
V+A- kucuúkurira wean for, wean in (duration)
V+P- kucúkurwa be weaned
kúcwa disown; cut up
A- kucwera disown at; cut up for/at;
C- kucwisa cause to cut up
p- kucwebwa be cut up
S- kucwaka become extinct
A+R- kucwerangana cut up for each other
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C+P- kucwisibwa be caused to disown/cut up
S+A- kucwecera meet e.g. a visitor on the way
S+I- kucwecerera be completely destroyed
S+R+C- kucwekanisa cross (e.g. a road)
kucmara spit
A- kucw@rera spit for (reason)
C- kucwåe cause to spit
P- kucw\rwa be spat
R- kucwerangana spit on each other
X- kucworaguzibwa spit often
C+R- kucwdrangana cause each other to spit
kweba be forgotten
A- kwebera be forgotten at
C- kwebess cause to forget
P- kwebwa forget
R- kwebangana forget each other
A+P- kwoberwa forget (while) at
C+R- kwebesangana cause each other to forget
C+I- kwebesereza distract
kwabembera be in front, lead
A- kwobemberera lead for
C- kwebambera put in front
P- kw@bemberwa be preceded by, be led
kw@fuuza regret, be remorseful
A- kw@fuuriza regret at
kwsga learn
A- kw<jera learn at, learn for(e.g. a profession)
C- kwegesa teach
p- kwlgwa be learnt
C+P- kwagesibwa be taught
C+R- kwegesangana teach each other
C+I- kw@gesereza teach in order to convert, coach regarding
        what to say
kwegaana deny
A- kw@ganira deny at
kw@gama lean
A- kw@gamira lean against
C- kw@gamya cause to lean against
A+P- kw@gamirwa be leaned upon
kw@ganya feel lazy/not up to the task/unwilling
        to tackle a task
A- kw'ganyira feel self pity, be considerate of
        one's energies
I- kw@ganyiirira feel lazy
X- kuganyira feel pity/consideration for
X+A- kuganyirira pity for/at
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X+P- kuganyirwa be pitied
X+R- kuganyirangana feel pity for each other
kw`jeka put leaning
A- kwejecera put leaning for
C- kwojecesa cause to put leaning
P- kwejekwa be put leaning
R- kwhjekangana put each other leaning
A+P- kw@jecerwa be put something leaning
A+R- kwhjecerangana put leaning for each other
kwehanga dare foolishly (i.e. against ability)
A- kwohanjira dare at (place)
R- kw@hangaana muster one's energies
X- kwehangamurira attempt the impossible
kw6jiza pretend
A- kwejiriza pretend on someone
kw6komya make sure of future recognition, recognize
A- kwekomera reconize at
kwoma start from; (of animals) be on heat, conceive
A- kwemera conceive at
C- kwamya (of male animals) serve
kwemera withstand, endure; provide support
A- kwhmerera provide support for
R- kwemerangana endure each other
P- kwemorwa be endured; be supported
I- kwemeerera stand up
I+C- kwemeerera erect, cause to stand up
I+C+P kwemeereribwa be caused to stand up
kwenda like, want
A- kwendera like for/at, wish for
C- kwenza demand
P- kwendwa be liked
R- kwondangana like each other
A \(+C\) - kwendeza demand for/at
A+P- kwenderwa be liked at
A+R- kwonderangana wish for each other
\(C+R-k w e r a n g a n a\) demand from each other
R+A- kwondanganira like each other at
kwera (of crop) ripen, be abundant; be clean, be white
A- kwerera ripen for/at; be clean (while) at; testify to someone's innocence
C- kwêz have a good crop; clean satisfactorily
X- kwhrurukana be whitish, lose original color
A+C- kwerera have a good crop for/at
A+R- kwererangana testify to each other's innocence
C+P- kwexibwa be produced in abundance; be cleaned
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kwereera float
C- kwereeza cause to float, hold high
C+P- kwereezibwa be caused to float
kwerura winnow
A- kwerurire winnow for/at
C- kwerura cause to winnow
p- kwerurwa be winnowed
A+P- kwerurirwa be winnowed something
A+R- kwerurirangana winnow for each other
C+P- kweruzibwa be caused to winnow
C+R- kweruzangana cause each other to winnow
kwesiga trust
A- kwesijire trust for/at
R- kwesigangana trust each other
P- kwesigwa be trusted
kwesiza be quiet
A- kweziriza be quiet at
kweta call
A- kw@tera call for/ (while) at
C- kwotesa cause to call
P- kw!twa be called
R- kwetangana call each other
X- kwotabuka respond (vocally) to a call
I- kw@terera give same name as someone else; keep
        calling animals to follow
A+P- kweterwa be called for/at
A+R- kweterangana call for each other
C+P- kw@tesibwa be caused to call
I+C- kwفtereza call repeatedly (so pester)
kwotenga desire, long for
A- kw@tenjera desire at, wish for
C- kw@tenjesa cause to desire
P- kwotengwa be desired
kwetonde introduce oneself; be careful, concentrate
A- kwetondera introduce self to/at; be careful at
kweraga recite poetry
A- kw@vujira recite poetry for/at
C- kwơvujisa cause to recite poetry
P- kwerugwa (of poetry) be recited
kweya sweep up
A- kweyera sweep up for/into
C- kweyese cause to sweep up
P- kweywa be swept up
A+P- kweyerwa be cleaned a place
A+R- kweyerangana sweep up for each other
C+A- kweyeseza cause to sweep up for
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C+R- kweyezangana cause each other to sweep up
kw@yayaamura yawn
A- kwלyayammurira yawn at
C- kwhyayaamuza yawn in (manner)
kúfa die; break down, go bad(esp. beer)
A- kufeera die for/at
C- kufiisa fail to make good beer, (of animals) lose young to
death
X- kufedrecerera be completely destroyed
A+P- kufeerwa lose a relative to death
kufoora change colour (transitive)
A- kufoorera change colour for/at
C- kufoora cause to change colour
P- kufoorma be changed in colour
S- kufooka change colour(intransitive)
A+C- kufoorera cause to change colour for
A+P- kufoorerwa be changed colour for
A+R- kufoorerangana change colour for each other
C+P- kufooribwa be caused to change colour
S+A- kufoocera change colour at
kufuka be cold; blow the nose
A- kufucira be cold at; blow the nose at
C- kufucisa cause to blow the nose
kufukamna wrestle
A- kufukaanira wrestle for/at
C- kufukaanisa cause to wrestle
kufukunkura empty out
A- kufukunkurira empty into
C- kufukunkura cause to empty out
P- kufukunkurwa be emptied out
S- kufukunkuka empty out (intransitive)
A+P- kufukunkurirwa be emptied something
A+R- kufukunkurirangana empty out for each other
C+P- kufukunkuzibwa be caused to empty out
kufumbata embrace
A- kufumbatira embarace for/at
C- kufumbasa cause to embrace
P- kufumbatwa be embraced
R- kufumbatana embrace each other
A+P- kufumbatirwa be embraced for/at
C+R- kufumbatanisa cause to embrace each other
R+A- kufumbatanira embrace each other at
kufumura pierce
A- kufúmurira pierce for/at
C- kufúmuxa cause to pierce
P- kufumurwa be pierced
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R- kufumurangana pierce each other
S- kufumuka be pierced
D- kufumafumura pierce repeatedly
A+P- kufumurirwa be pierced something
A+R- kuffmurirangana pierce for each other
C+A- kufumuriza cause to pierce for/at
\(C+P-k u f(m u z i b w a ~ b e ~ c a u s e d ~ t o ~ p i e r c e ~\)
S+A- kufumucira be pierced at
D+P- kufumafumurwa be pierced repeatedly
D+S- kufumafumuka be pierced repeatedly
kufuna gain, profit
A- kufunira gain for/at
C- kufunisa cause to gain
kufonda be narrow, fail to fit
A- kufundira be narrow at
C- kufbnza cause to be narrow; reduce distance/job ahead
P- kufandwa be unable to fit into a dress
V- kufunduura open (remove lid, stopper)
S- kufunduaka open (intr)
V+A- kufúnduurira open for/at
\(V+C-\) kufúnduuza cause to open
\(V+P-\) kufunduurwa be opened
\(S+A-\) kufúnduucira become open at
\(V+A+R-k u f u n d u u r i x a n g a n a\) open for each other
\(V+C+R-k u f u n d u u z a n g a n a\) cause each other to open
kufundicira cover
A- kufundicirira cover for/at
C- kufundiciza cause to cover
P- kufundicirwa be covered
R- kufundicirangana cover each other
A+P- kufúndicirirwa be covered at
A+R- kufundicirirangana cover for each other
\(C+R-k u f u n d i c i z a n g a n a\) cause each other to cover
kufunga imprison, lock
A- kufunjira imprison for/at.
C- kufunjisa cause to imprison/be imprisoned
P- kufungwa be imprisoned
V- kufungura dilute
    - kufungurura unlock, let out of prison
S- kufunguka be diluted
    - kufunguruka be unlocked
A+P- kufunjirwa be imprisoned for/at
\(A+R-k u f u n j i r a n g a n a\) imprison for each other
\(C+A-k u f u n j i s i z a\) cause to be imprisoned for
\(C+R-k u f u n j i s a n g a n a\) cause each other to
        imprison/be imprisoned
S+A- kufungucira be diluted at
V+A- kufungurira dilute for/at
V+C- kufunguza cause to dilute
V+P- kufungurwa be diluted
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V+P- kufungururwa be set free
V+C+A- kufunguriza cause to be diluted something
kufunya fold, prepare a body for burial; drive (cattle)
A- kufunyira fold for/at; drive for
C- kuffuyisa cause to fold; cause to drive
X- kufunyanyara be wrinkled
D- kufgnyafunya crumple
p- kufunywa be folded, be driven
A+P- kufunyirwa be folded something, be driven cattle
A+R- kufunyirangana fold for each other; drive for e.o.
C+P- kufunyisibwa be caused to fold; be caused to drive
C+R- kufunyisangana cause each other to fold;
        cause e.o. to drive
X+A- kufunyanyarira be wrinkled at
X+C- kufunyanyara cause to be wrinkled
D+A- kufunyafunyira crumple for/at
D+C- kufunyafunyisa cause to crumple
X+A+C- kufúnyanyariza cause to be wrinkled for
kufura wash clothes
A- kufurira wash for/at
C- kufura cause to wash
p- kufurwa be washed
A+C- kufuriza cause to be washed clothes, wash with for
A+P- kufurirwa be washed clothes
A+R- kufurirangana wash for each other
C+P- kufuribwa be caused to wash
C+R- kufuyangana cause each other to wash
kufúrura move ( esp.house and goods)
A- kufururira move for/to
C- kufuruza cause to move
P- kufururwa be moved
R- kufururangana cause each other to move
S- kufúruka move (intransitive)
A+P- kufururirwa be moved to
A+R- kufururirangana move each other to
C+R- kufúrurangana cause each other to move
S+A- kufurucira move to, settle at
kufútana chew
A- kufutanira chew for/at
C- kufutanisa cause to chew
P- kufutanwa be chewed
A+P- kufutanirwa be chewed something, be chewed at
A+R- kufutanirangana chew for each other
C+R- kufútanisangana cause each other to chew
kufuuha (in marriage) be very jealous; spray
A- kufuubira be jealous to; spray onto
C- kufuuhisa cause to be jealous; cause to spray
A+P- kufuuhirwa be victim of jealousy; be sprayed onto
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A+R- kufuuhirangana be jealous to each other; spray onto e.o
kufuuta crush, squeeze juice
A- kufuutira crush for/at
C- kufuutisa cause to crush
P- kufuutwa be crushed
A+P- kutuutirwa be crushed something
\(A+R-k u f u u t i r a n g a n a\) crush for each other
\(C+R\) - kufuusangana cause each other to crush
kugaaniira converse
A- kugaaniirira narrate to,tell; converse at
C- kugaaniira cause to converse; tease
A+C- kugamninriza tease for
A+P- kugaaniirirwa be told
\(C+P-\) kugaaniizibwa be caused to converse; be teased
kugaaya whimper
A- kugaayira whimper at
C- kugaayisa cause to whimper
kugaba distribute, give away; (of milk) fill mother's breasts
A- kugabira give tolat
C- kugabisa cause to give away; cause to have
    milk in breasts
P- kugabwa be given away
V- kugabura divide amongst
\(A+P-\) kugabirwa be given something
\(A+R-\) kugabirangana give to each other
V+A- kugaburira give food(esp. to a child)
\(V+C-\) kugabusa cause to divide amongst
\(V+P-k u g a b u r w a\) be divided up
\(V+A+P-\) kugaburirwa be fed; be given one's share
kugaga (of food) go bad
A- kugajira go bad at
C- kugajisa cause to go bad
C+P- kugajisibwa be caused to go bad
kugamba speak, denounce
A- kugambira speak to, tell; denounce at
C- kugambisa cause to speak
P- kugambwa be said, be denounced
R- kugambangana denounce each other
I- kugambirira speak to on behalf of, tell for; speak one's mind
X- kwégambisiriza hint, speak indirectly
\(A+P-\) kugambirwa be told
\(A+R-\) kugambirana confer together.
\(C+P-\) kugambisibwa speak nonsense; speak indiscreetly
\(R+A-\) kugambanganira denounce each other at
kugana tell stories
A- kuganira tell stories to/at
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C- kuganisa cause to tell stories
P- kuganwa be told
A+P- kuganirwa be told stories
A+R- kuganirangana tell each other stories
C+P- kuganisibwa be caused to tell stories
C+R- kuganisangana cause each other to tell stories
kugangabura split, crack
A- kugangaburira split for
C- kugangabura cause to split
P- kugangaburwa be split
A+R- kugangaburirangana split for each other
C+R- kugangaburangana cause each other to split
kugarama lie on one's back; be flat
A- kugaramira lie on back for/at
C- kugaramya cause to lie on the back; make flat
A+C- kugaramiza cause to lie on back for/at
kugarura bring back
A- kugarurira give back to, stop at; forgive
C- kugarura cause to bring back
P- kugarurwa be brought back
R- kugarurangana bring each other back
S- kugaruka return
S+A- kugarucira return while at, stop at
S+P- kugarukwa be repeated; be returned to
A+P- kugarurirwa be given back something; be forgiven
A+R- kugarurirangana give back to each other; forgive e.o.
R+A- kugaruranganira stop each other at
kugaya scorn,despise
A- kugayira despise for/at
C- kugayisa cause to despise
P- kugaywa be despised
R- kugayangana despise each other
A+P- kugayirwa be despised at
A+R- kugayirangana despise for each other
C+R- kugayisangana cause each other to despise
kugeita marry in church
A- kugeitera marry in church for/at
C- kugeitesa cause to marry in church
P- kugeitwa be married in church
A+P- kugeiterwa be married in church for/at
kugesa harvest (esp. millet, sorghum)
A- kugesera harvest for/into
C- kugesesa cause to harvest
P- kugesibwa be harvested
A+C- kugeseza cause to harvest for
A+R- kugeserangana harvest for each other
kugoba reach, be complete
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A- kugobera reach in (time); reach and camp at
C- kugobya cause to reach, deliver; cause to be complete; defraud
P- kugobwa be reached, be sufficiently covered by supplies
R- kugobangana reach each other; get together
A+C- kugobeza defraud (transitive)
A+P- kugoberwa be reached(esp. by trouble), be one's turn
$C+I-$ kugobesereza complete full amount
kugomora fatten
A- kugomorera fatten for/at
P- kugomorwa be fattened
R- kugomorangana fatten each other
S- kugomoka grow fat
S+A- kugomocera grow fat at
kugona snore
A- kugonera snore at
C- kugonesa cause to snore
$C+P-$ kugonesibwa be caused to snore
kugonda give in
A- kugondera give in at
C- kugondesa cause to give in
X- kugondeka bend (transitive)

- kugondama be bent
$X+A$ - kugondecera bend for/at
X+P- kugondekwa be bent
kugorora straighten, iron; reconcile
A- kugororera straighten for/at
C- kugoroza cause to straighten; oversleep, wake up late
P- kugororwa be straightened; be reconciled
R- kugororangana straighten each other
S- kugororoka be straight
$A+R-$ kugororerangana straighten for each other;
reconcile for each other
$S+A-$ kugororocera become straight while at
kugbya cook sorghum meal
A- kugbyera cook for/at
C- kugbyesa cause to cook
P- kugbywa be cooked
A+P- kugbyerwa be cooked something, be cooked at
$A+R-k u g y^{\prime} e r a n g a n a$ cook for each other
$C+P$ - kugoyesibwa be caused to cook
$C+R$ - kugbyesangana cause each other to cook
kuguguna gnaw
A- kugugunira gnaw for/at
C- kugugunisa cause to gnaw
P- kugugunwa be gnawed
A+P- kugugunirwa be gnawed something, be gnawed at
$A+R-k u g u g u n i r a n g a n a$ gnaw for each other

C+P- kugugunisibwa be caused to gnaw
$C+R-$ kugugunisangana cause each other to gnaw
kuguma remain, continue; be hard (solids), be difficult, be well (healthy)
A- kugumira remain for; be hard for/at
C- kugumya keep to self, retain; gumye omutima have courage, persevere

- kugumisa harden, encourage

R- kugumangana become hard
A+P- kugumirwa have difficulty
C+A- kugumisiza harden for, encourage for
C+P- kugumisibwa be hardened; be confirmed in the faith
C+I- kugumisiriza encourage, give heart
$R+C-$ kugumanganisa cause to become hard
kugura buy
A- kugurira buy for/at
C- kugura cause to buy, sell
P- kugurwa be bought
A+C- kuguriza sell for/at
A+P- kugurirwa be bought something
$A+R-$ kugurirangana buy for each other
C+P- kuguzibwa be sold something
$C+R-$ kugurangana cause each other to buy, sell to e.o.
$A+C+R-$ kugurizangana sell for each other
kuguruka jump, skip
A- kugurucira jump for/at
C- kuguruca cause to jump, toss up
P- kugurukwa be jumped
R- kugurukangana jump each other
D- kuguraguruka jump about in excitement
A $+C$ - kuguruciza jump about
$\mathrm{C}+\mathrm{P}-\mathrm{kugurucibwa}$ be caused to jump
$C+R-k u g u r u c a n g a n a$ cause each other to jump
kugutura snap, cut
A- kugraturira cut for/at
C- kugatuza cause to cut
p- kuglturwa be cut
S- kugútuka snap, be cut
D- kugutagutura cut into many pieces
A+P- kugúturirwa be cut something
A+R- kuguturirangana cut for each other
C+P- kugúturibwa be caused to cut
$C+R-$ kuguturangana cause each other to cut
D+S- kugatagutuka be cut into many pieces
S+A- kugutucira snap at
kugwa fall, fail
A- kugwera fall on; waylay
C- kugwisa cause to fall
P- kugwebwaho be fallen on

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I- kugwerera stagger
A+P- kugwerwa be hit by something falling; be waylayed
A+R- kugwerangana fall on each other; waylay each other
C+A- kugwisiza cause to fall for
I+R- kugwererana stagger
C+A+R- kugwisizangana cause to fall for each other
kugweigoora strip sisal
A- kugweigoorera strip sisal for/at
C- kugweigoora cause to strip sisal
P- kugweigoorwa (of sisal) be stripped
A+C- kugweigooreza cause to be stripped sisal
A+P- kugweigoorerwa be stripped sisal
A+R- kugweigoorerangana strip sisal for each other
C+P- kugweigoosibwa be caused to strip sisal
C+R- kugweigoozangana cause each other to strip sisal
kúha give
A- kuhbera give for/at
C- kuhdisa cause to give, cause to be given; praise
p- kuhbebwa be given something
A+R- kuh@́rangana give to each other at
C+I- kuh@isereza praise intensively
C+R- kuh@isangana praise each other
A+C- kuh@@reza give, hand to, serve
A+C+R- kuhérerangana give to each other
kuhaata peel
A- kuhaatira peel for/at
C- kuhaatisa cause to peel
P- kuhaatwa be peeled
D- kuhaatahaata peel fast
A+P- kuhaatirwa be peeled something, be peeled at
C+P- kuhaasibwa be caused to peel
C+R- kuhaasangana/haatisangana cause each other to peel
kuhaba lose one's way
A- kuhabira lose one's way into/while at
C- kubabya cause to lose way.
- kuhabisa cause to lose way, mislead
S- kuhabuka (of god) manifest self
V- kuhabura advise, direct
C+P- kuhabisibwa be caused to lose way
C+R- kuhabisangana mislead each other
S+A- kuhabucira (of god) manifest self to/at
V+A- kuhaburira advise for/at; steer(vehicle)
V+C- kuhabuza inquire about way, seek (esp. medical) advice
kuhakana dispute
A- kuhakanira dispute about/at
C- kuhakanisa contradict
p- kuhakanwa (of an argument) be disputed
A+P- kuhakanirwa be disputed about
C+A- kuhakanisiza contradict for/at
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C+P- kuhakanisibwa be contradicted
kuhdkuura draw out (esp. honey from hive)
A- kuhtkuurira draw out for/at
C- kuhakuuga cause to draw out
P- kuhdkuurwa be drawn out
A+R- kuhakuurirangana draw out for each other
A+P- kuhakuuriswa be drawn something(esp. honey)
C+P- kuhakuusibwa be caused to draw out
C+R- kuhakuumangama cause each other to draw out
kuhama take root, be fixed firmly; gain strength
A- kuhamira gain strength at
C- kuh{mya hold firmly
    - kuhtimisa hold firmly
kuhamba assault (esp. a woman); be scarce
A- kuhambira assault at
C- kuhambisa cause to assault
P- kuhambwa be assaulted
R- kuhambangana assault each other;
    have a habit of assaulting
A+P- kuhambirwa be assaulted at
kuhana censure, rebuke
A- kuhanira rebuke for/at
C- kuhanisa cause to rebuke
P- kuhanwa be rebuked
R- kuhanangana rebuke each other
A+P- kuhanirwa be rebuked at
A+R- kuhanirangana rebuke for each other
kuhanama climb
A- kuhanamire climb for
C- kuhanamisa cause to climb
P- kuhanamwa be climbed
R•- kubanamangana climb each other
S- kuhanamuka climb down
A+P- kuhanamirwa be climbed for
A+R- kuhanamirangana climb for each other
C+P- kuhanamisibwa be caused to climb
C+R- kuhanamisangana cause each other to climb
kuhandiika write, register
A- kuhandiicira write for/at
C- kuhandiicisa cause to write
P- kuhandiikwa be written
A+P- kuhandiicirwa be written something (e.g. a letter),
    be written at
C+A- kuhandiicisiza cause to be written something
kuhanga create; be in fashion;
    kuhanga móiso gaze at/look to
A- kuhanjira create at
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C- kuhanjiss say/use something frequently
P- kuhangwa be created
S- kuhanguka (of first rain) come
\(V\) - kuhangura enable a barren woman to have a child
    - kuhangurura put out of fashion
\(C+R-\) kuhanjisangana refer to each other frequently
\(V+S-\) kuhangreruka go out of fashion
V+P- kuhanguruiwa be put out of fashion
\(V+S+A-\) kuhangurucira go out of fashion at
kuhanga be noon
A- kuhfojira be noon while at
A+P kuhinjirwe have noon come upon
kuhánguha grow fat
A- kuhanguhira grow fat at
C- kuhangusya cause to grow fat
C+P- kuhangusibwa be caused to grow fat
kuhanika hang up
A- kuhanicira hang up for/at
C- kuhanicisa cause to hang up
P- kuhanikwa be hang up
S- kuhanuka come down
V- kuhanura take down
A+P- kuhanicirwa be hung something
\(A+R-\) kubanicirangana hang up for each other
V+A- kuhanurira take down for/at
V+C- kuhanura cause to take down
\(V+P-\) kuhanurwa be taken down
\(V+A+P-k u h a n u r i r w a\) be taken down something
\(V+C+R-\) kuhanuzangana cause each other to take down
\(V+A+R-\) kubanurirangana take down for each other
kuhanuura discuss, decide
A- kuhanuurira advise
C- kuhanuura express surprise
    (reflexive:kwehanuuza seek advice)
P- kuhanuurwa be decided/resolved
S- kuhanuuka do something for the first time
\(A+R-k u h a n u u x i r a n g a n a\) advise each other
kuhara scrape
A- kuhłrira scrape for
C- kuhfza cause to scrape
P- kuharwa be scraped
X- kuhdragata scrape
\(A+R-k u h \neq i r a n g a n a ~ s c r a p e ~ f o r ~ e a c h ~ o t h e r ~\)
C+P- kuhazibwa be caused to scrape
kuhays threaten (intransitive)
A- kuhayira threaten
C- kuhayisa cause to threaten
\(A+P-\) kuhayirwa be threatened
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A+R- kuhayirangana threaten each other
kuheeka carry (usually on the back);
(of maize plant) form a cob
A- kuheecera carry for/at; form the cob in (time)
C- kuheecesa cause to carry
P- kuheekwa be carried
R- kuheokangana carry each other
S- kuheekuka come off the back
V- kuheekura take off the back

- kuheekurura take off the back

V+S- kuheekuruka come off the back
A+P- kuheecerwa be carried something, be carried at
$A+R-$ kuheecerangana carry for each other
C+A- kuheeceseza cause to carry for
R+A- kuheekanganira carry each other at
$V+A-k u h e o k u r u r i r a ~ t a k e ~ o f f ~ t h e ~ b a c k ~ f o r / a t ~$
$V+S+A-k u h e a k u r u c i r a$ come off the back at
kuheesa forge ( as a metal smith)
A- kuhbeseza forge for/at

- kubersera forge for/at

C- kuhdesesa cause to forge
P- kuheerwa be forged

- kuhásibwa be forged
$A+R-k u h e \in s e z a n g a n a$ forge for each other
$C+R-$ kuhousesangana cause each other to forge
kuhehaera be cool, be soft/moist;
have a 'frog' in one's throat
A- kuheheerera be soft at
C- kuheheeza cause to be soft
$C+P-$ kuheheazibwa be caused to be soft
kuheijera groan
A- kuheijerera groan at
C- kuherjera cause to groan
C+P- kuhaijezibwa be caused to groan
C+R- kuheijezangana cause each other to groan
kuheima (of bees) gather materials for making honey
A- kuheimera gather for
$C$ - kuheimesa cause to gather
$A+P-$ kuheimerwa be gathered something
A+R- kuheimerangana gather for each other
$C+R-$ kuheimesangana cause each other to gather
$C+P-$ kuheimesibwa be caused to gather
kuhambal light (a fire)
A- kuhembera light for
C- kuhembesa cause to light
P- kuhembwa be lit
I- kuhemberera put moral pressure on
A+P- kuhemberwa be lit a fire

A+R- kuhamberangana light for each other
C+A- kuhambeseza cause to be lit a fire
C+P- kuhambesibwa be caused to light
$C+R-$ kuhembesangana cause each other to light
kuhemura disgrace
A- kuhomurira disgrace for/at
P- kuhemurwa be disgraced
R- kuhemurangana disgrace each other
S- kuhemuka be ashamed
S+A- kuhemucira be ashamed at
kuhênda break; ovexburden
A- kuhendera break for/at
C- kuhenza cause to break; overburden with
P- kubendwa be broken, be overburdened
R- kuhendengana break each other; overburden each other
S- kuhendeka break (intrans); toil
D- kuhéndahenda break quickly; break into many pieces
A+P- kuhenderwa be broken something
A+R- kuhanderangana break for each other
$C+P-k u h 6 n \varepsilon i b w a$ be caused to break; be overburdened with
$C+R-$ kuhenzangana cause each other to break; overburden each other with
S+A- kuhendecera break at; toil for/at
kuhera be gone for too long
A- kuherera be gone at, esp.in akahererthi what became of him?
C- kuhaza finish, complete
I- kuhtreera be near
S- kuhereka entrust
I+C- kuheraeza put near
$I+R-$ kuhéreerana be near each other
I+S- kuhfrearuka be last, see last
S+A- kuherecera see off
S+P- kuherakwa be entrusted with
I+R+C- kuhéreeranisa put near each other
kuhiga jostle, make an opening; move (trans)
A- kuhijira jostle for/at
C- kuhijisa cause to jostle
P- kuhigwa be jostled
D- kuhigahiga jostle, make an opening
A+C- kuhijiza make room for, give way
C+R- kuhijizangana give way to each other
kuhijika squeeze in small space; be intolerant, persecute
A- kuhijicira fix in place, support
P- kubijikwa be squeezed
R- kuhijikangana persecute each other
S- kuhiguka fall over
V- kuhigura knock over
A+C- kuhijiciza cause to support

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S+A- kuhigqucira fall over at
V+A- kuhigurira knock over for/at
kuhiiga nunt; look for
A- kuhifijira hunt for/at; look for/at
C- kuhi&jisa cause to hunt
P- kuhilgwa be hunted
R- kuhiiggangana hunt each other
A+P- kuhíijirwa be hunted something
A+R- kuhifjirangana hunt for each other
C+R- kuhilijisangana cause each other to hunt
I+C- kuhifjiriza search intensively
kuhiika (of rain) threaten to fall
A- kuhilcira threaten at
I+C- kuhifciriza threaten seriously
kuhika arrive, reach; amount to, be sufficient
A- kuhicira arrive and camp at, reach
C- kuhica cause to arrive, fulfil amount
P- kuhikwa be reached; be satisfied, befully covered
R- kuhikaana be together and in harmony
I+C- kuhiciiriza fulfil amount
A+P- kuhicirwa be reached
R+C- kuhikaanisa put together
kuhinda thunder; rouse from sleep
A- kuhindira thunder at; rouse for/at
C- kuhinza cause to thunder
p- kuhindwa be roused
S- kuhinduka change, turn (round); turn against
V- kuhindura change, turn (transitive)
X- kuhindagana rush, stampede
D+S- kuhindahinduka be changeable
D+V- kuhindahindura turn repeatedly
S+R- kuhindukana turn against each other
V+P- kuhindurwa be turned
V+R- kuhindurangana turn each other
V+A+C- kuhindurisa change for the worse (in health)
kuhingura go past
A- kuhingurira go past something while at
C- kuhingusa cause to go past
p- kuhingurwa be passed
C+R- kuhinguzana cause each other to go past
C+P- kuhinguzibwa be caused to go past
kuhinya fold,
A- kuhinyira fold for/at
C- kuhinyisa cause to fold
p- kuhinywa be folded
D- kuhinnyahinya crumple
I- kuhinyirira fold up trousers/shirt sleeves
A+R- kuhinyirangana fold for each other
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C+R- kuhinyisangana cause each other to fold
I+C- kuhinyiriza fold up trousers/shirt sleeves
kuhóma plaster
A- kuhbmera plaster for
C- kuhomesa cause to plaster
p- kuhomwa be plastered
S- kuhbmooka become unplastered; (of plaster) fall off
V- kuh6moora unplaster
I- kuhbmeerera seal a crack esp. of a leaking container
A+P- kuhomerwa be plastered something
\(A+R-\) kuhbmerangana plaster for each other
\(C+P-k u h m^{\prime}\) esibwa be caused to plaster
\(C+R-\) kuhomesangana cause each other to plaster
V+A- kuhomoorera unplaster for
V+P- kuh6moorwa be unplastered
\(V+A+R-\) kuhomoorerangana unplaster for each other
kuhóra cool; lend
A- kuhorera cool at; lend at
C- kuhoza cause to cool; plead a case; (Reflexive:kwéhoza
borrow)
P- kuhorwa be lent
R- kuhorangana lend to each other
C+C- kuhbzesa cause to plead a case, cause to answer charges
C+P- kuhbzibwa (of a case) be pleaded/argued
I+C- kuhbreereza soothe, calm (trans)
\(C+R-\) kuhbzesangana cause each other to answer charges
kuhunga flee
A- kuhunjira flee at/to; doze
C- kuhunjisa cause to flee
P- kuhungwa be fled
S- kuhunguka visit on the way
\(V\) - kuhungura inherit a wife
\(S+A-\) kuhungucira visit on the way at
V+A- kuhungurira inherit wife at
kuhúra lose appetite during pregnancy, dislike
A- kuhurira lose appetite at; hear, obey
P- kuhúrwa be disliked (by a pregnant person)
I- kuhúxiirizs listen attentively
A+C- kuhúriza hear with; have hearsay
\(A+P-k u h u r i r w a\) be heard, be obeyed
kúhwa end, be no longer there, be exhausted
A- kuhwera end at
C- kuhwása go dry (esp. cow's milk), diminish (esp. food)
X- kuhwérecerara be completely destroyed, be annihilated
I- kuhwerera wear out (e.g. a pencil)
kuhweza be clear (with light), see clearly; be intelligent
A- kuhwereza light up for; be intelligent at
C- kuhwézesa light up with
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kwiba steal
A- kwiiblira steal for
C- kwifbisa cause to steal; accuse of stealing
P- kwlbwa be stolen
R- kwiibangana steal from each other
A+P- kwi{birwa be stolen something
A+R- kwiibirangana steal for each other
C+P- kwiibisibwa be caused to steal
C+R- kwisbisangana cause each other to steal;
    accuse each other of stealing
kwibika dip, soak
A- kwibicira dip for
C- kwibicisa cause to dip
P- kwibikwa be dipped
R- kwibikangana dip each other
X- kwibira sink, dive
A+P- kwibicirwa be dipped something
A+R- kwibicirangana dip for each other
C+R- kwibicisangana cause each other to dip
X+A- kwibirira sink while at
X+C- kwibiza cause to sink
kwica rest; breathe
A- kwiciza rest at; breathe at
C- kwicisa cause to breathe
I+C- kwiciriza agree, respond in affirmation
kwiga make rain
A- kwijira make rain for/at
C- kwijisa cause to make rain
P- kwigwa (of rain) be made
X- kwigama shelter from rain
    - kwijika (of rain) cause to seek shelter
A+P- kwijirwa be made rain
A+R- kwijirangana make rain for each other
C+R- kwijisangana cause each other to make rain
kwigura open
A- kwigurira open for
C- kwiguza cause to open
p- kwigurwa be opened
S- kwiguke open (intr)
X- kwigara close, seal
A+P- kwigurirwa be let in
A+R- kwigurirangana open for each other
C+P- kwiguribwa be caused to open
C+R- kwiguzangana cause each other to open
kwiha remove
A- kwihira remove for
C- kwihisa cause to remove
P- kwihwa be removed
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I- kwihirira start from, arise from
A+P- kwihirwa be removed something
kwihura serve food
A- kwihurira serve food to/at
C- kwihura cause to serve food
P- kwihurwa (of food) be served
S- kwihuks 'get off the hook'
A+P- kwihurirwa be served food
A+R- kwihurirangana served each other food
C+P- kwihuribwa be caused to serve food
C+R- kwihuzangana cause each other to serve food
kwija come
A- kwizira come towards
C- kwizisa cause to come
A+P- kwizirwa be approached
kwijuka recall
A- kwijucira recall while at
C- kwijuca cause to recall, remind
P- kwijukwa be recalled, be remembered
I- kwijuciriza keep recalling a past experience
C+R- kwijucangana remind each other
kwijura (of container) be filled; (of subtance)
    fill a container
A- kwijurira be filled at
C- kwijuza fill
P- kwijurwa(mu) be filled
V- kwijurura diminish (from fullness) (trans)
X- kwijururuka dwindle, diminish (from fullness) (intr)
A+C- kwijuriza fill up
V+P- kwijururwe (of container) be unfilled
kwikara stay
A- kwikarira stay for; fell in wrestling
C- kwikaza cause to stay, stay with
P- kwikarwamu be stayed in
A+P- kwikarirwa be felled
A+R- kwikarirangana fell each other
C+P- kwikazibwa be caused to stay
C+R- kwikazangana keep each other company
kwima withhold, refuse
A- kwimira withhold for/at
C- kwimisa cause to withhold, cause to be refused something
P- kwimwa be refused something
R- kwimangana refuse each other something
C+P- kwimisibwa be caused to be refused something
C+R- kwimisangana cause each other to withhold
kwimuka rise
A- kwimucira rise for/at
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C- kwimuca raise, rouse
A+C- kwimuciza raise/rouse for/at
A+R- kwimucirangana rise for each other
C+P- kwimucibwa be raised, be roused
C+R- kwimucangana raise/rouse each other
A+C+R- kwimucirangana raise/rouse for each other
kwinama bow down, be bent
A- kwinamira bow to/at, bend towards
C- kwinamisa cause to bow, bend
    - kwinamya bend, cause to bow
P- kwinamwaho be bent over
S- kwinamuka go uphill, lift one's head
V- kwinamura raise, take uphill
I- kwinamirira (Reflexive:kuy@inamirira be bowed down in
        grief/thought
A+P- kwinamirwa be bowed to
A+R- kwinamirangana bow to each other
C+R- kwinamisangana cause each other to bow
    - kwinamyangana cause each other to bow
C+P- kwinamisibwa be caused to bow/bend
S+A- kwinamucira go uphill at
V+A- kwinamurira raise for/at, take uphill for
V+P- kwinamurwa be raised, be taken uphill
V+R- kwinamurangana raise each other, take each other uphill
kwingana be equal
A- kwinganira be equal at
C- kwinganisa compare, equalize
C+A- kwinganisiza compare for/at, equalize for/at
C+P- kwinganisibwa be equalized
kwira grow dark (at sunset)
A- kwirira grow dark while at
C- kwiza cause to grow dark
I+C- kwiririza cause to delay until nightfall
C+P- kwixibwa be caused to grow dark
I+C+P- kwiririzibwa be delayed until nightfall
kwirira move nearer/farther
A- kwiririra move nearer to
C- kwiririza cause to be nearer/farther
P- kwiririrwa be approached
R- kwiririrangana move closer to each other
kwiruka run
A- kwirucira run towards/for/at
C- kwiruca cause to run, chase
p- kwirukwa be run; be deserted
A+P- kwirucirwa be run to/for/in
A+C- kwiruciza cause to run for.
C+R- kwirucangana cause each other to run
kwita kill, spoil, treat badly
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A- kwitira kill for/at; spoil for/at
C- kwisa cause to kill
    - kwitisa cause to kill
P- kwitwa be killed
R- kwitana kill each other, struggle, compete
    - kwitangana kill each other
D- kwiteita obscure esp. by change of topic
\(A+P-k w i t i r w a ~ b e ~ k i l l e d ~ s o m e t h i n g ~\)
\(A+R-\) kwitirangana kill for each other
C+R- kwitisangana cause each other to kill
    - kwisangana cause each other to kill, kill each
        other with
R+A- kwitanira kill each other for, struggle for
    - kwitanganira kill each other at
R+C- kwitanisa cause to struggle
kuja go
A- kujiira go for
C- kujiisa cause to go
P- kujiibwa be gone to
\(C+R-k u j i i s a n g a n a\) cause each other to go
kujabika dip
A- kujabicira dip for/at
V- kujabu(u) ra take out of a pot
P- kujabikwa be dipped
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kujanjaba nurse
A- kujánjabira nurse for/at
C- kujanjabisa cause to nurse
P- kujánjabwa be nursed
R- kujanjabangana nurse each other
A+P- kujanjabirwa be nursed someone, be nursed at
A+R- kujanjabirangana nurse for each other
kujenda go, walk
A- kujendera go for/at
C- kujenza cause to go
    - kujendesa cause to go
D- kujendajende go for a walk, stroll, travel about
P- kujendwa be walked
R- kujendana go together
I- kujenderera progress, go on; do purposely
A+P- kujendesibwa be caused to go
    - kujenzibwa be caused to go
\(A+R-\) kujenderana go together with (of mixture or bundle)
\(C+A-k u j e n d e s e r a\) cause to go for
\(I+C-k u j e n d e r e z a\) cause to progress
I+C+P- kujenderezibwa be caused to progress
kujera flow; measure
A- kujerera flow for/at/into
C- kujeza cause to flow; try
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I- kujereera supervise
A+P- kujererwa be approached by something flowing
C+P- kujezibwa be caused to flow
kujigeija bear the firstborn
A- kujigeijera bear firstborn for/at
P- kujigeijwa be born first
kujuba fish
A- kujubira fish for/at
C- kujubisa cause to fish
P- kujubwa be fished
S- kujubuka be diluted
V- kujubura dilute; permit
A+P- kujubirwa be fished something
A+R- kujubirangana fish for each other
C+P- kujubisibwa be caused to fish
C+R- kujubisangana cause each other to fish
S+A- kujubucira be diluted at
V+A- kujuburira dilute for; permit for
V+R- kujuburangana permit each other
V+A+R- kujuburirangana dilute for each other;
    permit for each other
kujúga pay dowry; (esp. goats) howl
A- kujújira pay dowry to; howl at
C- kujújisa cause to pay dowry; cause to howl
P- kujúgwa (of wife) be paid dowry for
A+P- kujujirwa be paid dowry
A+R- kujújirangana pay dowry to each other
C+R- kujújisangana cause each other to pay dowry
kujúma insult, scold
A- kujúmira insult for/at
C- kujumisa cause to insult, cause to be insulted/scolded
P- kujumwa be insulted
R- kujumangana insult each other; have a habit of
    insulting others
C+R- kujumisangana cause each other to be insulted
R+A- kujumanganira insult each other at
kujumbika bake in the ashes
A- kujumbicira bake for
C- kujumbicisa cause to bake
P- kujumbikwa be baked
V- kujumbura remove from the ashes; force out of hiding
S- kujumbuka emerge out of hiding
A+P- kujumbicirwa be baked something
A+R- kujumbicirangana bake for each other
C+R- kujumbicisangana cause each other to bake
kujumeera (of cattle) cry
A- kujumeerera cry at
C- kujumeeza cause to cry
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kujuna help
A- kujunira help for/at
C- kujunisa cause to help
P- kujunwa be helped
R- kujunangana help each other
A+P- kujunirwa be helped at
A+R- kujunirangana help for each other
C+R- kujunisangana cause each other to help
kujunde rot
A- kujundira rot at
C- kujunza cause to rot
C+P- kujunzibwa be caused to rot
kujunga squeeze banana juice
A- kujunjira squeeze for/at
C- kujunjisa cause to squeeze
P- kujungwa be squeezed
I- kujunjiirira tread severely
A+P- kujunjirwa be squeezed banana juice, be squeezed at
A+R- kujunjirangana squeeze for each other
C+R- kujunjisangana cause each other to squeeze
kujura be homesick, miss
A- kujurira be homesick at; testify
C- kujúza cause to be homesick
P- kujúrwa be missed
A+C- kujúriza call as a witness
A+P- kujurirwa be given favorable testimony
A+R- kujurirangana testify for each other
A+C+R- kujurizangana call each other as witness
kujúura undress, take off clothes
A- kujúúxira undress for/at
C- kujuuza cause to undress
P- kujúrwa be undressed, ( of clothes) be taken off
R- kujuurangana undress each other
S- kujúuka get off
A+R- kujúurirangana undress for each other
C+R- kujGG&angana cause each other to undress
S+A- kujúrcira get off at
kujwa (sun) shine; (juice) flow
A- kujwera shine for/at; flow for/at
C- kujwisa cause to shine, have sunshine; cause to flow
A+P- kujwexwa be flowed onto
C+A- kujwisima cause to flow for
C+P- kujwisibwa be caused to shine; be caused to flow
I+R- kujwererana flow profusely, bleed profusely
kujwara wear, put on
A- kujwarira wear for/at
C- kujwaza cause to wear
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P- kujwirwe be worn
X- kujwalke dress, clothe
C+R- kujwamangana cause each other to wear
X+A- kujwecera dress/clothe for/at
X+P- kujwlkwa be dressed/clothed
X+R- kujwokangana dress/clothe each other
kukfaba faint, die
A- kuktbira faint at
C- kukabya cause to faint
I- kukabirira faint for
kukaga detect by smell
A- kukdjira smell for/at
C- kukfjisa cause to smell
P- kukagwa be detected by smell
R- kukagangana detect each other by smell
A+P- kuktjirwa be smelled something
A+R- kukajirangana smell for each other
kukatma milk
A- kukdmira milk for/at
C- kuk{mise cause to milk
p- kuktmwa be milked
D- kuktmakama (Of clothes) be half dry
S- kukfmuuka (e.g. water) be squeezed out, drip
V- kuktmuure squeeze out (liquids), press (wet items)
A+P- kuktmirwa be milked something, be milked at
A+R- kuktmirangana milk for each other
C+P- kukdmisibwa be caused to milk
C+R- kuktmisangana cause each other to milk
S+A- kukfmuucira drip at
V+A- kuktmuurira squeeze out/press for/at
V+C- kuk{muuma cause to squeeze out/press
V+P- kukcmuurwa be squeezed/pressed
V+A+P- kuktmuurirwa be squeezed/pressed something
V+A+R- kuktmuurirangana squeeze/press for each other
V+C+P- kuk&muuribwa be caused to squeeze/press
V+C+R- kukamuumangana cause each other to squeeze/press
kukambura pull down (house)
A- kukamburira pull down for
C- kukambura cause to pull down
P- kukambuxwa be pulled down
S- kukambuka fall to ruin/disrepair
D- kukambakambura pull down violently
A+P- kukamburirwa be pulled down (a house)
A+R- kukamburirangana pull down for each other
C+P- kukamburibwa be caused to pull down
C+R- kukambuzangana cause each other to pull down
S+A- kukambucira fall to ruin in (duration)
kukana insult with tongue click
A- kukfnira insult for/at
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C- kukfnisa cause to insult
P- kukafnwa be insulted
R- kukanangana insult each other
A+R- kukanirangana insult for each other
kukanda massage; (of a field) grow bushy
A- kukandira massage for/at
C- kukandisa cause to grow bushy
P- kukandwa be massaged
R- kukandangana massage each other
V- kukanduura clear a bushy place
V+A- kukanduurira clear for
V+C- kukanduuga cause to clear
kukanga startle
A- kukanjira startle for/at
C- kuktnjisa frighten with
P- kukângwa be startled
X- kuktngaza be restless
X- kukangarana be startled (intransitive)
kuktnika repair, fix (i.e.do work of a mechanic)
A- kukanicira repair for/at
C- kukánicisa cause to repair
P- kukknikwa be repaired
A+P- kukanicirwa be repaired something
A+R- kukAnicirangana repair for each other
C+R- kukanicisangana cause each other to repair
kukanjura chew
A- kuktnjurira chew for/at
C- kukanju&a cause to chew
P- kukadnjurwa be chewed
A+P- kukanjurirwa be chewed something
C+R- kukanjuzangana cause each other to chew
kukeikura (of women) grow old
A- kuk@ikurira grow old at
C- kukeikura cause to grow old
kuko6koota be shrivelled, be dwarfed
A- kuko6kootera be shrivelled at
C- kuk66koosa cause to be shrivelled
S- kuk60kootoka be shrivelled (used as a curse)
kukoma tie, imprison
A- kukbmera tie for/at
C- kukomesa cause to tie
    - kukomya blink
P- kukomwa be tied
R- kukomangana tie each other
S- kukomooroka become untied/loose
V- kukomoorora untie, loosen
I- kukomeerera pack up
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D- kukomakoma tie quickly
A+P- kukOmerwa be tied something
A+R- kukomerangana tie for each other
    - kukbmerana tie together(in one bundle); lock inside
C+A- kukomasera cause to tie for
C+P- kuk6mesibwa be caused to tie
C+R- kukomesangana cause each other to tie
S+A- kukomoorocera become loose at
V+A- kukbmoororera untie for/at
V+C- kuk6moorozal cause to untie
V+P- kuk6moororwa be untied
V+R- kuk6moororangana untie each other
V+A+P- kukbmoororerwa be untied something
kukomaga beat barkcloth
A- kukomajira beat barkcloth for/at
C- kukGmajisa cause to beat barkcloth
P- kukomagwa (of barkcloth) be beaten
A+P- kukomajirwa be beaten barkcloth
A+R- kukomajirangana beat barkcloth for each other
kukómba lick up
A- kukombera lick up for/at
C- kukOmbesa cause to lick up
p- kukombwa be licked up
A+P- kuk6mberwa be licked something
A+R- kukGmberangana lick up for each other
C+P- kukGmbesibwa be caused to lick up
C+R- kuk6mbesangana cause each other to lick up
kukomera sow
A- kukomerera sow for
C- kukbmeza cause to sow
P- kukomerwa be sowed
A+P- kukomererwa be sowed something
C+R- kukbmerangana cause each other to sow
kukona be underdone/undercooked; castrate
A- kukonern be underdone at; castrate for/at
C- kukonesa cause to be underdone, undercook
P- kukonwa be castrated
A+P- kukonerwa be castrated something
A+R- kukonerangana castrate for each other
C+A- kukoneseza undercook for; cause to castrate for
C+P- kukonesibwa be caused to be undercooked
kukonda fell
A- kukondera fell for/at
C- kukondesa cause to fell
P- kukondwa be felled
X- kukondeka cause to hang down loosely; put up a rough shelter
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kukonora pull off (esp. fruit)
A- kukónorera pull off for/at
C- kukbnozs cause to pull off
P- kukbnorwa be pulled off
S- kukonoka fall off
A+P- kukonorerwa be pulled something
A+R- kukonorerangana pull off for each other
$C+R-$ kukonozangana cause each other to pull off

kukbra work; make; do; repair; touch
A- kukbrera work for
C- kukbza cause to work/make/do; cause to repair, cause to be repaired; dip morsel in sauce

- kukozesa cause to work; cause to be repaired

P- kukorwa be done/made; be repaired
D- kukorakora grope
$A+C-k u k b r e z a$ dip morsel for; cause to be repaired something
A+P- kuk6rerwa be done a job; be repaired something
A+R- kukorerangana work/make/do for each other; repair for each other
$C+R-$ kuk6zangana cause each other to work; cause each other to repair
D+A- kukorakorera grope for/at
$C+R-$ kukbzesangana cause each other to work/repair
$A+C+R-$ kukoremangana dip morsel for each other; cause each other to be repaired something
kuk6rora cough
A- kukórorera cough at
C- kukoroza cause to cough
C+R- kukorozangana cause each other to cough
kukúba fold
A- kukubira fold for/at
C- kukúbisa cause to fold

- kukúbya nickname (appreciative)

P- kukúbwa be folded
S- kukúbuuka turn round

- kukubuuruka unfold

V- kukúbuura turn round (transitive)

- kukúbuurura unfold (trans)

X- kukúbajiza call by nickname (appreciative)
A+P- kukubirwa be folded something
A+R- kukubirana fold together (in one bundle)
$C+R-k u k u ́ b i s a n g a n a ~ c a u s e ~ e a c h ~ o t h e r ~ t o ~ f o l d ~$

- kukúbyangana call each other by nickname

S+A- kukabuucira turn round at

- kukubuurucira unfold at
$V+A-k u k u b u u r i r a t u r n$ round for
- kukubuururira unfold for/at
$V+C-k u k u b u z a$ cause to turn round
- kukúbuuruza cause to unfold

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A+R+C- kukGbiranisa fold (legs) while seated
kukumba fall/roll over
A- kukumbira fall over at; fall onto
C- kukumbisa cause to fall over
    - kukumbya cause to fall over
X- kukumbagmra fall over
A+P- kukumbirwa be fallen onto
C+P- kukumbisibwa be caused to fall over
C+R- kukumbyangana cause each other to fall over
X+A- kukumbagarira fall over at
X+C- kukumbagama cause to fall over
kukúna be polite, be hospitable
A- kukunire be polite to, respect
C- kukunisa cause to respect
A+P- kukunizwa be respected, be accorded hospitality
A+R- kukunirangana be polite to each other, be hospitable
    to each other
kukanda like, love; agree
A- kukundira like for/at; agree to
C- kukanza cause to like
P- kukQndwa be liked
R- kukundangana like each other
A+R- kukindirangana like each other for
kukange howl
A- kukunjira howl for/at
C- kukunja cause to howl
    - kukGnjisa cause to howl
R- kukungana be quarrelsome
C+R- kukunjangana cause each other to howl
kukura grow
A- kukúrira grow at; be older than
C- kukuza cause to grow; overestimate someone's age
A+P- kukurirwa be younger than
C+P- kukuribwe be caused to grow old
C+R- kuk&zangana grow old together; overestimate
    each other's age
kukúrata follow, go after
A- kukúra(a)tira follow, go after
C- kukurasa cause to follow, bring after
P- kukuratwa be followed
A+P- kukGra(a)tirwa be followed
kukurura drag
A- kukururira drag for/at
C- kukuruma cause to drag; drag oneself along
P- kukururwa be dragged
R- kukururangana drag each other
S- kukururuka be dragged
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A+p- kukuruxixwa be dragged something
A+R- kukururirangana drag for each other
kukuura uproot
A- kukúrira uproot for
C- kukGuza cause to uproot
P- kukuurwa be uprooted
S- kukuuka come out (of the soil)

A+R- kukGurirangana uproot for each other
C+P- kukúzibwa be caused to uproot
$C+R-k u k u ́ u z a n g a n a$ cause each other to uproot
kukwata hold, catch; touch; (of plant) take root
A- kukwatira hold for/at; be stuck
C- kukwisa cause to hold; help; cause to be caught; corner

- kukwatisa cause to be caught

P- kukwitwa be held/caught
R- kukwttangana hold each other

- kukwatana be related

S- kukwatika be availabie
D- kukwatakwata feel all over; touch repeatedly
I- kukwatirira hold as surety
A+P- kukwatirwa be held something
A+R- kukwatirangana hold for each other

- kukwatirana hold things together (as in a bundle); share the use of something
C+A- kukwasisa corner for; cause to hold for
C+P- kukwtisibwa be caused to hold; be helped
C+R- kukwasangana help each other
- kukwatisangana cause each other to be caught

R+C- kukwatanisa hold things together (as in a bundle); carry out a task together with
I+C- kukwatiriza cause to be held as surety, mortgage
kumanya know
A- kumanyira know for/at
C- kumanyisa cause to know, inform
p- kumanywa be known
I- kumanyiira get used to
R- kumanyangana know each other
S- kumanyika be well known, be famous
$C+A-k u m a n y i s i z a$ inform for/at
C+P- kumanyisibwa be informed, be caused to know
$C+R-k u m a n y i s a n g a n a$ inform each other
$I+R-$ kumanyiirangana get used to each other

kumara finish; exhaust, deplete
A- kumarira finish for/at
C- kumaza cause to finish
P- kumarwa be finished
$R-k u m a r a n g a n a$ exhaust each other
A+R- kumarirangana finish for each other

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kumera (of plants) sprout, germinate
A- kumerera sprout for
C- kumera cause to sprout
P- kumerwamu (of place) have plants sprout in
I- kumereera live a long time, live for ever
A+C- kumereza cause to sprout for
C+P- kumezibwa be caused to sprout
kumiga press
A- kumijira press for/at
C- kumijisa cause to press
P- kumigwa be pressed
R- kumigangana press each other
S- kumiguka (e.g. a ripe banana) be pressable
A+P- kumijirwa be pressed something
A+R- kumijirangana press for each other
C+P- kumijjisibwa be caused to press
C+R- kumijisangana cause each other to press
R+A- kumiganganira press each other at
kumira swallow
A- kumirira swallow for/at
C- kumiza cause to swallow
P- kumirwa be swallowed
X- kumivinkuza gulp
C+P- kumizibwa be caused to swallow
kumoka bark
A- kumbcera bark at
C- kumbca cause to bark
A+P- kumbcerwa be barked at
A+R- kumbcerangana bark at each other
C+P- kumocibwa be caused to bark
C+R- kumocangana cause each other to bark
kumurika shine/flash, shine on, be alight
A- kumuricira shine for
C- kumurica cause to shine
P- kumurikwa shine on, be lit
R- kumurikangana shine on each other
A+P- kumuricirwa be lit a light
A+R- kumuricirangana light for each other
kumwenya smile
A- kumwenyera smile for/ at
C- kumwenyesa cause to smile
D- kumwenyamwenya be all smiles
kumyora screw, wind; dislocate a joint
A- kumyorera screw for/at; dislocate for/at
P- kumyorwa be dislocated
S- kumyoka have a dislocated joint
R- kumyorangana dislocate each other's joints
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S+A- kumyócera dislocate a joint at/while at
kunaaba wash (intransitive)
A- kunaabira wash for/at
C- kunaabisa wash, bathe (transitive)
P- kunaabwa (e.g. water, soap) be use in washing
\(A+P-\) kunaabirwamu (of container, river etc.) be bathed in
\(C+R-\) kunaabisangana wash each other
kunaga throw away; neglect
A- kundjira throw away for
C- kunajisa cause to throw away: sell cheap
D- kunaganaga scatter
p- kundigwa be thrown away
R- kunagangana neglect each other
    - kuntigana shirk responsibility for someone e.g. a child
X- kunageija be careless about
\(C+R-\) kundjisangana cause each other to throw away
\(D+A-\) kunáganajira scatter for
\(D+P-k u n a g a n a g w a\) be scattered (kunagwanagwa)
kundijra sleep
A- kunajirira sleep at
C- kunajiza cause to sleep
C+P- kunajizibwa be caused to sleep
\(C+R-k u n \notin j i z a n g a n a\) cause each other to sleep
kunanura satisfy
S-kunanuka be satisfied
\(A+S-k u n a n u c i r a\) be satisfied at
kunéa bite, gnaw
A- kunenera bite for/at
C- kunenesa cause to bite
P- kund́nwa be bitten
kunia defecate
A- kuneera defecate on
C- kuneisa cause to defecate
P- kuneebwa be defecated
\(A+P-k u n c e r w a\) be defecated on
\(A+R-\) kuneerangana defecate on each other
\(C+A-\) kuneisera cause to defecate for
\(C+P-k u n e i s i b w a\) be caused to defecate
\(C+R-k u n e i s a n g a n a\) cause each other to defecate
kunfajiira plod along
A- kunítiiirira plod along at
C- kunfijiiza cause to plod along
X- kunitganiaga plod along
\(C+P-k u n £ \notin j i i z a n g a n a\) cause each other to plod along
kuniga choke
A- kunijiza choke for/at
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C- kunijisa cause to choke, cause to be choked
P- kunigwa be choked
R- kunigangana choke each other
A+R- kunijirangana choke for each other
C+R- kunijisangana cause each other to choke with
R+A- kuniganganira choke each other at
kuniha overeat, (of eaten food) be too much for
A- kunihira be too much at
C- kunihisa cause to overeat
kunoba hate
A- kunobera hate for/at
C- kunobesa cause to hate
P- kunobwa be hated
R- kunobangana hate each other
R+A- kunobanganira hate each other at
kunoga be thoroughly crushed/pounded
A- kunbjera be thoroughly crushed at
C- kun6ja crush thoroughly
A+C- kuncjeza crush thoroughly for/at
C+P- kuncjibwa be thoroughly crushed
$A+C+R-$ kunbjezangana thoroughly crush for each other
kun6goora make clay pots, mould
A- kun6goorera mould for/at
C- kunógooza cause to mould/be moulded
P- kun6goorwa be moulded
A+P- kun6goorerwa be moulded something
$A+R-$ kun6goorerangana mould for each other
C+P- kunGgooribwa be caused to mould
$C+R-$ kunGgoozangana cause each other mould
kun6gora cut a piece off
A- kunogorera cut a piece for/at
C- kunogora cause to cut a piece
p- kunbgorwa be cut
S- kun6goka be cut
A+P- kunogorerwa be cut a piece
A+R- kunogorerangana cut a piece for each other
$\mathrm{C}+\mathrm{P}-$ kunogozibwa be caused to cut a piece
$C+R-$ kunogozangana cause each other to cut a piece
kunúga loathe, be disgusted
A- kunujira loathe at
C- kunújisa cause to loathe
P- kunugwa be loathed
R- kunúgangana loathe each other, have a habit of loathing
$R+A-$ kunuganganira loathe each other at
kununka stink, smell; sniff
A- kununcira smell to
C- kununcisa cause to smell

```
P- kununkwa(mu) be sniffed in
R- kununkaana stink all over
I+C- kununciriza sniff about
C+P- kununcibwa be caused to stink
kunura taste nice, be delicious
A- kunurira taste nice to
C- kunu&a cause to taste nice
A+P- kunurirwa be pleased by taste of
C+P- kunuzibwa be caused to taste nice
kunyaara urinate
A- kunydarire urinate on
C- kunyaaza cause to urinate
P- kunyáarwa be urinated
A+P- kunyaarirwa be urinated on
A+C- kunytariza cause to urinate for
A+R- kunyadrirangana urinate on each other
C+P- kunyatzibwa be caused to urinate
C+R- kunydazangana cause each other to urinate
kunyaata eat without vegetables or relish
A- kunyaatira eat ...at
C- kunyaatisa cause to eat ...
    - kunyaasa cause to eat...
p- kunyaatwa be eaten without relish
kunyaga swindle, cheat
A- kunyajira swindle for/at
C- kunyajisa cause to be swindled
P- kunyagwa be swindled
R- kunyagangana swindle each other
A+P- kunyajirwa be swindled at
C+A- kunyajisira cause to be swindled for
C+R- kunyajisangana cause each other to be swindled
kunyagarara be troubled, be poorly off
A- kunyagararira be troubled at
C- kunytgaraza trouble, put in a poor condition
C+R- kunydgarazangana trouble each other
kunyeeta grow older, mature
A- kunyeotera mature at
C- kunyeesa cause to mature
C+P- kunyeesibwa be caused to mature
C+R- kunyeesangana cause each other to mature
kunyejera go uphill; be welcome
A- kunyejerera go uphill at; be welcome at
C- kunyejeza cause to go uphill; welcome,
    treat with hospitality
p- kunyejerwa be climbed
C+P- kunyejezibwat be welcomed
C+R- kunyejezangana welcome each other
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kunyiga press down on (esp. cooked bananas)
A- kunyíjira press for/at
C- kunyfjisa cause to press
P- kunyigwa be pressed
$A+R-k u n y i j i r a n g a n a ~ p r e s s ~ f o r ~ e a c h ~ o t h e r ~$
$C+R-$ kunyijisangana cause each other to press
kunyurura pull
A- kunyururira pull for/at
C- kunyuruse cause to pull
P- kunyururwa be pulled
R- kunyururangana pull each other
S- kunyururuke be elastic, be pulled
$A+P-$ kunyururirwa be pulled something
$A+R-k u n y u r u r i r a n g a n a$ pull for each other
$C+P-$ kunyuruzibwa be caused to pull
$C+R-$ kunyuruzangana cause each other to pull
$R+A-$ kunyururanganira pull each other at
kunyúunya lick up, suck up
A- kunyúanyira lick up for/at
C- kunyuanyisa cause to lick up
p- kunyúnywa be licked up
$X-$ kunyúdnyuuta suck out

$A+R-k u n y$ unyirangana suck up for each other
$C+R-$ kunyuunyisangana cause each other to suck up
kúnywa drink
A- kunywara drink for/at
C- kunyweisa cause to drink
p- kunywabwa be drunk by
R- kunywana make blood brotherhood/friendship
X- kunyweisaguzibwa have a habit of
drinking anything/anywhere
$A+P-$ kunywerwa be drunk something
$A+R-$ kunywerangana drink for each other
C+A- kunyweiseza cause to drink for
C+P- kunyweisibwa be caused to drink
$C+R-$ kunyweisangana cause each other to drink
R+A- kunywanira make friendship for/at
$R+C-k u n y w n i s a$ cause to make friendship
I+R- kunyworerana drink together(as a mixture); have a custom of sharing beer
kunywejera kiss
A- kurywejerera kiss for/at
C- kunywojeza cause to kiss
P- kunywejerwa be kissed
R- kunywejerangana kiss each other
C+P- kunywajezibwa be caused to kiss
kwoca be hot, heat, roast, burn

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A- kwoceza burn for/at
C- kwocesa cause to burn
P- kwocibwa be burnt
R- kwocangana burn each other
A+R- kwocezangana burn for each other, burn e.o. at
C+R- kwocesangana burn each other with
kwo̊ga bathe (intransitive)
A- kw6jera bathe at
C- kwठja wash, bathe (transitive)
    - kw6jesa cause to wash
p- kwögwa (of water, soap etc.) be washed with
X- kwógoroza rinse
A+C- kw6jeza wash for/at
C+P- kw6jibwa be washed
C+R- kw6jangana wash each other
X+P- kwogorozibwa be rinsed
kw6gosa twist rope, weave rope
A- kwogoseza twist for/at
C- kwogosesa cause to twist
P- kwogosibwa be twisted
kw8ma dry up (intransitive)
A- kwomera dry up for/at
C- kwomesa cause to dry up
    - kwbmya cause to dry up
R- kwomangana dry up thoroughly
X- kwbmesereza (of a guilty person) deny guilt vehemently,
        stand by a denial of guilt firmly
R+C- kwómanganisa cause to dry thoroughly
kw6mbeka build
A- kwombecera build for
C- kwombecesa cause to build
P- kwombokwa be built
A+P- kwombecerwa be built something
A+R- kwombecerangana build for each other
C+P- kwombecesibwa be saused to build
C+R- kwombecesangana cause each other to build
kwona (of animals) spoil crops in the fields
A- kwonera spoil crops for
C- kwonesa cause to spoil crops
A+P- kwonerwa be spoilt crops
C+A- kwonesera cause to spoil crops for
kwonjera continue, add
C- kwonjera increase, give more to
P- kwonjerwa be given more
X- kwonjesereza add to
C+R- kwonjezangana give more to each other
kwonka suck at the breast
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A- kwoncera suck at
C- kwônca suckle
P- kwonkwa be sucked
A+C- kwonceze suckle for/at
C+P- kwoncibwa be suckled
kwora become poor
A- kworera become poor for/at
C- kwora cause to become poor
C+P- kworibwa be caused to become poor
C+R- kwomangana cause each other to become poor
kw6reka show
A- kwbrecere show at
C- kworeca put on display
P- kworekwa be shown
I- kworecerera demonstrate
R- kworekangana show to each other
R+A- kworekanganira show to each other at
kworoba be soft, be weak; be obedient
A- kwbrobera be soft to/at; be obedient to
C- kwbrobya soften, weaken
kworoora bring up, look after
A- kworoorera bring up for/at
C- kworooza cause to bring up
P- kworoorwa be brought up
A+R- kworoorerangana bring up for each other
C+P- kw6roozibwa be caused to bring up
kw8sa omit/skip a day
A- kwosera omit a day for/at
C- kwosesa cause to omit a day
C+R- kwosesangana cause each other to omit a day
kwota warm oneself
A- kwotere warm oneself at
C- kwbtesa cause to warm oneself
P- kwbtwa (of fire) be used to warm oneself
C+R- kwotesangana cause each other to warm self
kwoya be hard on; hanker after
A- kwoyera be hard on for/at; hanker after at
C- kwoyesa cause to be hard on; cause to hanker after
P- kwoywa be hankered after
R- kwoyangana be hard on each other
C+P- kwoyesibwa be caused to be hard on; be caused to hanker
    after
C+R- kwoyesangana cause each other to hanker after
kupacira load, board (a vessel, vehicle)
A- kupacirira load for/at, board at
C- kupaciza cause to load, put on board
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P- kupfcirwa be loaded, be put on board
C+R- kupatcizangana put each other on board
kupagasa work for a wage
A- kupagasiza work for a wage for/at
kupika pump
A- kupicira pump for
C- kupicisa cause to pump
P- kupikwa be pumped
A+P- kupicirwa be pumped something
A+R- kupicirangana pump for each other
C+R- kupicisangana cause each other to pump
kupima measure, weigh
A- kupimira measure for/at
C- kupimisa cause to measure
P- kupimwa be measured
R- kupimangana measure each other
A+P- kupimirwa be measured something
A+R- kupimirangana measure for each other
C+P- kupimisibwa be caused to measure
C+R- kupimisangana cause each other to measure
kupukura stab
A- kupukurira stab for/at
C- kupukura cause to stab
p- kupukurwa be stabbed
R- kupukurangana stab each other
A+P- kupukurirwa be stabbed something
A+R- kupukurirangana stab for each other
C+P- kupukuzibwa be caused to stab
C+R- kupukuzangana cause each other to stab
kuraaha castrate
A- kuraahira castrate for/at
C- kuraahisa cause to castrate
V- kuraahuura castrate
V+P- kuraahuurwa be castrated
A+P- kuraahirwa be castrated something
A+R- kuramhirangane castrate for each other
kuraama curse
A- kureamira curse for/at
C- kuraamisa cause to curse
P- kuraamwa be cursed
R- kuraamangana curse each other
A+R- kurammirangana curse for each other
kurtara spend the night; (of fire) go out
A- kuradrira (of a guest) spend the night at; (of a bird)
            sit on eggs
C- kuramza cause to spend the night; extinguish (fire)
P- kuradrwa(mu) be spent the night in
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X- kuradrika invite to a task/function
A+C- kuradriza invite to a task/function; extinguish fire for/at
A+P- kurdicirwa have a guest spend the night
kuraba pass; (of plants) blossom, produce fruit
A- kurabira pass through; produce fruit at
C- kurabya cause to pass; (of lightining) flash

- kurabisa get a good crop
p- kurabwa (of a path etc.) be passed through
kurabura enlighten, make clever
A- kurdburira enlighten for/at
C- kurabuza cause to enlighten
P- kurdburwa be enlightened
R- kuraburangana enlighten each other
S- kurabuka be clever
A+P- kuraburirwa be enlightened someone
A+R- kuraburirangana enlighten for each other
$S+A-$ kurabucira be clever at
kuraga say goodbye; promise; bequeath
A- kurajire say goodbye for/at; bequeath for/at
C- kurajisa cause to say goodbye; cause to bequeath
p- kuragwa be bid farewell; be bequeathed something
I- kurajiixa order, give directions
R- kuragangana say goodbye to each other; bequeath to e.o.
- kuragaana agree, promise

I+A- kurajiirira give directions about
R+C- kurageanisa give an appointment, promise
I+A+C- kurajiiriza give directions repeatedly with admonitions not to forget
kuragara go down, fall
A- kuragarira fall at
C- kuragaza cause to fall; wipe off
P- kuragarwa drop something
S- kuragarika fall, be scattered
$C+P-k u r a g a z i b w a$ be wiped off
S+A- kuragaricira be scattered at
kuragura prophesy, divine, foretell
A- kuragurira prophesy for/at
C- kuraguza consult a diviner/soothsayer
P- kuragurwa be prophesied
A+P- kuragurirwa be told a prophesy
A+R- kuragurirangana prophesy for each other
kurahira swear, vow
A- kurahiェiza swear at
C- kurahiza cause to swear
kurahuka be quick
A- kurahucire be quick at something

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C- kurahuca do quickly
kurahura bully; (of chickens) scratch
A- kurahurira bully for/at
C- kurahuma cause to bully; cause to scratch
P- kurahurwa be bullied; be scratched
R- kurahurana be a bully, bully each other
kurambika lay
A- kurambicira lay for/at
P- kurambikwa be laid
X- kurambira lie down
I+C- kurambicirima straighten out (legs while seated)
kurambura inspect
A- kuramburira inspect for
C- kurambuza cause to inspect
P- kurtmburwa be inspected
R- kuramburangana inspect each other
A+P- kuramburirwa be inspected something
A+R- kuramburirangana inspect for each other
C+P- kuramburibwa be caused to inspect
C+R- kurambuzangana cause each other to inspect
kurambuura make to lose weight by denying food
A- kurambuurira make lose weight for/at
P- kurambuurwa be made to lose weight
S- kurambuuka lose weight
R- kurambuurangana make each other lose weight
S+A- kurambuucira lose weight at
kuramuca greet
A- kuramuciza greet for/at
I- kuramukanisa greet one another
kuramura judge, reconcile, decide
A- kuramurira judge for/at
C- kuramusa bargain, lnaggle
P- kuramurwa be judged
C+P- kuramuzibwa (of price) be bargained
kuramya greet/pay homaye to the king
A- kuramiza greet king for/at
X- kuramisiriza be on tenterhooks, keep fingers crossed
kuranda (of plants) creep; repair a crack in a calabash
A- kurandira creep at; repair for/at
C- kurandisa cause to creep; cause to repair
P- kurandwa be repaired
X- kurandagatana creep all over
kuranga announce
A- kuranjira announce to
C- kuranjisa display/announce lost item
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p- kurangwa be announced
R- kurangaana spread (bad/confidential) news
I- kuranjirira preach
A+P- kuranjirwa be announced something
I+P- kurangaanwa be infamous
kurangaara gape
A- kurangaarira gape at
C- kurangaaza cause to gape
C+P- kurangaazibwa be caused to gape
C+R- kurangaazangana cause each other to gape
kurara (esp. animals) wander
A- kurarira wander at
C- kuraza cause to wander
S- kuraruka become mad
V- kurarura cause to become mad
C+P- kurazibwa be caused to wander
V+R- kurarurangana cause each other to become mad
kurairama look up
A- kurdramira look up at
C- kuraramisa cause to look up
X- kurdrika raise (head)
A+P- kuraramirwa be looked up at
A+R- kuraramirangana look up at each other
C+R- kuraramisangana cause each other to look up
kurasa shoot, throw
A- kurasira throw at, shoot for/at
    - kurasiza shoot for/at
P- kuraswa be shot
R- kurdsangana shoot each other, throw at each other
    - kurasana struggle, fight
A+P- kurdisirwa be thrown something
kureeba look, watch, see, look for
A- kureebera search for/at, see at, watch for;
            cheat by looking at answers
C- kureobesa cause to see
    - kureebya keep uninvited watch in order to do mischief
D- kureebareeba look about
P- kureebwa be seen
R- kureobana keep in touch by visiting each other
    - kureabangana look at each other
I- kureeberera supervise, watch over
I+C- kureebereza hang around in order to receive crumbs
A+P- kureeberwa be watched something
    kureeberwamu be transparent, allow sight (e.g. a hole),
be reflective (e.g. a mirror)
A+R- kureeberangana cheat by looking at each other's work
C+P- kureebesibwa be caused to see
C+R- kureabesangana cause each other to see
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kureega tighten (e.g. a bow)
A- kureejera tighten for/at
C- kureejesa cause to tighten
P- kureegwa be tightened
S- kureeguka become slack

- kureaguruka become slack

V- kureegura slacken

- kureegurura slacken

A+P- kureejerwa be tightened something
A+R- kureejerangana tighten for each other
$C+P-k u r e e j e s i b w a$ be caused to tighten
$C+R-$ kuraejesangana cause each other to tighten
kuraeta bring
A- kureetera bring for
C- kureesa cause to bring, come with (means/manner); smoke

- kurátasa cause to bring

P- kureatwa be brought
R- kuráétangana bring each other

- kurétana come together, arrive together

I- kuréterera sing sclo
A+P- kuráterwa be brought something
$A+R-k u r$ éterangana bring for each other

- kuredterana flow/leak/bleed profusely
$C+A-$ kurderesa smoke at
$C+P-$ kurodsibwa be caused to bring; be smoked
$C+R-$ kura@tesangana cause each other to bring
I+P- kur@@tererwa be sung
kuraga tell tales on; set container to catch rain water
A- kurejera set container for
C- kurejesa cause to set container, catch with (container)
P- kurégwa be victim of tales; (of rain water)be caught, (of container) be set up to catch water
R- kuregangana tell tales on each other
A+P- kurejerwa be caught water, be set up a container
$A+R-k u r d j e r a n g a n a$ catch water for each other, set up containers for each other
$C+R-$ kurejesangana cause each other to catch water/set up containers
kureiha be long, be tall
A- kureihera be long for/at
C- kureihesa cause to be long, lengthen, overestimate length
S- kureihuuke become long, become tall
C+P- kureihesibwa be lengthened
$S+A-$ kureihuucira become long at
kureka let, leave alone
A- kurecera leave alone for/at; stop doing; throw a spear at
P- kurekwa be left alone
$\mathrm{R}-\mathrm{kurekangana}$ leave each other alone
S- kurekuka fall from grasp
V- kurekura let go from grasp, set free

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A+A- kurecerera stop doing at
A+C- kurecera cause to stop doing
A+R- kurecerangana end a relationship
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kurema be too much for, beat; make sandals
A- kuremera be too much at; make sandals for
C- kuremesa exhaust, cause to fail; cause to make sandals
P- kuremwa be tired, fail; (of sandals) be made
R- kuranangane be too much for each other, disagree
I- kuremeera be heavy
S- kuramukka regain strength, be rested
A+P- kuremerwa be tired at
$C+A-k u r e m e s e z a$ exhaust for
$C+P-$ kuremesibwa be caused to be tired
$C+R-$ kuremesangana cause each other to be tired/to fail
R+A- kuromanganira disagree at
I+A- kuromeerera be heavy for/at
I+C- kuremeeza cause to be heavy
I+A+P- kurameererwa be weighed down
kuremba be very ill, be thoroughly beaten
A- kurembera be very ill for/at
C- kurambya cause to be very ill
$A+C-$ kurembesa cause to be very ill for/at
C+P- kurambyangana cause each other to be very ill
kurenga measure; be mean (esp. with respect to food)
A- kurenjera measure for; be mean to
C- kurenjesa cause to measure; try; tempt
$\mathrm{P}-\mathrm{kurengwa}$ be measured
$A+P-k u r e n j e x w a$ be measured something
$A+R-k u r e n j e r a n g a n a$ measure for each other
$C+P-$ kurengesibwa be tempted
$C+R-$ kurengesangana tempt each other

- kurengesane hesitate/guess
kuringa go from view, go beyond a point/rule, (of sun) set
A- kuranjera set at, go beyond at
C- kuranje (of character) be unacceptable; pass day; cause to go beyond
D- kurengarenga (of sun) be evening twilight
P- kurangwa be surpassed
$C+A-$ kurênjenza hint
kuréngahara be ignorant, lack skill/dexterity
A- kurangaharixa be ignorant at
C- kurengahaza cause to be ignorant
$C+P$ - kurengahasibwa be caused to be ignorant
kurera rear (a child), babysit
A- kurerera rear for/at
C- kuraza cause to rear
P- kurerwa be reared
$R$ - kurerangana rear each other

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A+P- kurererwa be reared a child
A+R- kurererangana rear for each other
C+P- kurezibwe be caused to rear
C+R- kuresangana cause each other to rear
kuriba (of a commodity) fail to sell
A- kuribira fail to sell at (place)
C- kuxibisa cause to fail to sell
A+A- kuribirira fail to sell for(person)
C+P- kuribisibwa be caused to fail to sell
kuribata tread on, march
A- kuribatira tread on for/at
C- kuribatisa cause to tread on
    - kuribasa cause to tread on
p- kuribatwa be trodden
R- kuribatangama tread on each other
I- kuribatiirira tread severely
A+P- kuribatirwa be trodden something
kuriha pay damages
A- kurihira pay damages to
C- kurihisa cause to pay damages
P- kurihwa be paid as damages
C+P- kurihisibwa be caused to pay damages
C+R- kurihisangana cause each other to pay damages
kurima dig, cultivate
A- kurimira dig for
C- kurimisa cause to dig
p- kurimwa be dug
A+P- kurimirwa be dug somethirg
A+R- kurimirangana dig for each other
C+P- kurimisibwa be caused to dig
C+R- kurimisangana cause each other to dig
kurinda look after, watch, protect; wait
A- kurindira watch for; wait for/at
C- kurinza cause to watch; cause to wait
P- kurindwa be watched/protected; be waited for
R- kurindangana protect each other; wait for each other
A+R- kurindirangana protect for each other
kurira cry, weep
A- kuririra cry at
C- kurima cause to cry
I- kuririirira (of a child) cry a lot to
    someone's inconvenience
C+P- kurizibwa be caused to cry
kuroga bewitch
A- kurojera bewitch for/at
C- kurojesa cause to bewitch, accuse of witchcraft
P- kurogwa be bewitched
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R- kurogangana bewitch each other
V- kurogoorora exorcise
I- kurojeerara fixate the victim of a magic spell
    on something
A+P-kurojerwa be bewitched something
\(A+R-\) kurojerangana bewitch for each other
\(R+A-k u r o g a n g a n i r a ~ b e w i t c h ~ e a c h ~ o t h e r ~ a t ~\)
kuronda look for, search
A- kurondera search for/at
C- kurondesa cause to search
    - kuronza cause to search
P- kurondwa be looked for
I- kurondoora resemble a relative (in character or physical
        features)
A+P- kuronderwa be searched something
\(C+P-\) kuronzibwa be caused to search
kurbota dream
A- kur6otera dream at
C- kur66tesa cause to dream
P- kurbotwa be dreamed
R- kurb6tangana dream about each other
V- kurótorora tell a dream
I- kur66terera have nightmares
kuroza taste
A- kuroreza taste for/at
C- kurozesa cause to taste
P- kurozibwa be tasted
A+R- kurorezangana taste for each other
\(C+R-\) kurozesangana cause each other to taste
kuruga exit, come from
A- kurujira exit for
C- kurujisa cause to exit
P- kurugwamu be exited
kuruks weave
A- kurucira weave for/at
C- kurucisa cause to weave
P- kurukwa be weaved
A+P- kurucirwe be weaved something
A+R- kurucirangana weave for each other
\(C+R-\) kurucisangana cause each other to weave
kurúma bite
A- kurumira bite for/at
C- kurumisa cause to bite
P- kuruma be bitten; be in labor
R- kurumangana bite each other; have a habit of biting
X- kurúmika cup, bleed
V- kurfmura give an antidote for a bite
R+A- kurumanganira bite each other at
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X+A- kurumicira cup for/at
kurunda heap up
A- kurundira heap up for
C- kurunza cause to heap up
P- kurundwa be heaped up
R- kurundaana gather
A+P- kurundirwa be heaped up something
R+A- kurundaanira gather for/at
R+A+P- kurundaanirwa be gathered something
kurunga season (food)
A- kurunjira season for/at
C- kurunjisa cause to season
P- kurungwa be seasoned
X- kurunjisirisa be fond of seasoning
A+P- kurunjirwa be seasoned something
A+R- kurunjirangana season for each other
C+R- kurunjisangana cause each other to season
kururuma (esp. of motor) rumble
A- kururumira rumble at
C- kururumya cause to rumble
kurwana fight, struggle
A- kurwanire fight for
C- kurwanisa cause to fight; scold
I- kurwanirira fight for, help
I+P- kurwanirirwa be fought for/helped
kurwira be ill
A- kurwadrira become ill at (place)
C- kurw&za cause to become ill; nurse
P- kurwarwa (of a disease) be had
I- kurwatririra become ill at someone's inconvenience
C+P- kurwadzibwa be caused to become ill
C+R- kurwadzangana cause each other to become ill;
    nurse each other
kúrya eat; irritate
A- kuriira eat for/at
C- kuriisa cause to eat, feed
P- kuriibwa be eaten
D- kuryarya cheat
R- kurysma quarrel, fight
I- kuriicirira take more than one's fair share
X- kurifsaguribwa have a habit of eating anything/anywhere
A+R- kuriirangana eat for each other
C+A- kurifisiza cause to eat for, feed for
C+P- kurifsibwa be caused to eat, be fed
C+R- kurifsangana cause each other to eat, feed each other
kusa grind
A- kuseera grind for/at; overcharge, be expensive
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C- kuseisa cause to grind
p- kuseebwa be ground
A+R- kuscerangana grind for each other
C+A- kuseisera cause to grind for
C+P- kuseisibwa be caused to grind
C+R- kuseisangana cause each other to grind
kusamsa ache, hurt; be needed badly
A- kusaasira hurt at; feel pity for
P- kusaasibwa be hurt; need badly
R- kusaasangana hurt each other
kusaiaga be left over, be plenty, exceed
A- kusaajira be left over at
C- kusaajisa cause to be left over
    - kusalaja cause to be left over
P- kusalagwa be exceeded
R- kusatgaana be too much, be all over
V- kuskagura leave over
A+C- kustajiza offend
C+R- kusk&jisangana cause each other to be left over
V+C- kusakgura leave over
kusaarira be bitter
A- kusaaririra be bitter at
C- kusaarima cause to be bitter
I- kusaariirira be bitter to (person)
C+P- kusaarizibwa be caused to be bitter
A+P- kusaariirirwa feel a bitter taste
kusaaruura harvest
A- kusaaruurira harvest for/at
C- kusaaruuza cause to harvest
P- kusaaruurwa be harvested
A+P- kusaaruurirwa be harvested something
kusaba ask, beg, pray
A- kusabira beg for/at, pray for
C- kusabisa cause to beg
P- kusabwa be begged
R- kusabangana beg each other
I+C- kusabiiriza beg importunately
A+P- kusabirwa be begged something, be prayed for
A+R- kusabirangana beg for each other
C+P- kusabisibwa be caused to beg
C+R- kusabisangana cause each other to beg
kusagara accompany
A- kusagarira accompany for
C- kusagara cause to accompany
P- kusagarwa be accompanied
R- kusagarana accompany each other
A+P- kusagarirwa be accompanied someone
C+P- kusagaribwa be caused to accompany
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kusaka go and work for food, fetch food
A- kusacira fetch food for/at
C- kusaciss give food to take home
P- kusakwa (of food) be fetched
A+P- kusacirwa be fetched food
A+R- kusacirangana fetch food for each other
C+R- kusacisangana give food to each other
kusakaara thatch
A- kusakaarira thatch for/at
C- kusakamea cause to thatch
P- kusakaarwa be thatched
S- kusakaaruka become unthatched
V- kusakaarura unthatch
A+P- kusakaarirwa be thatched something
A+R- kusakaarirangana thatch for each other
C+P- kusakaazibwa be caused to thatch
C+R- kusakaazangana cause each other to thatch
kusama bleed (transitive)
A- kusamira bleed at
C- kustmisa cause to bleed
P- kusamwa be bled
R- kusamangana bleed each other
kusamaara stare, gape
A- kusamaarira stare at
C- kusamamza cause to stare
A+C- kusamaarisa cause to stare for
A+P- kusamaarirwa be stared at
C+P- kusamaaribwa be caused to stare
kusamba kick; writhe in agony
A- kusambira kick for/at
C- kusambisa cause to kick
P- kusambwa be kicked
R- kusambana commit fornication/adultery
    - kusambangana kick each other
A+P- kusambirwa be kicked something
A+R- kusambirangana kick for each other
R+A- kusambanira commit fornication at
kusamburura undo weavework
A- kusambururira undo weavework for/at
\(C-\) kusamburuza cause to undo weavework
P- kusambururwa (of weavework) be undone
S- kusamburuka be undone
A+P- kumbururixwa be undone weavework
\(A+R-k u s a m b u r u r i r a n g a n a\) undo weavework for each other
\(C+R-k u s a m b u r u m a n g a n a\) cause each other to undo weavework
\(S+A-\) kusamburucira be undone at
kusandaga make incisions, vaccinate
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A- kustadajira make incisions for
V- kustadajisa cause to make incisions
P- kusaindagwa be cut
$R-$ kusandagangana make incisions on each other
$A+P-k u s a n d a j i r w a$ be cut someone
kusanga meet, find
A- kusanjira meet for
C- kusanjisa cause to meet
P- kusangwa be met
R- kusangangana meet each other at

- kusangaana meet, come together
kusanjira cover
A- kusánjirira cover for/at
C- kusanjiza cause to cover
P- kusanjirwa be covered
R- kusanjirangana cover each other
S- kustangururka be uncovered
$V$ - kustinguurura uncover
A+P- kusanjirirwa be covered something
A+R- kusanjirirangana cover for each other
$C+R-k u s a n j i z a n g a n m ~ c a u s e ~ e a c h ~ o t h e r ~ t o ~ c o v e r ~$
$S+A-$ kustaguurucira be uncovered at
$V+A-k u s a n g u u r u r i z a$ uncover for/at
kusara cut
A- kusarira cut for/at; cut umbilical cord of newborn; prune banana tree
C- kusaza cause to cut
P- kusárwa be cut
R- kusdrangana cut each other
I- kusariirira trim cultivated plot to end day's work
$A+A-k u s t r i r i r a ~ p r u n e ~ b a n a n a ~ t r e e ~ f o r ~$
$A+C-$ kustiriza cause to be cut something; cause to prune
$A+R-k u s a r i r a n g a n a ~ c u t ~ f o r ~ e a c h ~ o t h e r ~$
$C+R-$ kustarangana cause each other to cut
kusarara be numb
A- kusararira be numb at
C- kusaraza cause to be numb
S- kusararuka lose numbness
$C+P-k u s a r a z i b w a$ be caused to be numb
kusasura pay
A- kusasurira pay for/at
C- kusasura cause to pay
P- kusasurwa be paid
R- kusasurangana pay each other
$A+P-$ kusasuriswa be paid for
$A+R-k u s a s u r i r a n g a n a$ pay for each other
$C+R-$ kusasurangana cause each other to pay
kusatura split open

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A- kustturira split for/at
C- kusatura cause to split
P- kusaturwa be split
S- kusatuka be split
A+P- kustturirwa be split something
A+R- kustturirangana split for each other
C+P- kusttuzibwa be caused to split
C+R- kusttumangana cause each other to split
S+A- kusatucira be split at
kusabuka sprout again
A- kusabucira sprout at
kuseega be ill for a long time
A- kuseojera be ill at
C- kuseejesa cause to be ill
C+R- kuseejesanganal cause each other to be ill
kuseemeeka pant
A- kuseemeecera pant for/at
C- kuseemeeca cause to pant
C+R- kuseemeecangana cause each other to pant
kuseenya collect firewood
A- kusaenyera collect firewood for/at
C- kus@enyesa cause to collect firewood
P- kuseenywa be collected
X- kuseenyagura shatter
A+P- kusúdnyerwa be collected firewood
A+R- kusednyerangana collect for each other
C+R- kus@@nyesangana cause each other to collect firewood
X+A- kusaenyagurira shatter for
X+S- kuse@nyagurika be shattered
X+S+A- kusáanyaguricira be shattered at
kuseesa spill
A- kuseesera spill for/on
C- kuseesesa cause to spill
P- kusqeswa be spilled
S- kuseeseka be spilled
R- kuseesaana spill all over, use
        (esp. liquids) extravagantly
X- kuseesekara fill and spill over
A+P- kuseeserwa be spilled something on
S+A- kuseesecera spill over onto
X+C- kuseesekaza cause to fill and spill over
kuseka laugh, mock
A- kusecera laugh/smile at
C- kuseca cause to laugh
    - kusecesa cause to laugh
P- kusekwa be laughed at, be mocked
R- kusekangana mock each other with respect to something
I- kuseceerera mock, laugh at
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I+P- kuseceererwa be mocked, be laughed at
A+R- kusecerangana smile at each other
C+P- kusecibwa be caused to laugh
C+R- kusecangana cause each other to laugh
I+C- kuseceereza laugh a lot
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kusékura pound
A- kusakurira pound for/at
C- kusakuza cause to pound
P- kus@kurwa be pounded
A+P- kusákurirwa be pounded something
A+R- kusekurirangana pound for each other
$C+R-k u s a k u z a n g a n a$ cause each other to pound
kusécera destroy, decimate
A- kusécerera decimate for/at
C- kuséceza cause to decimate
P- kusécerwa be decimated
R- kusécerangana decimate each other
kusemba wrap up
A- kusembera wrap up for/at
C- kusembesa cause to wrap up
P- kusembwa be wrapped up
S- kusemburuka become unwrapped
V- kusemburura unwrap
$A+P-k u s e m b e r w a$ be wrapped up something
A+R- kusemberangana wrap up for each other
$C+P-$ kusembesibwa be caused to wrap up
$C+R-$ kusembesangana cause each other to wrap up
$S+A-$ kusemburucira become unwrapped at
$V+A-$ kusembururira unwrap for
kusémbuka walk slowly when ill
A- kusémbucira walk slowly for/at
C- kusémbuca cause to walk slowly
$C+R-$ kusembucangana cause each other to walk slowly
kusemera be pleasant, be clean
A- kusemerera be pleasant for/at
C- kusémeza cause to be pleasant; operate on
A+C- kusemereza cause to be pleasant for; operate on for/at
A+P- kusemererwa be happy
$C+P-k u s$ emazibwa be operated on
kusenda withhold hospitality
A- kusendera withhold hospitality for/at
C- kusendess cause to withhold hospitality
P- kuséndwa be denied hospitality
R- kusendangana withhold hospitality from each other
kusénjeera buy beer
A- kusénjeerera buy beer for
$C$ - kusenjeeza cause to buy beer

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P- kusenjeerwa (of beer) be bought
R- kusenjeererangana buy beer for each other
A+P- kusenjeererwa be bought beer
A+R- kusenjeererangana buy beer for each other
kusensera permeate, enter
A- kusenserera permeate through
C- kusansaza cause to enter
P- kusenserwa be permeated
kusereka hide (something from someone)
A- kuserecera hide for
C- kusereca cause to hide
P- kuserakwa be hidden
R- kuserekangana hide something from each other
V- kuserekurura bring out of hiding
X- kuserura expose; (of moon) rise, appear
A+P- kuserecerwa be hidden something
\(A+R-k u s e r e c e r a n g a n a ~ h i d e ~ f o r ~ e a c h ~ o t h e r ~\)
\(C+R-\) kuserecangana cause each other to hide something
kusiba lock, imprison
A- kusibira lock for/at
C- kusibisa cause to lock
P- kusibwa be locked
X- kusibika fasten, tether
V- kusibusa unfasten
A+P- kusibirwa be locked something
\(A+R-k u s i b i r a n g a n a\) lock for each other
\(C+R-k u s i b i s a n g a n a\) cause each other to lock
X+A- kusibicira fasten for
X+P- kusibikwa be fastened
\(V+A-k u s i b u r i r a\) unfasten for
\(V+P-\) kusiburwa be unfastened
\(V+A+P-k u s i b u r i r w a\) be unfastened something
\(V+A+R-k u s i b u r i r a n g a n a\) unfasten for each other
kusiga leave behind
A- kusijira leave behind while at; entrust to
C- kusijisa cause to leave behind
P- kusigwa be left behind
R- kusigangana leave at different times,
        go at different paces
X- kusigara be left behind, stay
I- kusijirira leave before the end
\(A+P-k u s i j i r w a\) be entrusted with something
A+R- kusijirangana entrust each other with
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        new concern
\(C+R-\) kusijisangana cause each other to leave behind
X+C- kusigara cause to stay; be• left with
kusigaigana pass the buck
A- kusigeiganira pass the buck at
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C- kusigeiganisa pass the buck to
A+P- kusigeiganirwa (of task) be subject of contention
C+P- kusigeiganisibwa (of person) be passed the buck
kusigisa stir
A- kusigisira stir for/at
C- kusigisisa cause to stir
P- kusigisibwa be stirred
    - kusigiswa be stirred
A+P- kusigisirwa be stirred something
A+R- kusigisirangana stirr for each other
kusigura steal a person's wife; provide cause for not
        doing something
A- kusigurira steal.. for
C- kusigura cause to steal..
P- kusigurwa be stolen
R- kusigurangana provide excuse for each other
kusiiba spend the day; fast
A- kusiibira pass the day on(food)
C- kusiibya cause to spend the day
P- kusiibwamu be spend the day in
V- kusiibura bid farewell
V+A- kusiiburira bid farewell for/at
V+P- kusiiburwa be bidden farewell
V+R- kusiiburangana bid each other farewell
V+S- kusiiburuka break the fast
kusiiga smear, paint
A- kusiijira smear for/at
C- kusiijjisa cause to smear
P- kusiigwa be smeared
R- kusiigangana smear each other
A+R- kusiijirangana smear for each other
kusiima thank, approve of
A- kusiimira thank for/at
C- kusiimisa cause to thank
P- kusiimma be thanked
R- kusiimangana thank each other; like each other
A+P- kusiimirwa be thanked someone
kusiimura wake up (transitive)
A- kusiimurira wake up for/at
C- kusiimura cause to wake up
P- kusiimurwa be woken up
S- kusiimuka wake up (intransitive)
A+P- kusiimurirwa be woken someone
C+R- kusiimuzangana cause each other to wake up
S+A- kusiimucira wake up at
kusiisa spoil
A- kusiisira spoil for/at; encamp
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C- kusiisisa cause to spoil
P- kusiiswa be spoilt
X- kusiisikara be spoilt, go wrong
kusiita crush
A- kusiitira crush for/at
C- kusiitisa cause to crush
P- kusiitwa be crushed
I- kusiitiinra crush, press hard on
A+P- kusiitirwa be crushed something
A+R- kusiitirangana crush for each other
kusika pull; inherit
A- kusicirs pull for/at
C- kusicisa cause to pull; bequeath
R- kusikana wrangle
    - kusikangana pull each other
P- kusikwe be inherited
X- kusikankura pull forcefully
S- kusikuka be pulled off
V- kusikura pull off/out
R+C- kusikanisa bring into a wrangle
V+A- kusikurira pull off for
V+C- kusikuza cause to pull off
V+P- kusikurwa be pulled off
kusikina hicough
A- kusikinize hicough at
C- kusikinisa cause to hicough
kusimba erect, place upright
A- kusimbira erect for
C- kusimbisa cause to erect
P- kusimbwa be erected
S- kusimbuka (of e.g. a car) move, be movable
V- kusimbura set in motion, move (trans & intr)
A+P- klisimbirwa be erected something
A+R- kusimbirangana erect for each other
C+R- kusimbisangana cause each other to erect
V+A- kusimburira set in motion for
V+C- kusimbura cause to set in motion
kusinda be drunk; groan with pain; (of lion) roar
A- kusindira be drunk for/at
C- kusinga cause to be drunk
S- kusinduuka become sober
V- kusinduura make sober
C+P- kusinzibwa be made drunk
C+R- kusinzangana make each other drunk
S+A- kusinduucira become sober at
kusindika push; dispatch/send
A- kusindicira push for; (of mother) push baby out
C- kusindicisa cause to push
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P- kusindikwa be pushed
R- kusindikana shove, jostle
A+P- kusindicirwa be pushed something; (of baby) be
    pushed out
A+R- kusindicirangana push for each other
C+R- kusindicisangana cause each other to push
kusindura uproot
A- kusindurira uproot for
C- kusinduza cause to uproot
P- kusindurwa be uprooted
S- kusinduka be uprooted
A+P- kusinduriswa be uprooted something
A+R- kusindurirangana uproot for each other
C+R- kusinduzangana cause each other to uproot
kusinga rub clean
A- kusinjira rub for/at
C- kusinjisa cause to rub
P- kusingwa be rubbed
A+P- kusinjirwa be rubbed something
A+R- kusinjirangana rub for each other
C+R- kusinjisangana cause each ot.her to rub
kusinga win, overcome
A- kusinjira win at
C- kusinjisa cause to win; cause to be overcome/fail
P- kusingwa fail, be overcome
R- kusingangana compete
X- kusínjisiriza make fail unfairly
A+P- kusinjirwa fail for/at
R+A- kusinganganira compete at
kusisa resemble
R- kusisana resemble each other
R+A- kusisanira resemble each other for/at
R+C- kusisanisa confuse, mix up, compare (esp. faces)
R+P- kusisanwa be resembled
kusitama sit
A- kusitamira sit on
C- kusitamisa cause to sit
A+P- kusitamirwa be sat on
kusoba go wrong
A- kusobera baffle, be wrong at
C- kusobya err
S- kusobooka be clear, be understandable
    - kusobooroka (e.g. of weavework) be set right
V- kusoboorora set right; explain
    - kusobora cope with, be able
A+P- kusoberwa be baffled and saddened
A+C- kusobeza err for, disappoint
S+A- kusoboocera be clear to/at
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V+A- kusoboororera expalain for/at
V+P- kusoboororwe be explained something
V+R- kusoboororangana explain to each other
S+A+P- kusoboocerwa understand clearly;
    be enlightened/modern
kusohora go out
A- kusohorera go out at
C- kusohora cause to go out
S- kusohooroka fall out (e.g. from a bundle)
V- kusohoorora pull out
A+C- kusohorezs cause to go out for/at
C+P- kusohozibwa be taken out
S+A- kusohoorocera fall out at
V+A- kusohoororera pull out for/at
kusokoza comb
A- kus6koreza comb for/at
C- kus6koresa cause to comb
P- kusbkozibwa be combed
R- kusbkozangana comb each other
kusoma read; attend school/church; sip
A- kusomera read for/at
C- kusomasa cause to read; teach/preach
P- kusomwa be read
S- kusomeka be legible
I- kusomerera curse by reading from a holy book
I+C- kusomeereza drink while eating
A+P- kusomerwa be read something
A+R- kusomerangana read for each other
C+P- kusomesibwa be taught, be preached to
C+R- kusomesangana cause each other to read
kusomba fetch in several trips
A- kusombera fetch for
C- kusombesa cause to fetch
P- kusombwa be fetched
I- kusomberera fetch in several trips
A+P- kus6mberwa be fetched something
A+R- kusomberangana fetch for each other
C+P- kusbmbesibwa be caused to fetch
C+R- kus6mbesangana cause each other to fetch
kusomboora move items from a house; steal (almost)
        everything
A- kusomboorera move items for/at
C- kusombooza cause to move items
p- kusomboorwa (of things) be moved, be stolen; (of people)
    lose items through theft
S- kusombooka come together from all over
kusona sew
A- kusonera sew for/at
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C- kusonesa cause to sew
P- kusonwa be sewn
A+P- kusonerwe be sewn something
A+R- kusonerangana sew for each other
C+A- kusonesera cause to sew for
C+P- kusonesibwa be caused to sew
C+R- kusonesangana cause each othe to sew
kusongora sharpen (e.g. a peg)
A- kusongorera sharpen for/at
C- kusongora cause to sharpen
p- kusongorwa be sharpened
S- kusongoka be sharpened
A+P- kusongorerwa be sharpened something
A+R- kusongorerangana sharpen for each other
C+P- kusongoribwa be caused to sharpen
C+R- kusongozangana cause each other to sharpen
kusoora extinguish (esp. a plant)
A- kusoorera extinguish for/at
C- kusooza cause to extinguish
P- kusoorwa be extinguished
S- kusooka be extinguished
A+P- kusoorerwa be extinguished something
A+R- kusoorarangana extinguish for each other
C+R- kusoosangana cause each other to extinguish
kusora pay tax
A- kusorera pay tax for
C- kusoza cause to pay tax
p- kusorwa (of tax) be paid
A+C- kusoreza cause to pay tax for/at; sniff
A+P- kusorerwa be paid tax for
A+R- kusorerangana pay tax for each other
C+P- kusozibwa be caused to pay tax
C+R- kusozangana cause each other to pay tax
kusoroma pick
A- kusoromera pick for/at
C- kusoromesa cause to pick
P- kusoromwa be picked
A+P- kusoromezwa be picked something
A+R- kusoromerangana pick for each other
C+R- kusoromesangana cause each other to pick
kusoroora set apart, sort out
A- kusoroorera set apart for/at
C- kusoroora cause to set apart
P- kusoroorwa be set apart
A+P- kusoroorerwa be sorted something
A+R- kusoroorerangana sort out for each other
C+P- kusoroozibwa be caused to sort out
C+R- kusoroozangana cause each other to sort out
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kusotooks walk feebly/stealthly
A- kus6toocera walk feebly for/at; stalk
C- kusótooce cause to walk feebly
A+P- kusóoocerwa be stalked
\(C+P-k u s 6 t o o c i b w a ~ b e ~ c a u s e d ~ t o ~ w a l k ~ f e e b l y ~\)
kusuka pour
A- kusucira pour for/at
C- kusucisa cause to pour
P- kusukwa be poured
X- kusukaanura pour from one vessel into another
A+P- kusucirwa be poured something
A+R- kusucirangana pour for each other
\(C+R-k u s u c i s a n g a n a\) cause each other to pour
kusumika join, tie a knot
A- kusúmicira tie a knot for/at
C- kusúmicisa cause to tie a knot
P- kusumikwa be tied into a knot
X- kusuminkanisa splice, mend (a rope)
A+P- kusumicirwa be tied a knot
A+R- kusumicirangana tie a knot for each other
\(C+R-\) kusumicisangana cause each other to tie a knot
kusuna pinch; (of breasts) develop
A- kusunira pinch for/at
C- kusGnisa cause to pinch
P- kusunwa be pinched
\(R-k u s G n a n g a n a\) pinch each other
\(A+P-k u s u n i r w a\) be pinched someone
\(A+R-\) kusunirangana pinch for each other
kusunga flatter, lionize
A- kusunjira flatter at
C- kusunjisa cause flatter
P- kusungwa be flattered
R- kusungangana flatter each other
kusanga regard a person as shameful
A- kusunjira regard as shameful at
C- kusunjisa cause to regard as shameful
P- kusangwa be regarded as shameful
\(R-\) kusungangana regard each other as shameful
\(A+R-k u s G n j i r a n g a n a\) regard as shameful for each other
\(C+R-\) kusúnjisangana cause each other to be regarded
    as shameful
R+A- kusunjirangana regard each other as shameful at
kusura herald, be an omen
A- kusurira herald for/at
C- kusúze cause to herald
\(P-\) kusúrwa be heralded
A+P- kusurirwa be heralded something
\(A+R-k u s u ́ x i x a n g a n a ~ h e r a l d ~ f o r ~ e a c h ~ o t h e r ~\)
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kusútura lift
A- kusúturira lift up for; lift many things simultaneously
C- kusutura cause to lift up
P- kusuturwa be lifted up
S- kusútuka go up/rise
A+P- kusuturirwa be lifted something
A+R- kusuturirangana lift up for each other
C+P- kusúturibwa be caused to lift
C+R- kusúturangana cause each other to lift
kusuuburat peel
A- kusuuburira peel for
C- kusuubusa cause to peel.; invest
P- kusuuburwa be peeled
A+P- kusuuburirwa be peeled something
A+R- kusuuburirangana peel for each other
C+P- kusuubuzibwa be caused to peel
C+R- kusuubuzangana cause each other to peel
kusumma go down hill
A- kusuumira go down hill at
C- kusummya take down hill
p- kusuumwa (of a hill) be descended
C+R- kusuumyangana take each other down hill
kusuura greet
A- kusuurira greet for/at
C- kusuuza cause to greet; approach
P- kusuurwa be greeted
R- kusuurangama greet each other
V- kusuuru(u)ra uncover
A+C- kusuuriza check on, visit
A+P- kusuurirwa be greeted someone
A+R- kusuurirangana greet for each other
V+P- kusuuru(u) rwa be uncovered
V+R- kusuuru(u) rangana uncover each other
kuswara be exposed, be shamed
C- kuswaya expose, shame
C+A- kuswariza expose for/at
C+P- kuswazibwa be exposed
C+R- kuswazangasa expose each other
kusweka cover
A- kuswecera cover for/at
C- kuswecesa cause to cover
P- kuswekwa be covered
R- kuswekangana cover each other
A+P- kuswecerwa be covered something
A+R- kuswecerangana cover for each other
C+R- kuswecesangana cause each other to cover
kuswåra (of a man) marry
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A- kusw@rera marry at
C- kuswaza cause to marry
P- kuswarwa (of a woman) be married
R- kuswerangasa marry each other
I- kusw@rerera arrange a marriage for (a man)
C+P- kusweribwa be caused to marry
C+R- kuswerangana cause each other to marry
kúsya burn, catch fire; ripen; be cooked
A- kuhiira burn at; pity
C- kuhfisa cause to be cooked; brew beer
I- kuhifrira be excited
X- kuhifsiriza (esp. of a boil) be very 'ripe' and ready to
        burst open
A+P- kuhfirwa (mu) have something burn at; be lucky
C+A- kuhilsize cause to ripen for/at
C+P- kuhissibwe cause to be ripe/cooked
kúta put
A- kuteera put for
C- kuteisa cause to put; forbid
P- kuteebwa be put
C+A- kutelsera cause to put for, forbid for
C+P- kuteisibwa be forbidden something
C+R- kutéisangana forbid each other
kutaaga seek pity; clutch at/try anything for help
A- kutadjira seek pity from
C- kutadijisa cause to seek pity
X- kutadgurea clutch at anything for help
I+C- kutadijiriza plead, entreaty
A+C- kutatjisangana cause each other to seek pity
A+R- kutłajirangana seek pity from each other
kutatagura tear
A- kutaagurira tear for/at
C- kutadgura cause to tear
P- kutakgurwa be torn
S- kut&aguka become torn
X- kutadgurikana be dawn
A+P- kutadgurirwa be torn something
A+R- kutadgurirangana tear for each other
C+P- kutatgguribwa be caused to tear
C+R- kut&&gumangana cause each other to tear
kutaaha go home, enter
A- kutaahisa enter for/at; (of bees) enter hive
C- kutaahisa go home with (means)
    - kutaasya take/bring inside
p- kutahwa be entered
I- kutaahirira intrude upon
A+C- kutaahima force one's way through
C+P- kutaahisibwa be caused to go home
I+P- kutaahirirwa be intruded upon
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kutaana separate (intransitive); do by turns
A- kutadanira separate at
C- kut&amisa cause to separate
X- kutadnuukana separate (intransitive)
kutaba struggle to get out of a quagmire/mud, play in mud
A- kutabire struggle at; cover esp. a hole with earth
C- kutabisa cause to struggle
P- kutabwa (esp. of mud) be played with
S- kutabuka emerge, arise; (of child) be very active/playful
V- kutabura (of water) boil
C+P- kutabisibwa be caused to struggle
C+R- kutabisangana cause each other to struggle
V+A- kutaburira boil at
kutabaara visit the king's residence; go to pick a fight
A- kutabaarira visit for; pick a fight at
C- kutabaaza cause to pick a fight
P- kutabaarwa be attacked
S- kutabaaruka return safely; (of a mother) deliver safely
kutagata be warm
A- kutagatira be warm at
C- kutagasa warm
A+P- kutagatirwa feel warm
C+A- kutagasiza warm for
C+P- kutagasibwa be warmed
kutaha scoop, draw (e.g. water)
A- kutahira scoop for/at
C- kutahisa cause to scoop
P- kutahwa be scooped
A+P- kutahirwa be scooped something
A+R- kutahirangana scoop for each other
C+P- kutahisibwa be caused to scoop
C+R- kutahisangana cause each other to scoop
kutahata carry in the hand esp. with something else
        on the head
A- kutahatira carry for
C- kutahatisa cause to carry
P- kutahatwa be carried
A+P- kutahatirwa be carried something
A+R- kutahatirangana carry for each other
C+P- kutahasibwa be caused to carry
kutama disgust, displease
A- kutamira disgust at
C- kutamisa anger
P- kutamwa be angry, dislike
R- kutamangana dislike each other
A+P- kutamirwa dislike at
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C+P- kutámisibsia be caused to dislike
kutamba cure (a disease); offer sacrifice
A- kutambira treat (a patient), rescue
C- kutdmbisa cure with (medicine), consult a doctor concerning a disease

- kutambya bother, be a nuisance, persecute

P- kutłmbwa (of a diseuse) be cured
A+P- kutambirwa (of a patient) be treated
A+R- kutambirangana treat each other
C+A- kutambisizs cause (a patient) to be treated
C+R- kutambyangana persecute each other
kutambura stride
A- kutamburira stride at
C- kutambuza cause to stride
P- kutamburwa (of a journey) be stridden
S- kutambuka stride
S+A- kutambucira stride at
kutamika feed, put into the mouth
A- kutamicira feed for/at
P- kutamikwa be fed
R- kutamikangana feed each other
A+P- kutamicirwa be fed at
kutana fester
A- kutanira fester at
C- kutanisa cause to fester
C+P- kutanisibwa be caused to fester
kutanaka vomit
A- kutanacira vomit on
C- kutanaca cause to vomit
P- kutanakwa be vomited
X- kutanacirana vomit severely
$A+C-$ kutanaciza cause to vomit for
A+P- kutanacirwa be vomited on
A+R- kutanacirangana vomit on each other
$C+P-k u t a n a c i b w a$ be caused to vomit
$C+R-$ kutanacangana cause each other to vomit
kutandama sit astride
A- kutandamira sit astride for/at
C- kutandamya cause to sit astride
$V-$ kutandamura set astride
I+C- kutandamiriza sit astride
A+P- kutandamirwa be sat astride for
A+R- kutandamirangana sit astride for each other
kutandika start work
A- kutandicira start work for/at
C- kutandicisa cause to start work
P- kutandikwa (of work) be started

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A+P- kutandicirwa be started something
A+R- kutandicirangana start for each other
C+R- kutandicisangans cause each other to start
kutanga forbid, bring back; go ahead/be first
A- kutanjira forbid for/at
C- kutanjisa cause to forbid
P- kutingma be forbidden
A+P- kutfnjirwa be brought back something
A+R- kutanjirangana bring back for each other
C+R- kutanjisangana cause each other to bring back
kutangaara be surprised
A- kutangaarira be surprised at
C- kutangaaza surprise
A+P- kutangaarirwa be marvelled
kutantamura enlarge
A- kutantamurira enlarge for/at
C- kutantamuza cause to enlarge
p- kutantamurwa be enlarged
S- kutantamuka become large
A+P- kutantamurirwa be enlarged something
A+R- kutantamurirangana enlarge for each other
C+P- kutantamumibwa be caused to enlarge
C+R- kutantamusangana cause each other to enlarge
kutaraaka splash, pop out (intransitive)
A- kutaraacira splash at
C- kutaraaca cause to splash
A+P- kutaraacirwa have something splash onto self
C+A- kutaraaciza cause to splash for/at
kutarika set up to dry
A- kutaricira dry for
C- kutaricisa cause to dry
p- kutdrikwa be dried
I+C- kutariicirima dry with insufficient heat
A+P- kutaricirwa be dried something
A+R- kutaricirangana dry for each other
kutatira warn
A- kutatirira warn for/at
P- kutatirwa be warned
R- kutatirangana warn each other
kutabya tell a story, converse
A- kutebeza tell a story to/at
I+C- kutebereza add fanciful parts to a story, exaggerate
A+P- kuteberibwa be told a story
kuteaga curse, procure a magic spell
A- kuteejera curse at
C- kuteejesa cause to curse
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P- kuteegwa (of magic spell) be procured
V- kuteegura make offering to undo magic spell against self
I- kuteejerera curse someone, procure magic spell
against someone
I+P- kuteejererwa be cursed
I+R- kuteejererangana curse each other
kutoeka cook; (of solution) settle; make (a law)
A- kutécera cook for/at; settle at; make a law for; pile up
C- kuteecesa cause to cook
P- kutoekwa be cooked
R- kutodkaana settle, calm down
V- kutékurura unpack
D- kute6kateeka prepare
I- kutécerexa press down upon; concentrate
A+P- kut@@cerwa be cooked something
A+R- kutécerangana cook for each other
$C+P-k u t 6$ acesibwa be caused to cook
$C+R-$ kuteecesangana cause each other to cook

- kutócerana pile upon each other

R+A- kutékaanira settle for
R+C- kutéekaanisa cause to calm down
I+C- kutécereza think, reflect
kutéakama perch; be naughty
A- kutékamira be naughty to
C- kutérkamisa cause to be naughty
A+P- kutéakamirwa be victim of naughty behavior
$A+R-$ kutákamirana be naughty to each other
kuteara hit
A- kutérera hit for/at; prune a banana tree
C- kutøera cause to hit, cause to be hit
P- kuteerwa be hit
R- kutérangana hit each other

- kutérana cause to be at loggerheads; mix up

A+P- kutérerwa be pruned; be hit for/at
$A+R-k u t \theta^{\prime} r e r a n g a n a$ hit for each other
$C+P-$ kuteفzibwe be caused to hit
$C+R-$ kutderangana cause each other to hit/be hit
R+A- kutéranganira hit each other at

- kutéranira cause to be at loggerheads for; mix at

I+C- kutérereza be a bad guy
kutaga set a trap; shave
A- kutejera set a trap for, ambush; shave for
C- kutejesa cause to set a trap; cause to shave; become incorrigible
P- kutagwa be trapped; be shaved
R- kutégangana trap each other
S- kutégururuk (of a trap) go off
V- kutéguurura unset a trap

- kutegrara clear space by putting things away, remove dishes after a meal

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A+P- kutejerwa be set a trap, be ambushed
\(A+R-k u t \notin j e r a n g a n a\) set a trap for each other;
        ambush each other
\(C+P-\) kutejesibwa be caused to set a trap; be caused to shave
\(C+R\) - kutejesangana cause each other to set a trap;
        cause each other to shave
\(S+A-\) kut@guurucira go off at
V+A- kuteguururira unset a trap for/at
\(V+P-\) kut@guururwa be unset
I+C- kutejerese wait for, expect
\(V+A+R-\) kut@gurirurirangana unset traps for each other
kutejeka control, manage, make rules
A- iutajecera manage for/at
C- kutajecesa cause to manage
P- kutéekwa be managed
A+R- kutajecerana have mutual understanding/control
I+C- kutajecereza lord it over others
kuteisura let go
A- kutésisurira let go for/at
P- kuteisurwa be dropped, be let free
S- kuteisuka slip off
kutema cut
A- kutémera cut for/at
C- kutemesa cause to cut
P- kutémwa be cut
R- kutemangana cut each other, fight
S- kutemuuruka (of a bush) be cleared; (of a sore) enlarge,
    get worse
V- kutémurura clear overgrown bush
A+P- kutemerwa be cut something
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C+P- kutemesibwa be caused to cut
\(C+R-\) kutemesangana cause each other to cut
R+A- kutemanganira cut each other at
R+C- kutemanganisa cause to fight
\(V+A-\) kut@mururira clear overgrown bush for
\(V+C\) - kut@muuruxa cause to clear overgrown bush
\(V+R-k u t e m u r u z a n g a n a\) cause each other to clear
    overgrown bush
kutemba go up
A- kutembera go up at
C- kutambya take up
P- kutembwa be climbed
V- kutembuura begin a new field
\(A+C\) - kutembera take up for/at
V+C- kutembuusa cause to begin a new field
kuténdeka ordain; put in a special position
A- kuténdecera ordain for
P- kuténdekwa be ordained
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R- kutendekangana ordain each other
kutengeeta sway, be loose
A- kutengeetera sway at
C- kutengeesa cause to sway
C+P- kutengeesibwa be caused to sway
kutsnse confer, plot; court (a woman)
A- kutdnseza confer at; court for/at
kut@ra even ploughed land
A- kut@rera even for
C- kutera cause to even
P- kuterwa be evened
I- kutereera be flat; be calm/settled/satisfied
A+P- kutererwa be evened ploughed land
A+R- kutererangana even for each other
C+P- kutezibwa be caused to even
C+R- kutezangana cause each other to even
I+C- kutereeza make flat; make settled
I+C+P- kut@reezibwa be made flat, be calmed
kuterama stay up late
A- kut@ramiza stay up late for/at
C- kutaramya cause to stay up late
A+P- kuteramirwa have guests stay up late
A+R- kutexamixangana stay up late for each other
kuterebura slip off, take away quickly/briefly
A- kutereburira slip off for/at
P- kutereburwa be slipped off
S- kuterebuke slip off (intransitive)
kutereka give beer
A- kutarecera give beer for/at
C- kut@recesa cause to give beer
P- kutarekwa be given beer
R- kutबrekangana give beer to each other
I- kutereecerera offer sacrifice
kuterera slip, be smooth
A- kutererera slip at
C- kutereza cause to slip
C+P- kuteresibwa be caused to slip
kuterura lift off from fire
A- kuterurira lift off for/at
C- kuteruza cause to lift off
P- kutorurwa be lifted off
S- kutaruka fall off balancing point
A+P- kut@rurirwa be lifted something
A+R- kuterurirangana lift for each other
C+P- kuteruzibwa be caused to lift off
C+R- kuterurangana cause each other to lift off
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kuteta (of a child) be spoilt
A- kutotera be spoilt at
C- kut@sa spoil ( a child)
C+A- kutesera spoil for/at
kutetema tremble
A- kutatemera tremble at
C- kutetemesa cause to tremble
C+R- kutetemesangana cause each other to tremble
kutetera (of a hen) cackle
A- kut6terera cackle at
C- kutकteza cause to cackle
C+P- kut@tezibwa be caused to cackle
kutiga pierce
A- kutijira pierce for
C- kutijisa cause to pierce
P- kutigwa be pierced
A+C- kutijiza hint, wink
A+P- kutijirwa be pierced something
A+R- kutijirangana pierce for each other
C+P- kutijisibwa be caused to pierce
C+R- kutijisangana cause each other to pierce
kutiganda cut wood for building
A- kutigandire cut wood for/at
C- kutigandisa cause to cut wood
P- kutigandwa be cut
kutiina fear
A- kutilnira be afraid at/for
C- kutisnisa frighten
P- kutiinwa be feared
R- kutifnangana fear each other
C+R- kutifinisangana frighten each other
kutiiza lend, borrow; invite
A- kutiiriza borrow for/lend for; invite for
P- kutiiribwa be lent/be borrowed; be invited
R- kutiizangana lend to each other; invite each other
kutimba dig (holes)
A- kutimbira dig for
C- kutimbisa cause to dig
P- kutimbwa be dug
A+P- kutimbirwa be dug something
A+R- kutimbirangana dig for each other
C+P- kutimbisibwa be caused to dig
C+R- kutimbisangana cause each other to dig
kutinda bridge; set up a bed
A- kutindira bridge for/at; set up a bed for
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C- kutindisa cause to bridge
P- kutindwa be bridged
V- kutinduura unset a bed
A+P- kutindirwa be bridged something
A+R- kutindirangana bridge for each other
C+P- kutinqibwa be caused to bridge
C+R- kutinzangana cause each other to bridge
kutitira be cold
A- kutitirira be cold at
C- kutitisa cause to be cold
C+P- kutitizibwa be caused to be cold
C+R- kutitizangana cause each other to be cold
kutobera sink; (of sun) set
A- kutoberera sink at
C- kutobeza cause to sink; pass the day
P- kutoberwamu be sank in
C+P- kutoberibwa be caused to sink
kutomera knock into
A- kutomerera knock into for/at
C- kutomeza cause to knock into
P- kutomerwa be knocked into
R- kutomerangana knock into each other
C+P- kutomezibwa be caused to knock into
C+R- kutomexangana cause each other to knock into
kutona announce a surprise event
A- kutonere (of an insect) sting
P- kutonwa be given surprise news
R- kutonangana give surprise news to each other
X- kutonelce arouse pain from a wound
A+C- kutoneza cause to sting, cause to be stung
A+P- kutonerwa be stung
X+X- kutonakara have a wound irritated
kutonda (of god) create; discriminate against a non-relative
A- kutondera create for/at
P- kutondwa be created
R- kutondangana discriminate against each other
V- kutondoora trace one's lineage
kutondore peel, split pods
A- kutondorera peel for
C- kutondora cause to peel
P- kutondorwa be peeled
S- kutondoka be peeled, lose skin
A+P- kutondorerwa be peeled something
A+R- kutondorerangana peel for each other
C+P- kutondozibwa be caused to peel
C+R- kutondosangana cause each other to peel
S+A- kutondocera be peeled at
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kutonga demand payment of a debt
A- kutonjera demand payment for/at
C- kutonja complain to oneself about misfortunes
    - kutonjesa cause to demand payment
P- kutóngwa be told to pay a debt
R- kutongana quarrel
    - kutongangana demand payment from each other
I- kutonjerera direct incantations to the spirits
X- kwetonjeza pray to the spirits (i.e. demand fair
        treatment from the supernatural powers. N.B. reflexive)
    - kut6njesereza be a very impantient creditor
C+A- kutonjeza complain to self at
R+A- kut6nganira plead for
R+C- kutonganisa attack verbally, engage someone in
        a quarrel
kut6oka sprout
A- kutobcera sprout at
kutoonya drip
A- kutoonyera drip onto
I- kut6onyerera drizzle
A+C- kutoonyeza cause to drip onto; write elegantly
A+P- kutobnyerwa be dripped something onto
V+S- kut6onyororoka stop drizzling
kutbora take, receive; (of a path) come into common use
A- kutobrera take for/at
C- kutbora cause to take; cause to come into common use;
    select
p- kutorwa be taken
R- kutobrana pick up something lost by chance
A+C- kutobreza copy, imitate, mimick
kut6roboza pick fruit before ripening
A- kutoroboreza pick for
C- kutbrobozesa cause to pick
P- kutorobo&ibwa be picked
kutorora cause to run away, kidnap
A- kutororera cause to run away for/to/at
C- kutoroza cause to kidnap
P- kutbrorwa be kidnapped, be caused to run away
R- kutororangana cause each other to run away
S- kutoroka run away
A+R- kutbrorerangana kidnap for each other
S+A- kutorocera run away at/to
kutota be too soft (due to too much water)
A- kutotera be too soft at
C- kutosa cause to be too soft
kutukura be red
A- kutukurira be red at
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C- kutukura cause to be red
P- kutukurwa have a part of self become red C+R- kutukurangana cause each other to be red
kutuma send(a person); summon
A- kutumira send for/at
C- kutumisa cause to send; cause to summon
P- kutamwa be sent
R- kutumangana send each other
$A+P-$ kuthmirwa be summoned someone
$C+P-k u t u m i s i b w a ~ b e ~ c a u s e d ~ t o ~ s u m m o n ~$
I+C- kutGmiiriza send on erands too often
kutumba swell, increase
A- kutumbira swell at
C- kutumbisa cause to swell
X- kutumbika soak
X+A- kutumbicira soak for
$X+P-$ kutumbikwa be soaked
kutunda do business, acquire wealth
A- kutundira do business for/at
P- kutundwa (of wealth) be acquired
$A+P-$ kutundirwa be acquired wealth
kutanga be rich; keep, care for
A- kutunjira be rich for/at; keep for
C- kutunjisa cause to be rich; cause to keep
p- kutangwa be kept
kutunta fly
A- kutuntira fly at
C- kutunsa cause to fly
X- kutuntumura make fly away
$X+S-$ kutuntumuka fly away
kutuntura worry, bother (transitive)
A- kutunturima worry for/at
P- kutuntuzibwa be caused to worry
R- kutunturangana cause each other to worry
kutura object to; (of animals) go out to graze
A- kuturira infect
C- kutuza (of a child) sleep
kutuma heap up
A- kutuumira heap up; heap up for
C- kutuumisa cause to heap up
P- kutumma be heaped up
S- kutuumulka (of smoke) go up, (of a ball) bounce
V- kutumuura blow smoke, bounce a ball
A+P- kutuumirwa be heaped something
$A+R-$ kutuumirangana heap up for each other
$C+R-k u t u m m i s a n g a n a$ cause each other to heap up
$S+A-$ kutuumuucira go up at
$V+A-k u t u u^{\prime} u r i r a$ blow for/at
$V+P-$ kutuumuurwa be blown
kutúra live, reside; put down (a load), relieve of a load
A- kutuurixa relieve for
C- kuturaa live with; cause to put down, cause to relieve
P- kutúurwa be lived in; be put down, (or a person) be relieved of a load
A+P- kutuurirwa be relieved someone of a load
$C+P-k u t G u z i b w a ~ b e ~ c a u s e d ~ t o ~ p u t ~ d o w n ~$
$C+R-k u t u x z a n g a n a$ cause each other to put down
kutwinga pound
A- kutwanjira pound for/at
C- kutwanjisa cause to pound
P- kutwangwa be pounded
A+P- kutwanjirwa be pounded something
$A+R-$ kutwanjirangana pound for each other
$C+A-k u t w i n j i s i z a$ cause to pound for
C+R- kutwanjisangana cause each other to pound
$C+P-k u t w a n j i s i b w a$ be caused to pound
kutwira take, carry; conceive; rule
A- kutwarira take for; take presents to a newly married daughter; conceive at
C- kutwaza cause to take; be rough in manners
P- kutwarwa be taken; be conceived; be ruled
R- kutwarangana take each other
A+P- kutwarirwa be carried something
A+R- kutwarimangana carry for each other
C+P- kutwazibwa be caused to take
$C+R-k u t w a ́ m a n g a n a ~ c a u s e ~ e a c h ~ o t h e r ~ t o ~ t a k e ~$

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kutweija press charges; pay tribute/gifts to a ruler
A- kutwaijera press charges against somebody
C- kutweijesa cause to press charges
p- kutweijwa (of a case) be brought forward
\(A+A-k u t w e i j e r e r a ~ p r e s s ~ c h a r g e s ~ a g a i n s t ~ s o m e b o d y ~ f o r / a t ~\)
\(A+R-k u t w e i j e r a n g a n a\) press charges against each other
\(A+P-\) kutwaijerwa be charged; be handled a case for
\(C+R-\) kutweijesangana cause each other to press charges
\(C+P-k u t w e i j e s i b w a ~ b e ~ c a u s e d ~ t o ~ p r e s s ~ c h a r g e s ~\)
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kutyaza sharpen
A- kutyariza sharpen for/at
C- kutydzisa cause to sharpen
P- kutydzibwa be sharpened
A+R- kutydxizangana sharpen for each other
$C+R-k u t y a z i s a n g a n a$ cause each other to sharpen
kuvúga drive, ride
A- kuvújira drive for/at
C- kuvújisa cause to drive

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P- kuvagqua be driven
A+P- kuvGjirwa be driven something
A+R- kuvújirangana drive for each other
C+P- kuvajisibwa be caused to drive
C+R- kuvújisangana cause each other to drive
kuvamba go to (usually) a neighbor's to drink beer
A- kuvGmbira seek beer at
C- kuvumbisa cause to seek beer
p- kuvambwa be visited by people when there is beer
R- kuvumbangana visit each other for beer
kuyoors scoop up
A- kuyoorera scoop up for/at
C- kuyooza cause to scoop up
p- kuyoorma be scooped up
A+P- kuyoorerwa be scooped up something
A+R- kuyoorerangana scoop up for each other
C+P- kuyoozibwa be caused to scoop up
C+R- kuyoozangana cause each other to scoop up
kuzaana play
A- kuraanira play for/at
C- kurasnisa cause to play, joke
p- kuradnwa (of a game) be played
A+P- kuzaanirwa be played a game
A+R- kuzammixangana play for each other
C+P- kuraanisibwa be caused to play
C+R- kuzaanisangana cause each other to play
kuydara deliver, give birth
f- kuydarira deliver for/at
C- kuramza cause to deliver
P- kurdiarwa be born
A+C- kuzadriza cause deliver for
A+P- kuzadxirwa be born child, be born at
C+P- kuzadzibwa be caused to deliver
C+R- kuxadxangana cause each other to deliver
kurenjerera go to a place many times; be dizzy
C- kusenjeresa cause to go to a place many times;
    cause to be dizzy
C+P- kuzenjerezibwa be caused to go many times;
    be caused to be dizzy
kuzibira prevent
A- kuribirira prevent for/at
C- kumibiza cause to prevent
p- kuzibirwa be prevented
R- kuzibirangana prevent each other
kuziha swim
A- kurihira swim at
C- ku&ihisa cause to swim
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C+R- kurihisangana cause each other to swim
kuziika bury
A- kuriicira bury for
C- kuriicisa cause to bury
P- kurikwa be buried
v- kuziikuura exhume
A+P- kuriicirwa be buried something
A+R- kuxiicirangana bury for each other
C+R- kumiicisangana cause each other to bury
V+A- kuriikuurira exhume for
V+P- kuriikuurwa be exhumed
kurimbm swell
A- kurimbira swell for/at
C- kurimbisa cause to swell
    - kuzimbya cause to swell
V- kurimburura cause a swelling to disappear
S- kurimburuka (of a swelling) disappear
C+P- kurimbisibwa be caused to swell
V+A- kurimburucira (of swelling) disappear at
kurimura pay back a dowry (after a divorce)
A- kurimurira pay back a dowry to
C- kuzimuza cause to pay back a dowry
p- kuximurwa (of a dowry) be paid back
C+R- kurimurangana cause each other to pay back a dowry
kuzina dance, sing
A- kurinira dance for/at
C- kurinisa cause to dance
P- kuzinwa be danced
I- kurfnirira sing softly in celebration/in anticipation
        of a prize
A+P- kuzinirwa be entertained with a dance/song
A+R- kuvinirangana dance for each other
C+R- kuzinisangana cause each other to dance
kurinda choke (transitive); close off
A- kuzindira choke for/at
C- kurindisa cause to choke
    - kurinra cause to choke
P- kurindwa suffocate
C+P- kurindisibwa be caused to choke
kurinduka visit (usually with presents)
A- kuzinducira visit (person)
A+P- kurinducirwa be visited
A+R- kuzinducirangana visit each other
kuringa role up; give a charm to prevent escape
A- kurinjira role up for/at; charm for/at
C- kurinjisa cause to roll up
P- kuyIngwa be rolled up; be charmed
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D- kuringazinga make very weak, paralyse
X- kuringama paralyse, fail to grow normally
S- kuringuruka become unwound
v- kuzingurura unwind
I- kurinjixira wind round
A+P- kusinjirwa be rolled something
A+R- kuxinjizangana roll up for each other
C+R- kurinjisangane cause each other to roll up
D+P- kuyingwazingwa (kusingasingwa) be weakened
    (e.g. by an illness)
X+A- kuzingamira paralyse at
S+A- kuringurucira become unwound at
V+A- kuzingururira unwind for/at
V+P- kuringururwa be unwound
I+P- kuzinjirirwa be wound round
kuzira be taboo, be forbidden; avoid
A- kuririra avoid at
C- kurima cause to avoid
P- kurirwa be avoided
R- kurirangana be taboo to each other
    - kuzirana be taboo to each other
v- kurirura make end avoidance
kurítira enclose, fence off
A- kuzitirira enclose for
C- kuritiza cause to enclose
p- kuritirwa be fenced off
A+P- kuritirirwa be fenced off something
A+R- kuzitirirangana fence off for each other
C+P- kuritizibwa be caused to fence off
C+R- kuritirangana cause each other to fence off
kuzonga sway; go indirectly, take long to reach
    a destination, (of a route) be circuitous
A- kuronjera sway at
C- kuronja cause to sway; cause to go indirectly
C+P- kuzonjibwa be caused to go indirectly
kuzoora find, present to view; widen (eyes) i.e. be on the
        lookout
A- kuroorera find for
C- kurooza cause to find; cause to widen (eyes)
P- kuzoorwa be found
S- kuzooka be found
A+Y- kuroorerwa be found something
A+R- kuzoorerangana find for each other
C+P- kuzoozibwa be caused to find; be caused to widen eyes
C+R- kuroozangana cause each other to find; cause each
    other to widen eyes
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