

CASE CATEGORIES OF SOME BASE VERBS OF
SHISA AND OF SOME OF THEIR
VERBAL EXTENSIONS

by

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Being a thesis presented to the University of London
as part of the requirements laid down for
the degree of Ph. D.

December, 1975

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ABSTRACT

For this analysis, the area of research was the verbal extensions of Shisa, a dialect of the Baluyia in Western Kenya.

The hypothesis was two-fold: (1) There is operative a complete set of case functions in Shisa, a language having no surface case inflections, and (2) a semantic/surface-syntactic description which included the category of case would be adequate for providing the grammatical context for lexical entries.

Sixty-one base verbs, as they occur in uniclause, initiating sentences (sentences which initiate conversation), were collected from informants and examined at seven levels of classification (which included number, kinds, and behavior of NP's with which a verb could be associated, plus the semantic features of animacy, inanimacy, number, and so on).

The verbal extensions were then investigated according to pertinent criteria. The result: Four major types of contrastive clauses were identified: Descriptive, Agentive, Entailing, Stative, in all of which occur--co-existently--varying types of syntactic patterns and numerous semantic classifications of verbs (i.e. verbs associated with animate/inanimate, singular/plural, and so on, NP's). Altogether a set of eighteen case and ten compound-case functions operative within Shisa were identified.

The grammatical component of each syntactic pattern was summarized in schematic form, and a set of symbols was arranged, providing for the indication of the grammatical context for each lexical entry.

This thesis has made these contributions: (1) Fifteen verbal

extensions were identified (only six were treated of in this analysis). (2) A set of eighteen case and ten compound-case functions was identified. (3) A means of identifying these case functions through observance of semantic and surface syntactic behavior, rather than by deep structure, was provided. (4) A degree of grammatical analysis adequate for the lexical entries of Shisa verbs and their extensions was attained. (5) It has provided a set of symbols for indicating the grammatical context of each lexical verb entry.

PREFATORY NOTE AND ACKNOWLEDGEMENTS

In this study only sentences of the uni-clause, uni-verbal type have been chosen, largely for reasons of space. However, I believe that with some modifications the methods applied here could also be used in a study of sentences in which subordinate clauses occur. But to have included compound or complex sentences in this analysis would have made an already very long study even longer. Too, such secondary forms as adjectives, possessives, demonstratives, and intensifiers--for the most part--have also been omitted because of space. Conclusions, based on the findings from the sample presented, cannot of course be final for all Shisa verbs, but for the purpose of this study they were thought to be adequate. Any future research could begin where this attempt has ended.

To many people I am grateful for help, particularly to the following: Professor W. H. Whiteley, Dr. J. Maw, Dr. C. M. M. Scotton. Especially am I grateful to Dr. J. H. Carter for her willingness to become my tutor after the tragic death of Professor Whiteley. Her guidance has been most helpful. Also, I am indebted

to my two chief informants, Mary Wycliffe and Dorina Anunda, as well as to many other Bashisa, who have given generously of their time and assistance.

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PART I

INTRODUCTION TO THESIS

CHAPTER 1

INTRODUCTORY

1.0. Introduction

This study is concerned with the verbal extensions of the Shisa dialect of the Luyia language in Western Kenya. The following are pertinent facts concerning the Shisa people and concerning this study.

1.1. Locus of the Study

The Shisa are a tribe of the Baluyia, a cluster of eighteen closely related Bantu-speaking peoples occupying North and Elgon Nyanza in Western Kenya, a territory extending from southern latitude $0^{\circ}0'$ --exactly on the equator--north 64.6 miles to Mt. Elgon-- $0^{\circ}56'$ --and from $34^{\circ}5'$ eastern latitude near Busia on the Uganda Border east sixty-four miles to $34^{\circ}59'$ on the Nandi escarpment. This territory covers an area of 2,684 miles, according to Wagner (1949, p. 4). The population of the Baluyia is ca. $1\frac{1}{2}$ million and of the Shisa people, ca. thirty-nine thousand, according to the last census.

The Shisa people are a part of Guthrie's (1948) classification, which he termed 'Hanga, Zone E, Group 32a.' It was among these people that research for this thesis was done.

1.2. Need for the Study

In conjunction with the research for the syntactic behavior of Shisa verbs and their extensions, it was also sought to list them as lexical items. One cannot study Shisa verbs without becoming

aware of the problems the verbal extensions¹ pose. For example, some verbs are associated obligatorily with a certain number and kinds of objects, others cannot be associated with any, and still others are optionally associated with one or more. But when these same radicals² are extended, all this may be changed. Thus it was necessary not only to provide a sound method for making lexical entries for base-verbs,³ but also for their extended forms. For a proper lexical entry provides the grammatical context of those items.

Professor Whiteley (1968, pp. 3-4) pointed up the problem very clearly for Swahili (and the problems of Shisa are very like those of Swahili) by advocating the improvement of lexicographic description by means of more careful attention to the known syntactic properties of the entries. Said Whiteley (Ibid.),

Two areas in which the existing dictionaries are particularly weak are those of transitivity and verbal extensions. There is, for example, no indication of whether a verb may 'take' an object-prefix or not; nor, despite the inclusion of many extended forms, is it clear from the absence of a particular form whether this means that it cannot occur, or simply that there is nothing remarkable about its usage and hence it does not need special mention. Again, it is not clear on what basis the listed forms have been selected, whether the aim has been exhaustiveness or selectivity...the field of verbal extensions is a vast and complex one which has received very little attention from Swahili scholars until the last year or two. But the preparation of a major dictionary seems an appropriate time to try and reach some generalizations about patterns of transitivity, both for minimal and extended radicals, and this will involve a re-examination of the whole basis for the classification of verbal extensions.

Another problem posed by the verbal extensions was that of determining types of subject and object NP's (a problem also in base-verb sentences) in sentences in which extended forms of the verbs occur. A proper classification of these noun phrases must be based upon semantic syntactic behavior of the items in question,

for only a native speaker could give a truly intuitional treatment. In this area Fillmore (1968) was most helpful, although his work is intuitional. Still, several of his ideas could be put to syntactic use.

1.3. Purpose of the Study

Clearly, research in depth into the verbal extensions was necessary. The hypothesis of this research, then, was this: (1) There is operative a complete set of case functions in Shisa, a language having no surface inflections, and (2) a semantic/surface-syntactic description which includes the category of case will be adequate for providing the grammatical context for lexical entries for verbs and their extensions.

A methodologically sound means was sought to identify the cases, to provide an adequate description of the grammatical component, and to present a way of indicating the grammatical context in lexical entries for verbs and their extensions. These purposes were to be attained by giving careful attention to the syntactic and to a certain extent, semantic behavior of base verbs and their extensions, by summarizing the grammatical component in an economical manner, and by means of sets of symbols to provide a schema for making lexical entries.

1.4. Limitations of the Study

In the beginning nearly one hundred verbs were researched. Their extensions have been classified into fifteen extensions. At first, it was thought there would be only eleven such classifications. Such a scope proved to be far too great for intensive study. The sample was then cut to a list of sixty-one verbs, investigated

in their base shapes and in six of these extensions. It was found that all verbs do not occur in all extensions. The reasons for this fact were not ascertainable with a corpus of these proportions.

All conclusions were based on the findings from this sample of sixty-one verbs. Such conclusions cannot, of course, be final for all the verbs in Shisa, but for the purposes of this study they were considered adequate. Any future research could begin where this attempt has ended.

It was discovered that what, in the past, was classed as the 'applied' or 'prepositional' extension was, in fact, a homophonous group of three distinct extensions, which are termed here as follows: (1) Benefactive, (2) Instrumental, and (3) Locative. The same was true of what had been termed the 'reciprocal' extension. These three extensions are here termed as follows: (1) Reciprocal, (2) Back-and-Forth, and (3) Comitative. These six are the extensions which are presented in this analysis.

The extent of the research went so far as to determine the grammatical component and a method for making lexical entries of the sixty-one verbs and their extensions. Use was made of Fillmore's suggestion concerning case frames with the exception that all was determined according to surface syntactic behavior and certain semantic features.

1.5. Method of Research and Sources of Data

In the beginning of the research, the assistance of two Shisa informants (Mary Wycliffe and Dorina Anunda) was obtained. Each, separately, gave two hours a day to the work.

Each verb was written at the top of two sheets of paper,

written in the active form (or untransposed form, see p. 36). Then, about two-thirds of the way down, the same verb was written in the passive extended shape. Each informant was given a sheet of this paper and asked to write sentences using that particular verb in the way she used it (if she employed it in her idiolect), both in the active form and in the passive extended shape. This was one way in which base-verb sentences were secured. These sentences were then checked with various groups of Shisa people and with individuals. If there were differences of opinion, they were discussed with all groups until all were agreed on what really should be. Where there was doubt or continuing disagreement, the sentences were eliminated or checked for other forms of occurrence.

When the informants employed 'secondary' word categories (i.e. adjectives, demonstratives, adverbs, and such), a further check was made with these categories eliminated from the sentence. If the informants' consensus was agreeable thereto, these word categories were omitted from the sentence, leaving, wherever possible, sentences containing only 'primary' word categories (i.e. nouns and verbs). Thus it was possible to obtain and analyze, for the most part, only what was necessary to 'minimal sentences' (see p. 27 for Whiteley's definition of a minimal sentence).

Another set of papers was duplicated for the extensions. The verb was written at the top. In a column on the left side of the page were the names of the extensions. In another column, to the right of the extension name, the verb form for each extension was written. And in a wide space to the right of that, each informant was asked to write sentences, using the verb form on the left, if ever she employed such a word in her speech. Many, many spaces were

left blank by her. These sentences of each informant were combined and checked with other individuals and groups. Only those for which there was substantial concurrence were included in the corpus. Often one of the sentences of an informant was totally rejected, but another using the same word shape was given in its place. If this checked out satisfactorily with other informants, it was retained in the corpus instead of the first one.

After intervals of two or three weeks, a final choice of sentences was again checked with the two informants and then with other individuals and groups for any gaps or inaccuracies.

All sentences in the corpus were checked for tone with one informant, Mrs. Mary Wycliffe.

Other sources of material for the corpus were as follows:

1. Mundáàlo tsiámanáni, by Miriam Wandai (a book of folklore of the Baluyia)
2. Akǎbalúyia Běmumbo, by Daniel Wako (a book of the customs of the Samia tribe of the Baluyia)
3. Sermons of Shisa pastors, recorded on tape
4. Conversations, accounts of customs and folktales recorded on tape and told by an elderly Shisa man, who does not speak English.

1.6. Overview of the Remainder of the Thesis

Since the purpose of this research was not to present an analysis of the phonological system of Shisa, it was thought the brief observations of that part of this work should appear as an appendix to this thesis (see Appendix II).

Likewise, the section on morphology is presented in

Appendix III Verb lists indicating lexical entries for each verb are given in Appendix IV.

The body of the thesis itself is divided into three principal sections: (1) Introductory material, (2) The basic chapter (Chapter 2), in which generalizations applying to the corpus of material are given, and a treatment of base-verbs in Chapter 3: (a) Sample sentences, (b) their grammatical component, and (c) the method for making lexical entries in which case frames, largely as suggested by Fillmore (1968), are employed. A brief treatment on 'case' and a statement of the position of this thesis in relation to it is presented at the end of Chapter 2.

Section (3) consists of six chapters, one devoted to each of the six extensions expounded in this thesis.

In a final, brief section some conclusions are drawn. Abbreviations, conventions, and notes are presented at the end of Chapter 11, the concluding chapter.

P A R T I I

B A S E V E R B S O F S H I S A

CHAPTER 2

BASE-VERB SENTENCES OF SHISA

2.0. Introduction

Units which expound levels of grammatical description may be divided into five categories: morpheme, word, phrase, clause, and sentence. If all units were arranged on a scale of rank (level), according to which the 'highest' level would be the sentence and the 'lowest' would be the morpheme, it could be said that the units of a higher rank are composed of units of a lower rank, or that units of a higher rank could be analyzed into units of the rank below it. (Lyons, 1969, pp. 170-71; Gleason, 1969, pp. 66-67) In other words, each rank can be described in terms of its structure.

Every type of structure (specifically, NP, PNP, V, and so on; see pp. 284-85 for abbreviations) within each of these categories is characterized by particular kinds of relationships, for structure presupposes relationships; and relationships presuppose co-occurrences, a linguistic phenomenon manifested in patterns of selectivity and sequence. This thesis will be concerned with three of the five categories mentioned above (i.e. words, phrases, and clauses/sentences; see the following three pages for definitions of clauses/sentences as used in this study), and the relationships existing between the constituent members of each, i.e. in terms of selectivity and sequence. Clause and/or sentence structures are treated in this chapter. The treatment of word and phrase structures is given in Appendix III.

In this chapter also, criteria for the classification of verbs (see p. 29), various kinds of NP's (noun phrases), and clause types will be set forth; the category of case will be introduced (and more fully treated in Chapter 3). Verbs will be tested and classified according to (1) number and kinds of NP's with which each can, or must, be associated, (2) whether or not the verb can, or must, be associated with an object prefix (OP)--or in the case of a locative object, with a locative suffix (locS)--when object NP's occur in their pronominal forms (see pp. 38-43), and (3) whether there are univalent, multivalent, and polysemous verbs. All this testing will be done to determine whether verbs can be identified with various clause types. Such testing should also make it possible to identify the various types of basic clauses to be found in Shisa sentences.

For if it can be established that some verbs occur in some type(s) of clause(s) and some in other types, the first element of lexical entries will have been ascertained--the clause type(s) of each verb. If kinds and numbers of NP's with which each verb can/must be associated are determined, a second element of the lexical entry can be ascertained--the type of syntactic pattern occurring within a particular kind of clause. Since, as was stated on page 18, the main purpose of this study is to find a way to make lexical entries giving an adequate grammatical context for verbs, this procedure in the analysis will, it is hoped, yield the desired results.

However, before proceeding further along these lines, it will be necessary now to define the terms sentence and clause as employed in this thesis.

2.1. Sentences

It would be well at this point to establish the position of this thesis concerning the terms 'sentence' and 'clause.' Lyons (1969, p. 171) gave the traditional grammarian's definition of 'sentence': "...the sentence...was traditionally defined in terms of 'subject' and 'predicate'," and of a clause: "A group of words with its own subject and predicate, if it is included in a larger sentence, is a clause." Bloomfield (1935, pp. 170-1) defined the sentence as "an independent linguistic form, not included by virtue of any grammatical construction in any larger linguistic form." Lyons (Op. cit., pp. 172-3) summed it up by stating, "The point of Bloomfield's definition can be stated more concisely as follows: the sentence is the largest unit of grammatical description. A sentence is a grammatical unit between the constituent parts of which distributional limitations and dependencies can be established, but which can itself be put into no distributional class. This is equivalent to saying that the notion of distribution, which is based on substitutability, is simply not applicable to sentences."

Whiteley (1966, p. xxiv) defined the concept of 'sentence' as follows:

The concept of sentence...is an intuitive one.... The intuitive nature of the concept is associated with a recognition on the part of the speaker--and perhaps more importantly, on the part of the linguistic community of which he is a member--that in discourse there are accepted points at which he may start afresh, or give way to a second speaker. Such points may be viewed as positive/negative choices imposed on him by the patterns of his language. The patterns themselves are conditioned grammatically and their conclusion is marked by the onset of periods of non-speech which are not conditioned grammatically, but are nevertheless generally accepted. The patterned units of discourse which are separated by such periods I shall refer to as sentences....

Minimal sentences, i.e. those which cannot be contracted further without loss of identity as sentences, can be classified....

Whiteley's 'minimal sentences' could be roughly equated to the 'simple sentence' of traditional grammar, i.e. a uni-clause unit of grammatical description. The stance of this analysis regarding the definition of a sentence agrees with Bloomfield, Lyons, and Whiteley, as set forth in the preceding paragraphs. Additionally, it applies the term clause to four types of 'minimal sentences' operating according to definite rules of syntactic behavior and capable of being included 'in a larger sentence', although in this corpus the 'larger' sentences do not occur, for in this analysis only minimal sentences of the uni-clause, uni-verbal type have been chosen for description and analysis. Beginning with the greatest possible number of NP's with which some base-verbs are associated (the optional locative NP possible with all verbs is here excluded) and continuing to the smallest number possible, base-verb sentence patterns are given as follows:

$S \rightarrow NP_1 + V + NP_2 + NP_3 \pm NP_4$ Sára aniina tsikhwî khumusáàla (nòmukhóno).
Sara she-climbs tree for firewood
(with one hand).

$S \rightarrow NP_1 + V + NP_2 \pm NP_4$ Dóbi areka omubéro (nëshisáàla).
Dobi he-sets trap (with stick).

$S \rightarrow NP_1 + V + NP_2$ Sára abisa omwána. - Sara she-hides child.

$S \rightarrow NP_1 + V$ Omundu úsinjiile. - Man he-has stood up.

The verb is treated as the focal point of the sentence, and the analysis will be concerned with the constraints imposed by particular sets of verbs on their co-occurrent nominal and/or pronominal phrases. These phrases may be realized as all nominals, all pronominals, or as combinations of each, and in each case the verb will be referred to as a one-, two-, etc., nominal verb. These constraints are described as follows:

1. the number of NP's with which the verb is associated in a sentence
2. whether or not the verb is associated with an object prefix (OP),¹ or, in the case of a locative noun object, with a locS
3. whether OP's, locS's, and NP's may occur in combinations, and if so, in what combination(s)
4. whether or not the verb is capable of occurring in a clausal affiliation, (see p. 37 for definition of affiliation as used here), and if so, which kind(s)

2.2. Uni- and Multi-nominal Verbals

Some verbs are associated with only one nominal, the subject NP, a nominal with which all verbs are obligatorily associated in the traditional type of declarative sentence (the only type of sentence occurring in the corpus of 'referent' sentences--see pp. 26, 30--the material gathered for this analysis). Other groups of verbs may be associated with two or more nominals in various types of syntactic patterns, as shown on the preceding page. Verbs which are associated with only one NP are termed 'uni-nominal,' and those which are associated with more are termed 'multi-nominal.'

Additionally, verbs may occur in sentences in association (1) with nominals only, (2) with pronominals only, or (3) with nominals and pronominals in combinations. As long as the nominal is represented--whether by the nominal itself or its pronominal substitute--the verb will be classified accordingly, i.e. one-nominal, two-nominal, and so on.

2.21. I. Uni-Nominal

The following sentences were studied:

1. Omútoká kwitsânga.
Motorcar it-is coming.
- * 2. Omútokâ kwitsanga omundu.
Motorcar it-is coming a man.
3. Omusíani ahulilânga.
Boy he-hears.
4. Omusíani ahulila omwána.
Boy he-hears child.

*Note: Starred sentences are sentences which were unacceptable to Shisa informants.

Sentence 1 is composed of NP + V and is acceptable to the Shisa. The pattern of sentence 2 is NP₁ + V + NP₂, the NP₁ + V being the same elements as those of sentence 1. NP₂ is an object noun, but this second sentence was rejected by the Shisa informants. Sentence 3 is represented by this pattern: NP₁ + V, and sentence 4 is composed of the same NP's and the same V plus an object NP. Both sentences 3 and 4 were accepted by the informants.

Results of this study showed that some verbs are always uni-nominal, i.e. one-nominal verbs only, and some are sometimes uni-nominal and sometimes multi-nominal. Also evident was the fact that uni-nominal verbs can be classified into two groups: (1) those always associated with only one NP and (2) those sometimes associated with only one. (For lists of such verbs see Appendix I, p. 299).

2.22. II. Multi-Nominal

Another set of sentences was studied:

- A.*1. Omwána abisa.
Child he-hides.
2. Omwána abisa amáramwa.
Child he-hides bananas.

- *3. Omwána abisa amáramwa nèíngubo.
Child he-hides bananas with cloth.
- B. 4. Omuleli ásaaba amakhóno.
Nursegirl she-washes her hands.
5. Omuleli ásaaba amakhóno nende isaábúùni.
Nursegirl she-washes her hands with soap.
6. Omuleli ásaaba omwána amakhóno nende isaábúùni.
Nursegirl she-washes child's hands with soap.
- C.*7. Dóbi aha eshisáàla.
Dobi he-gives a stick.
8. Dóbi aha Sára eshisáàla.
Dobi he-gives Sara a stick.
9. Dóbi aha Sára eshisáàla nămakhóno.
Dobi he-gives Sara a stick with his hands.
- D.10. Sára ahomânga.
Sara she-is smearing (mud).
11. Sára ahoma obutóyi/obwélu.
Sara she-is smearing mud/floor.
12. Sára ahoma obwélu obutóyi.
Sara she-smears the floor (with) mud.
13. Sára ahoma obwélu obutoyi nămakhóno.
Sara she-smears the floor (with) mud with her hands.

In studying the above sentences, it was found that in group A, -bís- 'hide' is always associated with only two nominals (except for an optional locative NP--locNP--common to all but one or two verbs. Locative NP's are treated in chapter 7). In group B, -sááb- 'wash (body part)' is a two-, three-, or four-nominal verb. In group C, it was found that -h- 'give' is always at least three-nominal and may be four-nominal. In group D, -hom- 'smear' may be associated with one, two, three, or four nominals. Thus, some verbs are always only two-nominal, others may be two-nominal or more, still others are at least three-nominal (and maybe more), while a fourth group may be one-, two-, three-, or four-nominal. It should be borne in mind that at this level of classification the attempt is

being made to determine only which verbs are one-nominal, which are two-nominal, and so on. (See Appendix I, pp. 299-310 for classification of verbs according to kinds associated with various numbers of nominals)

Since it has been shown that verbs vary in their ability to be one-nominal (always, sometimes), two-nominal (always, sometimes), and so on, another set of sentences was studied.

1. Omundu úkhamilê.
Man he-has disappeared.
- *2. Omundu úkhamile omútokâ.
Man he-has disappeared motorcar.
3. Omukhási abisa amáramwa.
Woman she-hides bananas.
- *4. Omukhási abisa amáramwa něshikápu.
Woman she-hides bananas with basket.
5. Omusáatsa akona omukhásiwê.
Man he-sleeps with his wife (sexually).
6. Omwána akona (tsindóòlo).
Child he-sleeps (sleep).
- *7. Omwána akona (tsindóòlo) (nende tsimóni).
Child he sleeps (sleep) (with eyes).
8. Omwéchi asooma (eliéko) (nǒmwóyo).
Pupil he-reads (lesson) (aloud--with voice).
9. Dóbi areeba (abèéchi) (amaréèbo) (nǒmunwa).
Dobi he-asks (pupils) (questions) (aloud, orally--with voice).
10. Omusiani areka omubéro (nende omukoye).
Boy he-sets trap (with rope).
11. Omwíbi arema (omundu)+(omukhóno) (nǒlupânga).
Thief he-slashes (man's)+(hand) (with machete).
12. Dóbi aniina (tsikhwi)+(khumusáala) (nende omukoye).
Dobi he-climbs to get (firewood)+(in tree) (with rope).
13. Okwemba aha Tsuma eshisáala (nǎmakhóno kabilî).
Okwemba he-gives Tsuma stick (with both hands).

This second set of sentences shows that verbs are not only one-, two-, three-nominal, and so on but that some verbs are univalent

(e.g., -khám- 'disappear' and -bís- 'hide') and others are multivalent (e.g., -kon- 'sleep/sleep with (sexually)/lie down'). Verbs in sentences 1-4 are univalent; others may be multivalent, i.e. capable of occurring in more than one syntactic pattern, like sentences 5-13, p. 32.

2.23. Polysemous Verbs

It was also noted that still other verbs are capable of occurring in one- and two-nominal, and so on, constructions in which meaning makes a difference, e.g., -kon- 'sleep/sleep with (sexually)/lie down'. See sentences 5-6, p. 32. In sentence 5, -kon- is an obligatorily two-nominal verb. In sentence 6 it is obligatorily one-nominal and optionally two-nominal. In 5 the meaning is 'sleep with sexually,' in 6 it is 'lie down' or 'sleep.' With NP₂ the meaning is to 'sleep sleep.'

Two stances are possible in relation to these verbs. One is that they are different verb radicals because their semantic interpretations are different. The other stance is that they are the same verb but that their meanings differ. The second is the stance adopted in this thesis: These verbs will be referred to as polysemous. This classification, then, provides a subcategory. See Appendix I, pp. 299-310 for the complete list of these verbs and their meanings. Verbs, then, can be divided into groups as follows:

2.221. Classification according to univalence

a. obligatorily one nominal only

-khám- 'disappear'

b. obligatorily two nominals only

-bís- 'hide'

2.222. Classification according to multivalence

- a. Minimum 1---Maximum 2
-ràáts- 'flow/leak'
- b. Minimum 1---Maximum 3
-sòóm- 'read/attend school'
- c. Minimum 1---Maximum 4
-rèéb- 'ask/question'
- d. Minimum 2---Maximum 3
-rék- 'set (trap)'
- e. Minimum 2---Maximum 4
-rém- 'chop/slash'
*-niin- 'climb to get/climb'
- f. Minimum 3---Maximum 4
-h- 'give'

2.223. Classification according to polysemy

- a. Minimum 1---Maximum 2
-kon- 'sleep/sleep with (sexually)/ lie down'
- b. Minimum 1---Maximum 3
-lol- 'see (ability)/see (something)'
- c. Minimum 2---Maximum 2
-lǐnd- 'wait for/watch over'
- d. Minimum 2---Maximum 3
-rék- 'set (trap)'
- e. Minimum 2---Maximum 4
-niin- 'climb for/climb'

See Appendix I for these classifications.

*Note: In sentence 11, the verb -niin- 'climb to get/climb' may be associated with a locative noun (locNP) as its fixed object (roughly equivalent to the direct object in traditional grammar).

In the research for this study, it was found that all verbs can be associated with an optional locative NP. Locative NP's are treated in detail in chapter 7, pp. 187-243. Therefore, only locative NP's which are fixed objects of verbs will be treated of elsewhere.

This analysis of verbs according to the number of NP's with which each may be associated is useful and enlightening, but numerous problems remain: What kinds of NP's occur in the position to the right of the verb? to the left? How do these NP's behave in other syntactic patterns? Can they occur in other positions, if so in what shapes? Is word order important? Clearly many problems remain to be solved.

Of importance is the fact that in 'initiating' sentences (i.e. sentences which initiate a conversation--a term employed by Guthrie, 1949a, p. 17, fn. 1) the grammatical-subject NP (i.e. NP₁) is obligatory with all verbs, but in subsequent utterances the SP² + V sequence suffices (SP for 1st person, singular -'I'- is here regarded as part of class 1, as did also Professor Guthrie). (See p. 37, 1. 24.) Pronominal forms and their possible occurrences and co-occurrences with NP's must yet be considered.

2.3. Definition of Terms

At this point it is necessary to introduce and define some new terms which will be extensively employed in this analysis. Certain 'sets' of sentences coexist in a language. They represent ways of expressing the same event, for example:

- a. Omusiáni aliile inyama. - Boy he-ate meat.
- b. Inyama yíliilwe nênde omusiáni. - Meat it-was eaten by boy.
- c. Achilíile. - He ate it.
- d. Yilíilwe ninayê. - It was eaten by him.

Sentences a and b coexist. Who can say whether a is sequential to b, or vice versa? Both describe the same event. Sentence c presupposes sentence a, and d presupposes b.

Since the term transformation(s) is so firmly associated with the concepts of 'deep' and 'surface' structure in generative grammar, and since this study seeks to prove certain hypotheses by means of surface, syntactic behavior (except for the considerations given to some semantic features), it would seem inappropriate to use the terms 'pronominal transformations,' 'passive transformations,' and so on. I, therefore, propose to employ the term used by Professor Whiteley (1968, p. 10), who stated as follows:

It is a property of items participating in an object-relationship that they also participate in a subject-relationship, and one way of exposing differences of transitivity is to transpose the item(s) in the object-relationship with those in the subject-relationship while retaining the same lexical items.... The sentences involved in such an operation I regard as constituting an 'affiliation-set.'

I propose to use Professor Whiteley's term 'affiliation set(s)' in this study to apply not only to the transposition of subjects and objects but also to apply to these same sentences in their pronominal forms. By the term 'affiliation' is meant those sentences having the same vocabulary items, but with different structures, such as arrangements of items, changes in such function words as verbs and nouns, or other structure markers; or the occurrence of a vocabulary item in a different form, such as nouns being represented by their 'pronominal' counterparts, to use a term from traditional grammar.

In any description of this sort, it is necessary to have some point of reference. I propose, therefore, to apply the term 'referent sentence(s)' to those members of sets which occur in contrast with other members of the same set in structure and/or in

form. For example, in a certain set of related sentences, one structure will be termed the 'passive affiliation.' Another sentence of the same set will be termed the 'pronominal affiliation' with its sub-sets of 'sequential' and 'mixed' pronominal affiliations. The structure in a set which has undergone no pronominal, passive, and so on, change will be termed the 'referent' sentence, rather than, for example, the ambiguous 'active' as opposed to 'passive' terminology, for some sentences seem to be neither 'active' nor 'passive.'

Such terms, then, as 'referent sentence(s),' 'passive affiliation(s),' 'entailing affiliation(s),' 'sequential affiliation(s),' and so on, will be employed throughout this study.

Sentence a on page 35 is, according to this analysis, the 'referent sentence'; sentence b on page 35 is a 'passive affiliation'; sentence c is a 'sequential pronominal affiliation' of a, and d is a 'sequential pronominal affiliation' of b. More will be said about the various affiliations as each is presented on the pages that follow.

Sentences occur in various types of syntactic patterns. A syntactic pattern, as here defined, consists of a verb plus the particular number and kind(s) of nominals with which it may be associated arranged in a sequence of co-occurrences, each element bearing a definite relationship to the verb and to each of the other elements of the sentence. Of great importance also, in a Shisa non-imperative syntactic pattern is the subject prefix (SP)--a particle which is in agreement with the grammatical subject, is obligatorily prefixed to the verb, and is in the system of grammatical control.

2.4. Affiliations

2.41. Introduction

On page 29, some criteria for testing and classifying verbs were given. The first criterion was for classifying verbs according to the number of NP's with which a verb could be associated. The result of that testing showed that some verbs are one-nominal, two- or three-nominal, and so on (some of them always and some of them sometimes).

A further level of testing showed some to be univalent (i.e. always occurring with a set number of nominals), and others to be multivalent (i.e. verbs occurring in syntactic patterns in which they are associated with varying numbers of NP's). Also during this second-level testing, it was noticed that some verbs are polysemous and that with differences of meaning occurred differences in syntactic patterns. The first-level testing term will still be referred to at times, but the more exact classification according to univalence, multivalence, and polysemy will be used, at least for some time, in further testing.

2.411. Pronominal Affiliations

Now the second and third criteria listed on p. 29, that of pronominal affiliations, will be applied in testing. For the sake of convenience in testing, affiliations will be divided into two general groups: (1) pronominal and (2) clausal.

Criteria 2 and 3 on p. 29 indicate that testing is to be done for pronominal affiliations to determine (2) whether or not these verbs are associated with an object prefix (OP)¹ type of object, or in the case of a locative object, with a locS-type of object (These together with SP--subject prefix--will be termed 'sequential

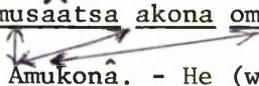
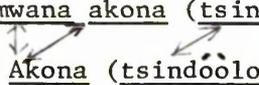
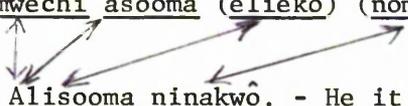
affiliations'), and (3) whether OP's, locS's, and NP's occur in combinations and, if so, in what combination(s) (These will be termed 'mixed affiliations'--if any occur).

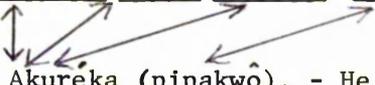
The unstarred sample sentences presented on pp. 31-32 will now be observed for pronominal affiliations, both sequential and/or mixed. The arrows indicate the item in the nominal form and its pronominal counterpart, or nominal form if the NP remains. SP in both sentences of the set is also marked with arrows at each end of a line.

The unstarred sample sentences presented on pp. 31-32 will now be observed for pronominal affiliations, both sequential and/or mixed.

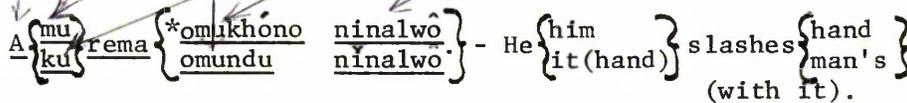
1. Omundu úkhamilê. - Man he-has disappeared.

Ukhamilê. - He has disappeared.
3. Omukhási abisa amáramwa. - Woman she-hides bananas.

Akabisa. - She them hides.
5. Omusaátsa akona omukhasiwê. - Man he-sleeps with his wife (sexually.)

Amukona. - He (with) her sleeps.
6. Omwana akona (tsindóòlo). - Child he-sleeps (sleep).

Akona (tsindóòlo). - He sleeps (sleep).
8. Omwéchi asooma (elieko) (nómwóyo). - Pupil he-reads lessons
(aloud--with voice).

Alisooma ninakwô. - He it (lesson) reads with it (voice).
9. Dóbi areeba (abeéchi) (amaréébo) (nómunwa). - Dobi he-asks pupils
(questions) (orally--with mouth).

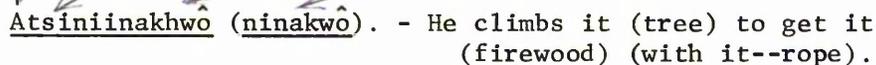
A $\left\{ \begin{array}{l} \text{ba} \\ \text{ka} \end{array} \right\}$ reeba $\left\{ \begin{array}{l} \text{amaréébo} \\ \text{abeechi} \end{array} \right\}$ (ninakwô). - He $\left\{ \begin{array}{l} \text{them(children)} \\ \text{them(questions)} \end{array} \right\}$ asks
 $\left\{ \begin{array}{l} \text{questions} \\ \text{children} \end{array} \right\}$ (orally).
10. Omusifani areka omubéro (nómukove). - Boy he-sets trap (with
string).

Akureka (ninakwô). - He it (trap) sets (with it--string).

11. *Om̄wibi arema (omundu)+(omukh̄ono) (n̄olup̄anga). - Thief he-slashes his own/man's hand (with machete).

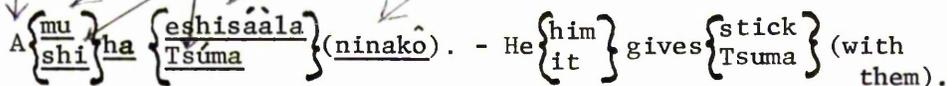


*Note: If omundu 'man', i.e. object NP₁ does not occur, the meaning is that the thief slashes his own hand. If this word does occur, the meaning is that the thief slashes the man's hand. Such behavior patterns will be referred to as 'inalienable possession one' (IP₁) and 'inalienable possession two' (IP₂), respectively. In IP₁ the subject NP is the animate possessor, and the fixed object (NP₂) is the possessed body part. In IP₂, NP₂ is the animate possessor, and NP₃ is the inanimate possessed body part.

12. Dobi aniina (tsikhwi)+(khymusaála) (n̄omukoye). - Dobi he-climbs tree (with rope) to get firewood.



13. Okw̄emba aha Tsuma eshisaála (n̄amakh̄ono kabil̄i). - Okwemba he-Tsuma stick (with both hands).



Here is a summary of the results of a study of these sentences.

The terms 'one nominal,' 'two nominal,' and so on, which were used in classifying verbs in their capacities to be associated with various numbers and kinds of nouns, are also employed here as a means of identification.

All verbs are obligatorily associated with pronominal SP in declarative sentences, whether or not the subject NP occurs. The SP without the occurrence of subject NP will be considered to be a pronominal form, a sequential affiliation form of the subject NP.

Sentence 1, p. 32, contains a one-nominal, univalent verb (-kh̄am- 'disappear'), which is capable of occurring only in the SP + V sequential affiliation pattern.

Sentence 3, p. 32, contains a two-nominal, univalent verb (-bís-'hide'), which may occur in the following two-nominal sequential affiliation pattern: SP + OP + V.

Sentence 6, p. 32, contains a minimum 1---maximum 2 NP multivalent verb (-kon-'sleep/lie down'), which may occur only in the SP + V \pm NP affiliation. The nominal in the fixed-object position to the right of the verb may not occur in pronominal form.

Sentence 8 contains a minimum 1---maximum 3 NP multivalent verb (-sóóm-'read/attend school'), which may occur in the following affiliation patterns: SP + V; SP + OP + V \pm PSAP.

Sentence 9 contains a minimum 1---maximum 4 NP multivalent verb (-reéb-'ask/question'), which may occur in the following pronominal affiliation patterns: SP + V; SP + OP + V + NP \pm PSAP; SP + OP + V \pm NP \pm PSAP; SP \pm OP + V \pm NP \pm PSAP. The \pm PSAP may never occur in a position to the left of the verb, nor may an OP occur in a position to the right of the verb. Neither may two OP's co-occur. However, one OP may occur in a position to the left of the verb concurrently with a NP in a position to the right of the verb.

Sentence 10 contains a minimum 2---maximum 3 NP multivalent verb (-rék-'set (trap)'), which may occur in the following pronominal affiliation pattern: SP + OP + V \pm PSAP.

Sentence 11 contains a minimum 2---maximum 4 NP multivalent verb (-rem-'chop/slash'), which may occur in these pronominal affiliation patterns: SP + OP + V \pm PSAP; SP + OP + V + NP \pm PSAP. Two, three, or four nominals may be associated with it, but when two fixed-object nominals co-occur, they may co-occur only as OP-NP or as two NP's. The pattern OP-OP may not occur.

Sentence 12 also contains a minimum 2---maximum 4 NP multi-valent verb (-niin-'climb to get/climb'). The first object is in the shape of NP, and the second in the shape of a locNP. This verb may occur in these pronominal affiliation patterns: SP + OP + V + locS \pm PSAP; SP + OP + V \pm PSAP; SP + V + locS \pm PSAP. Both object NP's may co-occur in the pronominal forms of OP-locS. Three of the sixty-one verbs studied may be associated with locS-type fixed objects: -niin-'climb,' -huny-'smell/take whiff of,' and -bú1-'not be.'

Sentence 13 contains a minimum 3---maximum 4 NP multivalent verb (-h-'give'), which may occur in the following pronominal affiliation pattern: SP + OP + V + NP \pm PSAP_I. Both object nominals co-occur obligatorily with this verb. Either may occur pronominally as OP, but only one OP to a sentence in this pattern of OP-NP.

A verb of different behavior patterns emerged at this point, the verb -bú1- 'not be(present)/not have.' These sentences were studied:

1. Mamá abulahô. - Mother she-is not here (present).

Abulahô. - She is not here.

2. Mamá abula obusíe. - Mother she-has no flour.

Abula obusíe. - She has no flour.

The nominal to the left of the verb is the grammatical subject in both sentences. In sentence 2, the nominal in the position to the right of the verb is a type of object but does not occur as either OP or locS. Only the SP sequential affiliation may occur with the verb in either sentence, but in sentence 1 the locative -hó is obligatory in both the referent sentence and in the pronominal form. Only the subject pronominalizes in both sentences. This is

a polysemous verb and seems to require a special classification-- at least at this point. It will be considered again later.

2.412. Pronominal Form of Instrumental NP

Here also mention should be made of a special kind of sequential affiliation--that occurring in connection with the final nominal of multivalent verbs capable of being associated with the instrument nominal, for example: $\left. \begin{array}{l} \text{něshisáàla} \\ \text{nende eshisáàla} \end{array} \right\}$ with/by means of stick. The structure of this PNP is na-/něnde + NP and indicates the instrument with which a process or an activity is accomplished. These NP's will be termed 'instrumental noun phrases' (NP_I/PNP_I) see p. 284. In sequential affiliations in which these occur ($SAP_I/PSAP_I$ --see list of abbreviations on p. 284) these structures can be described as -nina- + absolute pronoun. For example, nina + shío = ninashío. In passive affiliations (to be studied later) this phrase may occur optionally, and alternatively (but never concurrently), with agentive PNP ($PNP_{ag}/PSAP_{ag}$ as $PNP_I/PSAP_I$).

A summary of the pronominal affiliations noted in the above sentences is given in the following section.

2.42. Classification of Pronominal Affiliations--A Summary

From the analysis of the above pronominalized sentences, it was found that the pronominal affiliations can be divided into two principal groups: (1) those in which only pronominal forms occur, termed in this study 'sequential affiliations,' and (2) those in which there is a mixture of pronominal and nominal forms in a pattern, termed here 'mixed affiliations.' The following is a summary of each type:

1. Sequential affiliations

a. SP + V

- b. SP + OP + V
- c. SP + OP + V \pm PSAP_I
- d. SP \pm OP + V \pm PSAP_I
- e. SP + OP + V + locS \pm PSAP_I
- f. SP + V + locS \pm PSAP_I

2. Mixed affiliations

- a. SP + V \pm NP
- b. SP + OP + V + NP
- c. SP + OP + V + NP \pm PSAP_I
- d. SP + V + locS + NP \pm PSAP_I
- e. SP \pm OP + V \pm NP \pm PSAP_I

For lists of verbs in these classifications, see Appendix I, pp. 299-310.

2.43. Summary of Section

Through the analysis of verbs for sequential and mixed affiliations, especially through testing for pronominal forms of objects, another level of delicacy in verb division was introduced, a level which shows verbs to be associated with pronominal object forms according to the following constraints: (1) some verbs are associated with no object forms, that is, neither in the nominal nor in the pronominal manifestations; (2) other verbs are associated with OP pronominal-type objects (or, in the case of locNP, with the locS pronominal-type); (3) a third group of verbs is associated obligatorily with object NP's, but these NP's may not occur in pronominal forms; (4) a fourth group is associated optionally with object NP's, but these NP's also do not occur in pronominal forms.

The question now to be answered is whether the last two groups of verbs must remain separated into two groups, whether there is

still an overlapping of verb groups which should be separated into yet another division, or whether completely new groupings should be made. Further testing will be necessary.

Also noted were the following:

1. When an animate and an inanimate object co-occur, the animate object precedes the inanimate.
2. An animate NP may precede an inanimate body part NP, producing a combination called 'objects of inalienable possession.' If the subject of these verbs is the animate possessor of a body part, the combination of the subject NP and the inanimate body-part-object NP forms IP₁. If the first object NP is the animate possessor for the body-part NP₃, this combination is termed IP₂.

2.44. Clausal Affiliations

The fourth criterion listed on p. 29 to be tested was stated as follows: "whether or not each verb is capable of occurring in a clausal affiliation, and if so, in which kind(s)" (see p. 37 for definition of affiliation as used here).

An attempt was made to interchange NP's in the subject and object positions. Verbs were again grouped according to univalence and multivalence, and the following sentences with their possible clausal affiliations were studied. (Arrows indicate position of an NP and the SP in the referent sentence and the position of the same items in the transposed clause.)

1a. Omutokâ kwitsa. - Motorcar it-is coming.

*b. _____ kwitsa omútokâ. - It is coming motorcar.

2a. Mamá abula obusíe. - Mother she-has no flour.

*b. Obusíe bubulwa nênde Mâma. - Flour it-is not had (by Mother).

- c. Dóbi abulahô. - Dobi he-is not here.
- *d. -hó { habulwa / habula } nênde Dóbi. - Here is not being present (by Dobi).
- e. Dóbi alwala (omurêngo). - Dobi he-is ill (with fever).
- *f. Omurêngo ku { lwala / lwalwa } nênde Dóbi. - Fever it-is being illed (by Dobi).
- g. Mamá yabisa amáramwa. - Mother she hid bananas.
- h. Amáramwa kabiswa (nênde Mamá). - Bananas they-were hidden (by Mother).
- 3a. Dóbi aha Tsuma eshisaála (námakhono kabili). - Dobi he-gives stick (with both hands).
- b. { Tsuma / Eshisaála } shi { a / heebwa } { eshisaála / Tsuma } { naDóbi námakhono / kabili } . -
 { Tsuma he } is being given { stick } { by Dobi }
 { Stick it } { Tsuma } { with both hands } .
- 4a. Omwána ahunya khushimúli námóolu. - Child he takes whiff of flower with nose.
- b. { Khushimúli / Eshimúli } { khu / shi } { hunywakhwô } { nomwána / námóolu } . - Flower it-is smelled of by child/with nose.
- c. Omwána aniina tsikhwi kumusáála (nómukoye). - Child he-climbs tree (with rope) to get firewood.
- d. Tsikhwi tsiniinwa kumusáála { nomwána / nomukoye } . - Firewood it-is climbed for in tree (by child/with rope).
- e. { Khumusáála / Omusáála } { khu / ku } { niinwakhwô } tsikhwi { nomwána / nomukoye } . - Tree/In tree it-is climbed in it for firewood (by child/with rope).
- 5a. Omwami achaaka omusê (námashieesi). - Chief he-begins council meeting (with greetings).
- b. Omusê kuchaaka. - Council meeting it-begins.
- or,
- c. Omusê kuchaakwa { nomwami / namashieesi } . - Council meeting it-is begun (by chief/with greetings).

- d. Mamâ ateekha amapwoni (nõmulilo omukáli). - Mother she-cooks potatoes (with hot fire).
- e. Mamâ ateekha (nõmulilo omukáli). - Mother she-cooks (with a hot fire).
- f. Amapwoni kateekha. - Potatoes they are cooking.
- or,
- g. Amapwoni kateekhwa { naMama nõmulilo omukáli } - Potatoes they-are being cooked (by Mother/with hot fire).
- 6a. Omusiani asamba { inzû amakhõno omwana amakhõno } (nõmulilo). - Boy he-burns house his hands child's hands (with fire).
- b. Omulilo kusamba { inzû omusiani amakhõno omwana amakhõno } - Fire it-burns house boy's hands child's hands.
- or,
- c. { Inzû Amakhõno kõmwana ka } vi sambwa { nõmusiani nõmulilo } - { Child's hands they-are being } { House it-is being } burned (by boy/with fire).
- Amakhõno kõmusiani kasambwa (nõmulilo). - Boy's hands they-are being burned (with fire).
- 7a. Isiongo yiraatsa amãtsi. - Waterpot it-is leaking water.
- b. Amãtsi karaatsã musiongo. - Water it-is leaking from the waterpot.

A study of these sentences reveals a number of facts. Verbs associated with only one NP--the subject NP, in sentences 1a,b-- occur in sentences incapable of clausal transpositions. These are the one-nominal, univalent verbs and will be termed 'descriptive verbs.'

In sentences 2a-h, several interesting phenomena occur. In sentences 2a-f -bûl- 'not be/not have' and -lwal- 'be/become ill' occur, but permutation of NP's may not occur, nor may the -hõ suffix of -bûl- 'not be' occur in any other position. The verb

-lwal- 'be/become ill' is obligatorily one nominal and optionally two nominal. The verb -búl- 'not have' is obligatorily two nominal. Here also permutation of NP's may not occur. Also, as was noted in the section on pronominalization above (p. 38, -kon- (tsindó^olo), and p. 40, -búl-), no object NP's are of the OP-type. Since neither pronominal nor clausal affiliations may occur (except the SP affiliation) in structures associated with such verbs, these verbs will be termed 'stative verbs.' The verb -búl- 'not be/not have' is polysemous and univalent in each of its meanings. It will be considered a two-nominal univalent verb, and -kon- 'sleep' and -lwal- 'be/become ill' will be classified as multivalent.

In sentences 2g-h, the verb -bís- 'hide' is obligatorily only two nominal but permits of a permutation of its nominals as follows:

Affiliation A₁ (sentences 2g-h, p. 46):

1. The object NP becomes fronted grammatical subject.
2. The SP is in concordial agreement with the new subject.
3. The verb occurs in the passive extended shape.
4. NP₁ occurs optionally as PNP (termed here 'agentive prepositional noun phrase'--PNP_{ag}--indicating the agent by whom/which the action identified by the verb is performed) in a position to the right of the verb.

Sentences 3a, b appear to be variations of 2g, h. The following constraints obtain here:

Affiliation A₂ (sentences 3a-b, p. 46):

1. Either object may occur as fronted grammatical subject with the other object remaining as an object NP in a position to the right of the verb.

2. The SP is in concordial agreement with the new subject.
3. The verb occurs in the passive extended shape.
4. PNP_I and the optional PNP_I , either one, may occur optionally, but not concurrently, in a position to the right of the verb.

Sentences 4a-e also appear to be variations of 2g-h and 3a-b.

In 4a-e locative object NP's occur with the following constraints.

Affiliation A_3 (sentences 4a-e, p. 46):

1. $LocNP_2$ occurs as fronted grammatical subject, occurring either as a locNP or as a NP without the locative prefix, the usual pre-prefix or full prefix occurring instead.
2. SP is in concordial agreement with the locNP as locSP if the locNP occurs, or as SP with the non-locative noun form if the simple NP occurs.
3. The verb occurs in the passive extended shape.
4. A locS in concordial agreement with the fronted locNP--whether it occurs in the shape of locNP or simply as NP--is suffixed to the verb.
5. Either PNP_{ag} or PNP_I may occur optionally in a position to the right of the verb, alternatively but not concurrently.

A variation of the above constraints occurs according to the following criteria.

Affiliation A_4 (sentences 4a-e, p. 46):

1. Either object NP_2 or NP_3 (as locNP or simply as a NP) may occur as fronted grammatical subject. The other NP remains in object position to the right of the verb.
2. SP is in concordial agreement with the new grammatical subject.
3. The verb occurs in the passive extended shape.
4. If locNP occurs as fronted grammatical subject, a locS in concordial agreement with the locNP is affixed to the verb.

5. Either PNP_{ag} or PNP_I may occur optionally in a position to the right of the verb, alternatively but not concurrently.

Sentence patterns for affiliations A_1 , A_2 , A_3 , A_4 , respectively, together with their active, referent forms are given here.

Affiliation A_1 :

$$S_1 \rightarrow NP_1(ag) + V + NP_2 \quad \supseteq$$

$$S_2 \rightarrow NP_2 + V(+ -w-) \pm PNP_1(ag)$$

Affiliation A_2 :

$$S_1 \rightarrow NP_1(ag) + V + NP_2 + NP_3 \pm PNP_4(I) \quad \supseteq$$

$$S_2 \rightarrow \left\{ \begin{array}{l} NP_2 \\ NP_3 \end{array} \right\} + V(+ -w-) + \left\{ \begin{array}{l} NP_3 \\ NP_2 \end{array} \right\} \pm \left\{ \begin{array}{l} PNP_1(ag) \\ PNP_4(I) \end{array} \right\}$$

Affiliation A_3 :

$$S_1 \rightarrow NP_1(ag) + V + NP_2(loc) \quad \supseteq$$

$$S_2 \rightarrow \begin{array}{l} NP_2(+loc) + V(+ -w-) + locS \pm PNP_1(ag) \\ (-loc) \end{array}$$

Affiliation A_{4a} and A_{4b} :

$$S_1 \rightarrow NP_1(ag) + V + (NP_2) + (NP_3(loc)) \pm PNP_4(I) \quad \supseteq$$

Affiliation A_4 :

$$S_2 \rightarrow NP_2 + V(+ -w-) \pm NP_3(loc) \pm \left\{ \begin{array}{l} PNP_1(ag) \\ PNP_4(I) \end{array} \right\}$$

or,

Affiliation A_{4b}

$$S_3 \rightarrow \begin{array}{l} NP_3(+loc) + V(+ -w-) + locS \pm NP_2 \pm \left\{ \begin{array}{l} PNP_1(ag) \\ PNP_4(I) \end{array} \right\} \\ (-loc) \end{array}$$

Such sets of permutations will be termed the 'passive affiliations,' and NP_1 will be referred to as 'agentive' NP (NP_{ag}). Verbs capable of undergoing such transpositions will be termed 'agentive' verbs.

Sentences 5a-g (pp. 46-47) show further types of clausal

permutations which some agentive verbs can undergo. In addition to occurring in passive affiliations, such verbs can occur in one or two other types of affiliation.

Affiliation B₁ (sentences 5a-c, p. 46):

1. The inanimate object of the referent sentence becomes the fronted grammatical subject of a one-nominal construction.
2. NP_{ag} does not occur.
3. SP is in concordial agreement with the new subject NP
4. The verb radical remains unchanged, i.e. no suffix is added except the usual tense suffix.

Affiliation B₂ (sentences 5d-f, -teekh- 'cook', p. 47):

1. Agentive NP₁ or the inanimate object NP of the referent sentence may occur as the grammatical subject in one-nominal structures.
2. SP is in concordial agreement with whichever NP is the grammatical subject.
3. The verb radical remains unchanged (the same as in affiliation B₁ above).
4. If NP_{ag} is the subject, the optional PNP_I may also occur, but not if inanimate NP₂ is the subject.

Verbs which behave as those in Affiliation B₁ and Affiliation B₂ above do will be termed 'ergative' verbs, and the affiliations in which they occur will be termed 'ergative affiliations.'

Sentences 6a-b (p. 47) show still another type of clausal transposition which some other agentive verbs may undergo. In addition to occurring in the passive affiliation, the verb -sămb- 'burn' can occur in another type of affiliation as follows:

Affiliation C (sentences 6a-c, p. 47):

1. Instrumental NP (not in the shape of PNP) occurs as fronted grammatical subject.

2. SP is in concordial agreement with NP_I, the new, fronted subject.
3. The verb radical remains unchanged.
4. Animate NP_{ag} does not occur.
5. Other NP('s) remain unchanged in shape and in position(s).

Such an affiliation as this will be termed the 'instrumental affiliation.'

Note: It was also observed in sentences 6a, c, (p. 47) that when an IP₁ type of object occurs as fronted grammatical subject in passive affiliation, both the possessor noun and the possessed body part must

passive affiliation: { Amakhóno kómúfiani - Hands of the boy (IP₁) }
 { Amakhóno kómwána - Hands of the child (IP₂) }
 { Amakhóno kómwána - Hands of the child (IP₂) }

Both co-occur also as objects in the instrumental affiliation:

{ omúfiani amakhóno - boy's hands }
 { omwána amakhóno - child's hands }

It was observed that sentences 7a-b (p. 47) involve other types of verbs having a clausal affiliation with constraints as follow,

Affiliation D:

1. NP₂ occurs as fronted grammatical subject.
2. SP is in concordial agreement with the new grammatical subject.
3. No change occurs in the verb radical.
4. NP₁ in its new position to the right of the verb occurs as a locative NP.

Sentence patterns for affiliation D structures are as follows:

S₁ → NP₁ + V + NP₂

S₂ → NP₂ + V + NP₁(loc)

Such a set of interchanges will be termed the 'entailing affiliation,' and NP₁ will be considered a locative NP even though the

locative does not occur when this NP is in subject position.

The study of this set of sentences produced the following conclusions:

1. Univalent, obligatorily-one-nominal-only verbs do not undergo clausal transpositions and will be termed 'descriptive' verbs.
2. The verbs -búl-, -kon-, and -lwal- may not, as two-nominal verbs, undergo clausal transpositions. They will be termed 'stative' verbs.
3. Verbs in sentences 2g-h, 3a,b, and 4a-e occur in the passive extended shape when any permutation of subject and object NP's occurs. Such verbs will be termed 'agentive' verbs.
4. Two sub-classes of agentive verbs occur in two other general types of affiliations:
 - a. Sentences 5a-g show not only the passive affiliations of two agentive verbs (-chàák- 'begin' and -teekh- 'cook'), but also two other types of changes termed 'ergative' affiliations. Such verbs will be termed 'ergative' verbs.
 - b. A second type of agentive verb (-sǎmb- 'burn') occurs in the passive construction and also in a set of changes termed the 'instrumental affiliation.' This verb is always obligatorily at least two-nominal and active constructions in which it occurs may also occur in passive constructions.
5. Sentences 7a-b involve two other verbs (-rááts- 'leak/bleed' and -atikh- 'crack') in which a permutation of subject and object NP's may occur, but when it does, the verb root remains unchanged, and NP₁ occurs as locNP in object position to the right of the verb. Such verbs will be termed 'entailing' verbs.

Verbs in sentences 2e-f through 7b are all multivalent verbs and vary in their minimum and maximum capacities to be associated with varying numbers of NP's.

2.441. Summary of Section

Findings of investigations reported in the last three sections can now be summarized by a chart of comparisons (see p. 55). From these comparisons it will be seen that certain constraints are imposed by particular sets of verbs on their co-occurrent nominal phrases.

It is now possible to classify these verbs according to types of clauses in which they may, or must, occur. The chart on p. 55 indicates criteria for distinguishing four types of clauses. Constraints governing these clause types are summarized in the following section. References to the sample sentences are given in parentheses to the right of the clause name.

2.5. Clause Types

2.51. Descriptive Clauses (sentence 1, pp. 32, 45)

Eight of the sixty-one verbs are associated obligatorily with only one nominal. Some polysemous and some multivalent verbs may also occur in some one-nominal constructions. Criteria governing these constructions are as follows.

1. All are associated with only one nominal, the grammatical subject.
2. They are not associated with OP or locS affiliations.
3. They do not occur in any other affiliation except the SP sequential, and some in the imperative--to be discussed later.

Sentences whose verbs impose such restraints will be termed 'descriptive' sentences or 'descriptive' clauses.

Affiliation Classification Chart of Verbs

| According to association with nominals only | According to Pronominal Affiliations: | | Clausal |
|---|---|--|--|
| | Sequential: SP/SP-OP/ SP-locS/SP-OP-locS (PSAP _I) | Mixed: SP + OP -NP (PSAP _I)/locS -NP-(PSAP _I) | |
| A. According to univalence | | | |
| I. One nominal obligatory: Always--Polysemous: <u>-s̄injil-</u> <u>-huny-</u> : | SP-∅ | ∅ | ∅ |
| II. Two nominals obligatory: Class 1: <u>-b̄ul-</u> Class 2: <u>-b̄is-</u> | SP-∅ SP-OP | ∅ ∅ | ∅ Passive |
| III. One nominal + obligatory locS: <u>-b̄ul-</u> 'not be' | SP-locS: <u>-h̄o</u> | ∅ | ∅ |
| B. According to multivalence | | | |
| I. Min. 1--Max. 2 1. <u>-r̄aats-</u> , <u>-atikh-</u> 2. <u>-kon-</u> , <u>-lwal-</u> 3. <u>-kon-</u> | SP-∅ SP-∅ SP-OP | ∅ ∅ ∅ | Entailing ∅ Passive |
| II. Min. 1--Max. 3 1. <u>-huny-</u> 2. <u>-lol-</u> , <u>-ilukh-</u> 3. <u>-chaak-</u> , <u>-teekh-</u> | SP/SP-locS-(PSAP _I) SP/SP-OP-(PSAP _I) SP-OP-(PSAP _I) ➤ SP-∅ ➤ SP-PSAP _I | ∅ ∅ ∅ ∅ | Passive Passive Passive Ergative |
| III. Min. 1--Max. 4 <u>-r̄eeb-</u> , <u>-hom-</u> | SP/SP-OP-(PSAP _I) | SP-OP-NP (PSAP _I) | Passive |
| IV. Min. 2--Max. 3 <u>-mal-</u> , <u>-r̄ek-</u> | SP-OP-(PSAP _I) | ∅ | Passive |
| V. Min. 2--Max. 4 1. <u>-niin-</u> 2. <u>-rats-</u> 3. <u>-s̄amb-</u> , <u>-rats-</u> 4. <u>-s̄amb-</u> | SP-locS-(PSAP _I) SP-OP-(PSAP _I) SP-OP-locS-(PSAP _I) SP-OP-(PSAP _I) SP-OP-(PSAP _I) SP-OP-(PSAP _I) (IP ₁) ➤ SP _I -OP | SP-OP-locNP-(PSAP _I) SP-locS-NP-(PSAP _I) ∅ ∅ SP-OP-NP-(PSAP _I) SP-OP-NP-(PSAP _I) (IP ₂) SP _I -OP-NP | Passive Passive Passive Passive Passive Passive Instrumental |
| VI. Min. 3--Max. 4 <u>-h-</u> | ∅ | SP-OP-NP-(PSAP _I) | Passive |

➤ = sub-group affiliations. Oblique / indicates alternate forms.
 Parentheses () indicate optionality. ∅ indicates non-occurrence.

2.52. Agentive Clauses (sentences 2, 3, 5, 8, 9-13, p. 32;
2g-6c, pp. 45-47)

The majority of verbs occur (some obligatorily, some optionally) in constructions of two or more nominals and operate according to the following constraints:

1. All are associated with one, or two, OP-type objects (or in the case of locative-noun object, with locS).
2. These objects have the capacity to occur as grammatical subjects in a position immediately to the left of the verb (and will be termed fronted grammatical subjects) in passive constructions. The SP is in concordial agreement, then, with these subjects.
3. All these verbs are associated with what is here termed 'agentive subject NP' in referent sentences. This NP is usually animate and occurs optionally in passive constructions in a position to the right of the verb in the shape of PNP. In this position it is identified as PNP_{ag} and may occur alternatively to, but never concurrently with, optional PNP_I .
4. The verbal radical occurs in the passive extended shape when an object NP occurs as fronted grammatical subject.

Clauses whose verbs impose such constraints on their NP's will be termed 'agentive clauses.'

In addition to the capacity of this group of verbs to occur in passive affiliations, two sub-groups are capable of occurring in two other types of affiliations: (1) The ergative affiliation and (2) the instrumental.

2.521. Ergative affiliation (sentences 5a-g, pp. 46-47)

These verbs occur in two sub-subgroups, (a) and (b). The group here termed (a) contains the one verb -chàák-. For group (a), the

ergative affiliation is formed according to these criteria:

1. Inanimate NP₂ becomes fronted grammatical subject.
2. SP is in agreement with new grammatical subject.
3. The verb radical does not change.
4. NP₁ does not occur, thus making the clause one-nominal.

In group (b), the one verb -teekh- occurs in transposed sentences according to the following criteria:

1. Either NP₁ or NP₂ may occur as grammatical subject.
2. SP is in concordial agreement with whichever occurs.
3. No change occurs in the verb radical.
4. Either NP + V forms a one-nominal construction, but if NP₁ is subject, PNP₁ may occur optionally in a two-nominal construction.

2.522. Instrumental affiliation (sentences 6a-c, p. 47)

In the instrumental affiliation of an agentive clause the following constraints obtain:

1. Instrumental PNP becomes fronted grammatical-subject NP.
2. SP is in concordial agreement with instrument NP.
3. No change occurs in the verb radical.
4. Object NP('s) occur in usual position(s), i.e. immediately following the verb.
5. Object #1 may be animate or inanimate.
6. If object #1 is animate and object #2 is a name or body part of object #1, the combination forms the objects of inalienable possession 2 (IP₂).
7. The transposed clause can occur in a further passive affiliation.

2.53. Entailing Clauses (sentences 7a, b, p. 47)

A third group of verbs imposes the following constraints upon NP's with which they are associated:

1. Verbs are obligatorily of the one-nominal class (i.e. the grammatical subject NP) of the pattern

$$S \rightarrow NP_1 + V$$

and optionally of the two-nominal class of the pattern

$$S \rightarrow NP_1 + V \pm NP_2$$

2. Verbs are not associated with OP or locS affiliations (but they are associated with SP affiliation).
3. These clauses have the capacity to undergo the entailing affiliation, by which operation occur the following patterns of co-occurrences:

NP₁ and NP₂ interchange positions with these results:

- (a) The SP of the verb is in controlled relationship with NP₂.
- (b) The verb root remains unchanged.
- (c) These verbs do not tolerate locative noun shapes in subject position (but they may occur in other positions).
- (d) When NP₁ occurs in the position to the right of the verb, it occurs as locNP.

Clauses whose verbs impose such constraints on their NP's will be termed 'entailing clauses.'

2.54. Stative Clauses (sentences 7, p. 31; 2a, c, e, p. 32; pp. 45-46)

Three verbs occur in this group. Two of them (-kon- 'sleep' and -lwal- 'be/become ill' may occur in association with two nominals, and must occur with one, the grammatical subject, in referent sentences.

The other verb of this group is polysemous and as such occurs in two syntactic patterns. The verb is -búl- 'not be/not have.' When its meaning is 'not be,' it occurs in this type of syntactic pattern:

$$S \rightarrow NP + V + \text{locS} + \text{-h}\hat{o}$$

When the meaning is 'not have,' it occurs in an obligatorily two-nominal construction:

$$S \rightarrow NP_1 + V + NP_2$$

The verbs -kon- 'sleep' and -lwal- 'be ill (with)' are obligatorily one-nominal and optionally two. Constraints imposed upon clauses containing these verbs are as follows:

1. SP affiliation occurs, but no other sequential affiliations occur.
2. No OP, mixed, or clausal affiliations occur.
3. The verb radicals undergo no changes.

Clauses whose verbs impose such constraints on their NP's will be termed 'stative clauses.'

2.55. Summary of Section

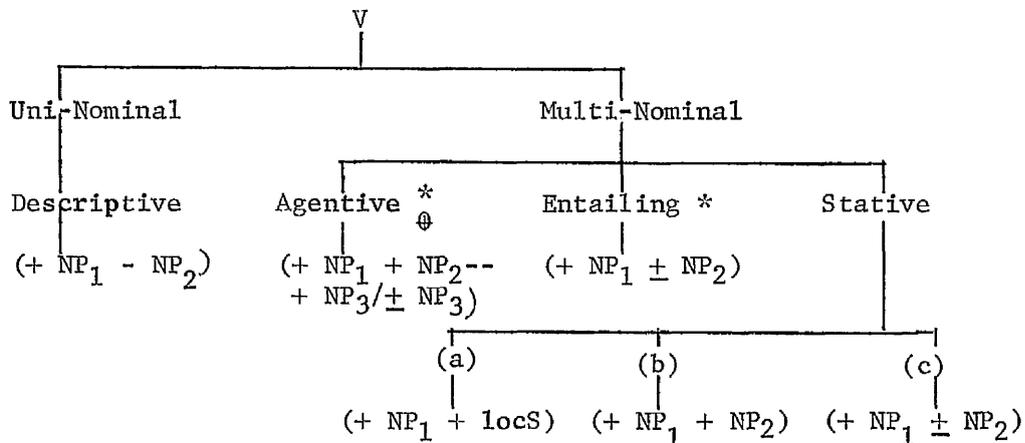
Through the last three sections of analysis, it has been possible to narrow verb classifications to the point of identifying them with certain general types of clauses: (1) Descriptive, (2) Agentive with subgroups (a) ergative and (b) instrumental, (3) Entailing, and (4) Stative. The first lexical-entry item can now be determined: The particular type of clause(s) in which a verb may occur.

These clause types were identifiable according to two general types of criteria:

1. association of verbs with nominals

- a. univalence
 - b. multivalence, with obligatoriness and/or optionality
 - c. polysemy
2. capacity of verbs and their associative nominals to occur in affiliations
 - a. sequential
 - b. mixed
 - c. clausal
 - d. problem verb (-bul-)

The following diagram illustrates these clause types:



Note: Interpretations of symbols are as follows:

⊕ = sequential and/or mixed affiliations

* = other affiliations (i.e. passive, entailing, etc.)

+ = obligatoriness

± = optionality

- = non-occurrence

NP₁ = grammatical-subject NP

NP₂ = an object-type NP

-- + NP₃ = possible second object-type NP, sequential position.

Since marked sentences do not occur in this study, these NP numberings indicate

2.6. Verb Classes Within Clauses

Verbs can be said to be involved in a system of classes, sub-classes, sub-subclasses, and so on. Each successive division operates within the framework of the last. A hierarchy of verb classes occurring at six levels is proposed here. At each level of classification similarities within, and contrasts between, each class are stated. Differences within the similarities are accounted for in subclasses, i.e. within the next level of classification. As was seen in the diagram above, in classifying verbs three general features of distinctiveness (i.e. three levels of classification) are observed: (1) the contrasting divisions into uni-nominal and multi-nominal verbs, (2) contrasting divisions into univalent and multivalent verbs, (3) potential, or non-potential, association with OP and/or locS-type objects in sequential, mixed, and/or other affiliations, and (4) capacity for occurring in contrastive clauses: Descriptive, Agentive, with sublevel groups (a) ergative and (b) instrumental, Entailing, and Stative. Only at this fourth level of classification was it possible to determine the first lexical item: the type(s) of clause(s) in which each verb may occur.

From the sample sentences on pp. 30-32 and 45-47, it was observed that some verbs have the capacity to occur in only one syntactic pattern and others in more than one. Since a lexical entry should indicate the grammatical context of a verb and since syntactic patterns are in the grammatical category, verbs should also be classified according to the syntactic patterns in which they may occur (i.e. according to the number of NP's with which a verb may be associated). This, then, will be the fifth level of classification of verbs, and it will be the second item in the lexical entry.

From a study of the referent sentences (pp. 30-32, 39-40, 45-47), it was also observed that some verbs were associated with animate and some with inanimate subjects; some with animate objects, some with inanimate objects, and some with either or both. Examples:

1. Omukhási ateekha amápwòni. - Woman she-cooks potatoes.
2. Isíongo yiraatsa amàtsi. - Waterpot it-leaks water.
3. Omusíani aniina tsikhwí khumusaála. - Boy he-climbs (to get)
firewood in tree.
4. Omuleli ásaaba omwána amakhóno. - Nursegirl she-washes child('s)
hands.

These phenomena required another sub-subclassification of verbs, a classification according to animacy, i.e. + animate, - animate, or ± animate. This classification yielded a third lexical entry, an entry according to animacy. Features of animacy, singularity, and so on are on the semantic level and are included in deep structure. But my argument here is that while there are syntactic structures and semantic features, and so on, in the deep structure of language, and while these structures are intuitionally perceived, there are also surface structures and features of these same items, and it is the surface structures and features which I am treating. Therefore, this third lexical entry is valid. Also, in a classification of such items, it will be necessary to move from the syntactic to the semantic level and back frequently and freely. However, it must be kept in mind that these are two different and distinct levels.

2.61. Verb Classes in Descriptive Clauses

Only obligatorily one-nominal verbs, polysemous verbs which in one of their semantic interpretations are one-nominal, and multivalent verbs in one-nominal patterns occur in descriptive clauses. All verbs of the obligatorily only one-nominal and polysemous groups occur in only one syntactic pattern: $S \rightarrow NP + V$, in which the grammatical subject

noun occurs as the sole NP. Other than the fact of uni-nominality, there is, therefore, no basis for comparing behavior of NP's in an interchange of positions in a sentence.

However, it was found that these same verbs are also characterized by the capacity or incapacity to imperativize and are accordingly termed imperatival and non-imperatival verbs, for example:

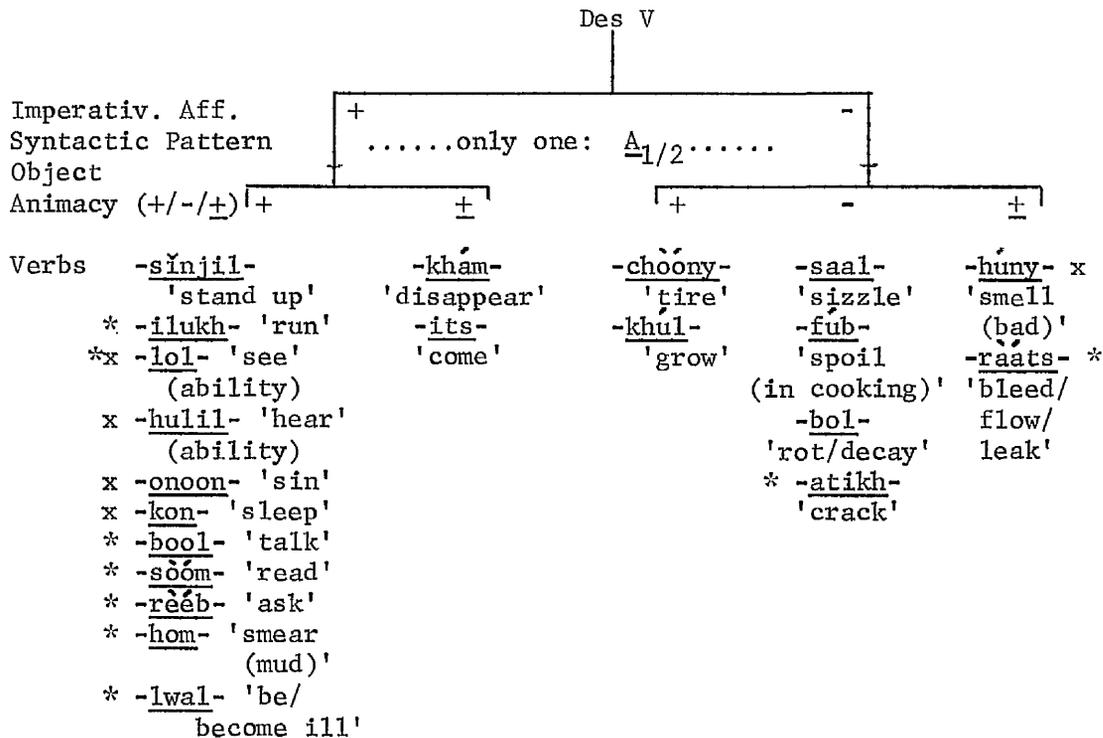
| <u>Verb Radical</u> | <u>Imperative Affiliation</u> | |
|----------------------------------|-------------------------------|-----------------|
| | <u>Singular</u> | <u>Plural</u> |
| - <u>sĭnjil</u> - 'stand up' | <u>Sĭnjila!</u> | <u>Sĭnjile!</u> |
| - <u>its</u> - 'come' | * <u>Yitsâ!</u> | <u>Yitsê!</u> |
| - <u>chòõny</u> - 'become tired' | ∅ | ∅ |

Note: *Initially verbs may have vowels or consonants; they will be termed vowel-stem verbs which have initial vowels and consonant-stem verbs which begin with consonants. Consonant-stem verb imperatives are formed by suffixing -a to the verb radical for the singular and -e for the plural. Vowel-stem verb imperatives follow the same rules and, in addition, Y- is prefixed to the radical.

Some of these verbs are activity oriented, i.e. they identify an action which the grammatical subject performs. Those which possess this semantic feature can also occur in the imperative affiliation. Such verbs will be termed 'imperatival' verbs. Some of these NP's are obligatorily animate and others, optionally so.

The second group of verbs does not imperativize. These are process or condition oriented, i.e. they identify a change which is taking place, or a condition existing, in the grammatical subject. Therefore, this group will be termed 'non-imperatival.' Some of their subjects have the semantic feature of animacy, and the others that of inanimacy.

The following illustration shows the levels of verb subclasses as they occur in the syntactic patterns of descriptive clauses. (Capital letters, for all types of clauses, indicate types of syntactic patterns in which the indicated phenomena occur.) The starred forms are multivalent verbs which occur here as one-nominal, and x indicates polysemy.



There are a few verbs (e.g., -cháák- 'begin' and -teekh- 'cook') which in certain affiliations occur in one-nominal constructions. Such verbs are not included in these classifications. Only as they occur in referent sentences are they classified as above.

2.62. Verb Classes in Agentive Clauses

Agentive clauses are characterized by the following criteria:

- a. an agentive grammatical-subject NP
- b. one, or two, OP-type objects (or, in the case of locative-noun objects, with locS-type objects)

- c. the capacity of OP/locS-type objects to occur as fronted grammatical subjects of the passivized verb, and
- d. the capacity of NP_{ag} to occur, optionally (and alternatively to, but not concurrently with, PNP_I), as PNP_{ag} (or in sequential affiliation as SAP_{ag}, i.e. nina- + Abs Pron) in a position to the right of the verb in a passive sentence
- e. the ability of the verb to occur in passive form.

It has been stated that polysemous verbs in one of their semantic interpretations occur in descriptive, or agentive, clauses. Similarly, these same verbs in another semantic interpretation and many multi-valent verbs occur in other types of clauses, most of them in agentive clauses, obligatorily with two nominals and some of them optionally with three or four. Since the agentive NP is common to all and its behavior is the same in all, it needs no further consideration in this classification. The occurrences, non-occurrences, and co-occurrences of various object nouns and their sequential or mixed affiliations account for the great variety of syntactic patterns in these clauses. It is these object nouns, OP's, locS's, and PNP_I/PSAP_I, which will be given consideration at this point.

2.621. Instrumental phrase (NP_I/PNP_I/ PSAP_I).

In referent agentive clauses the instrumental phrase occurs as an optional, prepositional noun phrase (PNP_I). In sequential affiliations it occurs in the shape of prepositional, instrumental, sequential affiliation phrase (PSAP_I). With one verb it may occur in a transposed sentence as the fronted grammatical subject in the shape of instrument noun phrase (NP_I). The following chart shows comparisons of relationships of agentive with other types of clauses in order to point up more clearly OP, locS, and PNP_I objects in relationship to the verbs.

A perusal of this chart brings several facts into focus:

1. All agentive clauses must be at least two nominal.
2. OP and locS type and instrument objects occur only in agentive clauses.
3. Passive constructions co-occur only with verbs which are agentive.
4. Verbs occurring as 'minimum one-nominal' and as 'maximum two-, three-, or four-nominal' are either polysemous or multivalent. As one-nominal representations they occur in descriptive clauses (according to the position taken in this analysis). As two-nominal verbs they occur in agentive clauses if NP₂ is obligatory and has the capacity to occur in sequential affiliation as OP (if not, the verbs occur in entailing or stative clauses). As three- or four-nominal verbs they are agentive.
5. One group of agentive verbs may occur in agentive clauses and further in another clause affiliation of the agentive clause in ergative clause affiliations.
6. Another agentive verb may occur in a further clause affiliation of the agentive clause, which here is termed the instrumental affiliation.
7. With five groups of verbs two object NP's are capable of occurring as OP-types, but not concurrently. One of these groups is in B-III. The group under V, 1-2-3, has the capacity to occur with objects of inalienable possession and under IV, 4, a co-ordinate object may occur. The two objects under III occur obligatorily in some syntactic patterns, and only one object is obligatory in others. The two under VI are obligatory.

| Number of Nominals | Affiliations: | | | Mixed | PNPI | Type of Clause |
|--------------------------------------|---------------|--------------|-----------|-------|------|----------------|
| | Sequential | OP-type | locS-type | | | |
| A. Obligatory | | | | | | |
| I. One | ∅ | ∅ | ∅ | ∅ | ∅ | Descriptive |
| II. Two | | | | | | |
| 1. -búl- 'lack' | ∅ | ∅ | ∅ | ∅ | ∅ | Stative |
| 2. Others | + one | ∅ | ∅ | ∅ | ∅ | Passive |
| -bís-, -yíl-, -yíl-, -leer-, etc. | | | | | | |
| III. One | | | | | | |
| -búl- 'be' | ∅ | + one (-hó-) | ∅ | ∅ | ∅ | Stative |
| B. Multivalent | | | | | | |
| Minimum 1 | | | | | | |
| 1. -raáts-, -atikh- | ∅ | ∅ | ∅ | ∅ | ∅ | Descriptive |
| 2. -kon-, -lwal- | ∅ | ∅ | ∅ | ∅ | ∅ | Descriptive |
| Maximum 2 | | | | | | |
| 1. -raáts-, -atikh- | ∅ | ∅ | ∅ | ∅ | ∅ | Entailing |
| 2. -kon-, -lwal- | ∅ | ∅ | ∅ | ∅ | ∅ | Stative |
| Minimum 1 | | | | | | |
| -húny-, -lol-, -soom-, etc. | ∅ | ∅ | ∅ | ∅ | ∅ | Descriptive |
| Maximum 3 | | | | | | |
| 1. -huny-, etc. | ∅ | + one | ∅ | ∅ | ± | Agentive |
| 2. -soom-, -lol-, etc. | + one | ∅ | ∅ | ∅ | ± | Agentive |
| 3. -chaák-, -teekh- | + one | ∅ | ∅ | ∅ | ± | Agentive |
| Minimum 1 | | | | | | |
| -reéb-, -sááb-, -lol-, -hom- | ∅ | ∅ | ∅ | ∅ | ∅ | Descriptive |
| Maximum 4 | | | | | | |
| -reéb-, -hom- | two possible* | ∅ | ∅ | OP-NP | ± | Agentive |

| Number of Nominals | Affiliations: | | | | Mixed | Type of Clause |
|--|---------------|---------|-----------|--|-------|--------------------------|
| | Sequential | Op-type | locS-type | locS-NP/OP-NP | | |
| Minimum 2 - <u>mal-</u> , - <u>rék-</u> etc. | + one | ∅ | ∅ | ∅ | ∅ | Passive Agentive |
| IV. Maximum 3 - <u>mal-</u> , - <u>rék-</u> , etc. | + one | ∅ | ∅ | ∅ | ± | Passive Agentive |
| Minimum 2 1. - <u>niin-</u> | one | one | ∅ | ∅ | ∅ | Passive Agentive |
| 2. - <u>rats-</u> , - <u>khúp-</u> , etc. | + one | ∅ | ∅ | ∅ | ∅ | Passive Agentive |
| 3. - <u>sám-</u> , | + one | ∅ | ∅ | ∅ | ∅ | Passive Agentive |
| 4. - <u>fwal-</u> , - <u>rats-</u> | + one | ∅ | ∅ | OP-co-ordinate | ± | Passive Agentive |
| V. Maximum 4 | one | one | one | OP-NP/ locS-NP | ± | Passive Agentive |
| 1. - <u>niin</u> | + one | ∅ | ∅ | OP-NP | ± | Passive Agentive |
| 2. - <u>rats-</u> , - <u>khúp-</u> , etc. | two possible* | ∅ | ∅ | OP-NP (IP ₁) OP-NP (IP ₂) | ± | Passive Agentive |
| 3. - <u>rats-</u> , - <u>khup-</u> , etc. | two possible* | ∅ | ∅ | OP-NP (IP ₂) | ± | Passive/ Instrumental |
| 4. - <u>sám-</u> | two possible* | ∅ | ∅ | OP-NP | ∅ | Passive Agentive |
| VI. Minimum 3 - <u>h-</u> | two possible* | ∅ | ∅ | OP-NP | ± | Passive Agentive |
| Maximum 4 - <u>h-</u> | two possible* | ∅ | ∅ | OP-NP | ± | Passive Agentive |

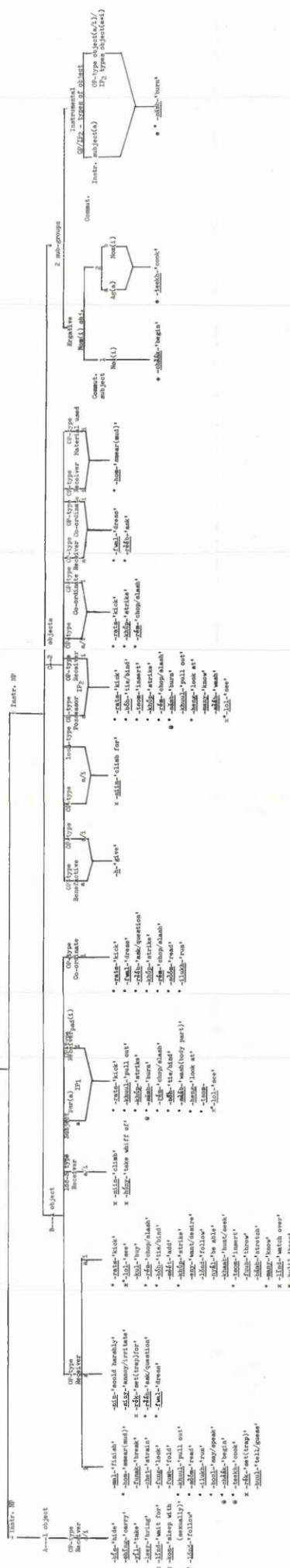
*Two object nouns are capable of occurring in sequential affiliations as OP, but not concurrently as OP. If both objects co-occur, they may co-occur as two NP's or in an OP-NP (or locS-NP), or as OP-locS combination.

8. Two verbs have the capacity to occur with locS object, one obligatorily (-húny-), the other alternatively or concurrently with an OP-type (-niin-).
9. All agentive verbs permit of two very broad divisions:
 - (a) those which can be associated with instrument objects
 - and (b) those which cannot. The chart on pp. 67-68 illustrates these facts as well as other syntactical features of objects, together with a sample of verbs occurring with each classification. As with descriptive verbs, features of animacy are indicated, and capital letters for syntactic patterns are employed.

The 'object' chart brings the analysis much further; it clarifies syntactic patterns, i.e. the number of nominals, OP- and locS-type objects possible with various classes of verbs in sentences, the behavior of PNP_I in sequential affiliations. The classification of verbs according to the semantic features of animacy also increases the adequacy of the description thus far, making possible the third item in the lexical entry. But several problems remain: More understanding of obligatory and optional word order is needed. If, as Fillmore (1968, p. 21) stated, the particular relationship of a verb with a particular NP (termed case relationship by him) can occur only once in a sentence, what are the two relationships existing between the two possible OP's and the verb in some sentences? Sometimes one is animate, and the other is inanimate, but in other sentences with other verbs both are inanimate. What sorts of objects are these? Clearly, the analysis needs to continue further.

However, for the moment, the other types of clausal syntactic pattern analysis will now be presented, together with the features of animacy and inanimacy.

CHART OF ADJECTIVE VERBS



7. T₁ = object of intransitive possession 1
 8. T₂ = object of intransitive possession 2
 9. T₃ = instrument
 10. I = inanimate
 11. A/I = animate or inanimate

Meanings of symbols:
 1. * = multivalency
 2. # = capable of clausal affiliation, i.e., ergative, instrumental
 3. x = polysemous
 4, 5, 6, 7 = syntactic patterns
 8-10 = pronominal object prefix
 11-15 = pronominal locative suffix

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 4, 5, 6, 7 = syntactic patterns
 8-10 = pronominal object prefix
 11-15 = pronominal locative suffix

2.63. Verb Classes in Entailing Clauses

A third group of clauses is characterized by the following criteria:

1. Verbs are obligatorily of the one-nominal class (i.e. the grammatical-subject NP) of the pattern

$$S \rightarrow NP_1 + V$$

and optionally of the two-nominal class of the pattern

$$S \rightarrow NP_1 + V \pm NP_2$$

2. These clauses have the capacity to undergo the entailing affiliation by which operation occur the following patterns of co-occurrences:

NP_1 and NP_2 interchange positions, by which operation

- a. the SP of the verb is in controlled relationship with NP_2

- b. the verb root remains unchanged.

(Such verbs do not tolerate locative noun shapes in subject position.)

- c. when NP_1 occurs in the position of NP_2 , i.e. in a position to the right of the verb, it occurs as a locative NP.

Clauses occurring in such patterns are here termed 'entailing' clauses. The pronominal shape of any locNP is locS (locative suffix).

It can be seen, then, that these verbs cannot be classed as 'descriptive,' for their grammatical subjects (in the referent sentences) are not actor subjects. NP_2 is the actor occurring as grammatical subject in the entailing affiliation. These verbs may

occur in one-nominal constructions, but they will be considered entailing verbs here.

It is a common occurrence for fronted locNP's to occur as grammatical subjects with, or without, the locative prefix (see p.190, for example:

Omusiáni aniina khymusaála.
Boy he-climbs (in) tree.

may occur thus:

Khumusaála khuniinwakhwô nende omusiáni.
in-tree it-is climbed in it by boy.

or,

Omusaála kuniinwakhwô nende omusiáni.
Tree it-is climbed in by boy.

the point being that a locative NP (with or without the locative) as grammatical subject in non-entailing clauses is the subject of the verb in its passive form. Both classes of these verbs (i.e. those of entailing and of non-entailing clauses) require that, in certain circumstances, the NP in the position to their right be in the shape of locNP in the referent sentences.

At this point it should be explained that locatives indicate two positions: They indicate (1) 'location' and (2) 'direction' and are here termed 'locational' (L_1) and 'directional' (L_2) locatives, respectively. Whether a NP is locational or directional depends upon the nature of the verb and the meaning of the sentence. Some verbs indicate directional movement, i.e. movement toward a goal (e.g., -its- 'come,' -yil- 'take (to a place)'). Other verbs indicate only process, movement, or activity within a given area. In such circumstances the locNP will be termed locational. If the verb and goal indicate movement toward the goal, the verb will be termed directional and the 'goal' locNP will be termed a directional

locNP. All verbs capable of being associated with directional locative NP's also have the capacity to be associated with a locational locNP within a larger area capable of containing the complete movement indicated. Examples:

Directional: Omusiani yeelukha khwílúuka.
Boy he-runs to shop.

Locational: Omusiani yeelushila khunjila.
Boy he-runs on road.

Both may occur concurrently:

Directional
and

Locational: Omusiani yeelushila khunjila khwílúuka.
Boy he-runs on road to shop.

With regard to the distinction of time and space, they are neutral. "The distinction between 'to' and 'from' is a second distinction within 'directional,'" asserted Lyons (1969, p. 300). These facts will be referred to at various times in this thesis. Both the 'locational' (loc₁NP) and 'directional' (loc₂NP) locatives occur in entailed clauses, which can be described by these patterns:

Unentailed:

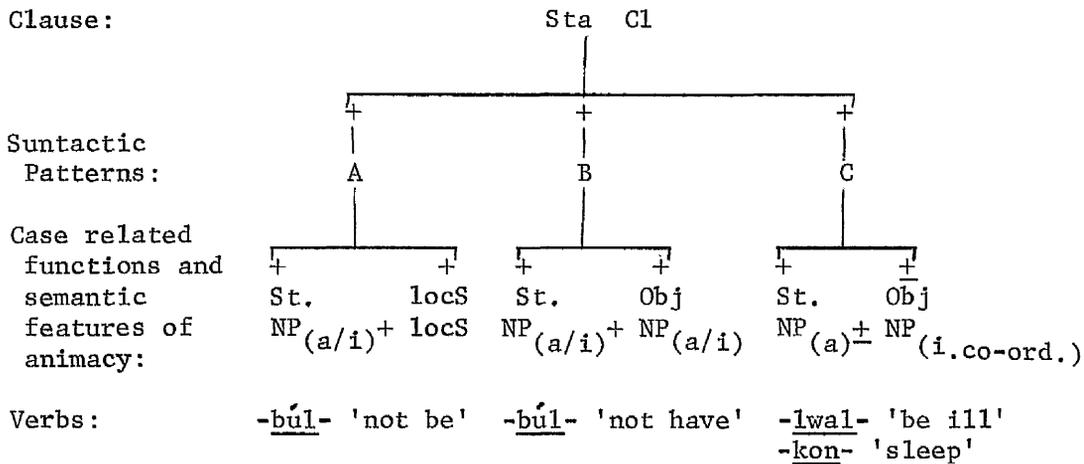
$$S_1 \rightarrow NP_1 + V_1 \pm NP_2 / S_2 \rightarrow NP_1 + V_2 \pm NP_2$$

Entailed:

$$S_1 \rightarrow NP_2 + V_1 + loc_1 NP_1 / S_2 \rightarrow NP_2 + V_2 + loc_2 NP_1$$

The following illustration gives a summary of entailing clauses and the verbs occurring in such clauses:

Clause:



2.65. Summary of Section

As was stated on page 61, six levels of description have been expounded thus far in this description:

1. Uni- and multi-nominal divisions
2. Association or non-association with OP- and/or locS-types of objects in sequential, mixed, and clausal affiliations
3. Occurrence of contrastive clauses: Descriptive, Agentive --with sublevel groups (a) ergative and (b) instrumental --Entailing, and Stative
4. The range of syntactic patterns in which a verb may participate
5. The semantic/syntactic role of various NP's in such syntactic patterns
6. The subclassification of verbs according to their ability to be associated with animate or inanimate NP's, or with both.

Item five has been partly described, but there still is no complete clarity concerning the particular roles of the various NP's in the syntactic patterns. Which NP's are 'fixed objects'? Which

is the semantic 'receiver' of the action? Is one object 'benefactive'? What of the two inanimate OP-type objects possible in association with -hom- 'smear'? Clearly another step in the analysis is needed.

Since a description of a language should include not only that of the grammatical component, but of the lexical component as well, a further level of analysis is necessary in order to complete the lexical description. For lexical entries should serve as the context for rules in the syntactic component of the grammar (Scotton, 1967, p. 255). As a final step, then, in this analysis, I propose the addition of a classification of NP's according to their case functions in sentences.

2.7. The Category of Case in Shisa Verbs

At this point it would be well to clarify the relationship between syntactic and case functions. Syntax deals with the rules governing the combinations of NP's and verbs in sentences. Basically, syntax is the theory of 'putting together' these elements into acceptable sentence patterns. The rules of syntax treat of such relationships as 'subject' and 'object.' 'Case' treats of the role of each NP within a syntactic pattern. It identifies the semantic-syntactic function which the individual NP performs in the sentence. In fact, case is subsumed in syntax. To borrow a figure from the realm of sport, it could be asserted that syntax is concerned with the rules of the game, and case is concerned with the roles of the players. Syntax is grammatical, and case is lexical in the sense that the grammatical component consists, at least in part, of a classification of verbs according to the number and

kinds of sentence patterns in which they can occur; and the lexical component, as a context for the grammatical component, indicates (besides the syntactic patterns in which a verb can occur) the case functions (placed in case frames in this analysis) of the NP's within each syntactic pattern. This does not mean that the two elements are separate. They only permit of separate types of classifications. In reality, syntax deals with the relationships existing between components of a sentence, such as 'subject,' 'verb,' and 'object'; and case classifies the functions of NP's, such as 'agentive,' 'instrumental,' 'benefactive,' and so on.

2.71. Background of 'Case' in Literature

From antiquity, grammarians have considered 'case' as "that form of a noun or pronoun which marks it as the subject of a verb, or as the object of a verb, adjective, or preposition, or as playing the part of an adjective or an adverb." (Curme, 1935, p. 127) Even generative grammarians and linguists looked upon "case markers, i.e. morphological inflections, as surface structure reflexes, introduced by rules, of various kinds of deep and surface syntactic relations." (Fillmore, 1968, p. 5)

"Traditionally," asserted Robins (1964, p. 248) "the category of case has been considered to be a property of the so-called 'case languages,' such as Latin, Greek, Sanskrit, and so on, whereby specific syntactic relations between nouns and nominal groups and other sentence constituents demand specific forms of the words involved." Robins continued (Ibid., p. 282), "From the time of classical antiquity, the different cases have been labelled by reference to some semantic characteristics, and these labels are still with us in the traditional terms: nominative, vocative, accusative, genitive, dative,

and ablative." Some linguists, such as Hockett (1958, p. 235), add the ergative case, and many add the instrumental. Each of these labels refers quite clearly to one of the semantic functions assigned to it, but not to all of the functions operating when a particular case form occurs. Most of the traditional case studies sought one comprehensive meaning to cover all the behavior of one inflected form, rather than recognizing the possibility that there might be several, distinct, but homophonous, cases.

Hockett (Ibid., p. 234) defined case: "Cases are inflected forms for nouns which fit them for participation in key constructions relative to verbs." Cassidy (1937, p. 244) stated, "'Case' will be properly used and will continue to have some meaning only if the association with inflection be fully recognized." Even Lyons (1969, p. 218) as late as 1969 thought of 'case' only as a surface phenomenon. He claimed, "'Case' (in the languages in which the category is found) is not present in 'deep structure' at all, but is merely the inflexional 'realization' of particular syntactic relationships."

Yet, with all these notions, there has remained an awareness of the fact of 'case.' Hjelmslev (1935, cited by Fillmore, op. cit., p. 3) suggested that, if we abandon the assumption that an essential characteristic of the grammatical category of case is expressed in the form of affixes on substantives, the study of cases can be pursued quite fruitfully. Lyons (1969, pp. 301-2) displayed a certain awareness of the notion of case outside the traditionally recognized inflected forms when, in treating of prepositions, he stated that they "may be regarded as cases of the nouns they govern, if the term 'case' is not restricted to inflexional variation.... No language has yet been studied in sufficient detail from a generative point of view for it to be possible to say just how much of the coincidence between the

more clearly 'local' and the more clearly 'grammatical' functions of cases and preposition is synchronically relevant in a particular language."

Fillmore (1968, p. 3, fn. 2) made the most sweeping and most revolutionary statement of all when he asserted, "My claim is...that a designated set of case categories is provided for every language, with more or less specific syntactic, lexical, and semantic consequences, and that the attempt to restrict the notion of 'case' to the surface structure must fail." Fillmore also emphasized "the centrality of syntax" (Ibid., p. 3) in any treatment of the category of case. He traces case through two levels, from the deep structure to the surface realization by means of the assignment of prepositions to NP's in the deep structure, thus identifying case functions in English. His approach is the use of "the term case to identify the underlying syntactic-semantic relationship...in a particular language...." Ibid., p. 21)

2.72. The present meaning of 'case'

In his entire revolutionary essay, Fillmore failed to define the term 'case.' Whiteley did so (in a tutorial session, May 20, 1971,) at SOAS): "'Case' is a device for classifying intrasentential relationships." Case frames are employed in this study to indicate the particular case functions NP's perform within sentences.

The question now arises: What are case frames? Therefore, an explanation of case frames is now given: Each sentence provides either a simple case function or an array of such functions, depending upon the number of NP's with which a verb is associated in the sentence and the semantic/syntactic role (e.g., agentive subject, or benefactive object) each NP plays. Fillmore (1968, p. 27) termed this array of cases a 'case frame' and presented it in the visual form of

a set of brackets, inside and to the left of which was a long dash for the verb and capital letters joined by a + sign. Some letters were inserted in parentheses to indicate optionality.

Examples: For the word open he gave the following frames:

[_____ O + A] - 1. John opened the door.

[_____ O + I] - 2. The wind opened the door.

[_____ O + I + A] - 3. John opened the door with a chisel.

Fillmore (Ibid., pp. 24-25) suggested six general case names: Agentive (A_g), Dative (D), Benefactive (B), Factitive (F) Locative (L), and Objective (O), but he added, "Additional cases will surely be needed." Also he wrote, "It is important to notice that none of these cases can be interpreted as matched by surface-structure relations, subject and object, in any particular language." Fillmore began the sentences for his argument in deep structure and by a series of transformations and the use of prepositions brought them to the surface.

This present study consisted of surface-structure testing and sought to show surface case functions. Thus the idea of Fillmore's frames do not indicate the order in which NP's and their respective case functions occur. This study presented each case function of an NP (represented by a capital letter within the brackets) in the order in which it occurs in the referent sentence, the long dash for the verb occurring in the position in which it occurs in the referent sentence in order to show the sequentiality of the sentence items, as well as the case functions involved. For example, [Ag_____ D + O (L)]. Thus the agentive NP occurs to the left of the verb, then the verb, then the animate object, followed by the inanimate object, and lastly the optional locative NP. See p. 284 for a list of abbreviations for case functions.

In this analysis the following case function items from Fillmore (Ibid.) have been adopted: Agentive (A) Instrumental (I), Dative (D) --animate object. The Objective (O) is usually the inanimate object unless otherwise specified for behavioral reasons. Locative (L) is used, but with differences as will be seen later. Other case functions will be named as they occur in the study.

2.73. The position of this analysis on 'case'

This thesis accepts Fillmore's challenge "that a designated set of case categories is provided for every language" (and will seek to show that there is a set for the Shisa language and that syntax should be at the center). It accepts Whiteley's definition that 'case' is a device for classifying intrasentential relationships, and Hjelmslev's suggestion that the assumption be abandoned that an essential characteristic of the grammatical category of case is expression in the form of affixes on substantives. However, this thesis will differ from Fillmore in that it will not treat of the deep structure of the Shisa dialect. It will seek to identify the various case functions of Shisa by investigating the behavior of such surface phenomena as various types of syntactic patterns; their ability to occur in affiliations, such as pronominal, passive, entailing, imperatival, and so on; word order; sets of behavior patterns governing their various types of NP's; anaphoric processes; and so on. In the domain of semantics, such selectional restraints as animacy vs inanimacy, meaning, and others to be indicated as the study proceeds will be employed as a set of secondary criteria for identifying sub-categories of case functions, such as identifying specific types of subject and object functions. In this analysis, then, transitivity is subsumed in the presentation of semantic/syntactic case functions.

2.74 Divisions of this description

There are two divisions of description: (1) the grammatical component, using, to a large extent, the conventions employed by Dr. C. M. M. Scotton (1967, pp. 255-6, 261) although otherwise her approach and findings are not followed, for she works from deep structure and this study works from surface structure; and (2) the lexical component. The latter component provides the context for the former. The lexical component will consist of six entries for each base verb and seven for each extended form of the verb: (1) verb entry, (2) meaning in English, (3) type(s) of clause(s) in which the base-verb may occur (i.e. Des., Ag., Erg., Instr., Ent., and Sta.--all abbreviations for Descriptive, Agentive, Ergative, Instrumental, Entailing, and Stative clauses, respectively), (4) and of syntactic pattern(s) in which a verb can occur (represented by capital letters), (5) class of verb according to animacy, plurality, and so on (represented by Arabic numerals), and (6) the case frame(s). In lexical entries for the extended forms of the verbs, Roman numerals will be inserted before abbreviations for types of clauses, according to the classification of the particular extended form. The following examples are lexical entries for (1) a base verb, and (2) a benefactive extended verb:

(1) base verb

-bīs- 'hide' Ag. A. 1. [Ag ____ (D) (O) (L)] *

*Note: See pp. 286-7 for conventions.

(2) benefactive extended form

-bisil- 'hide for' I. Ag. A. 1. [Ag ____ B (D) (O) (L)]

A 'read back' of the lexical entries for the verb -bīs- and its benefactive extended form -bisil- follows.

(1) base verb:

-bⁱs- = the base-verb entry

'hide' = meaning in English

Ag. = Agentive clause, the type of clause in which -bⁱs- may occur

A. = syntactic pattern in which it may occur (this will be learned from the study of grammar)

1. = class of verb according to semantic features of animacy, plurality, and so on.

In the brackets:

Ag = Agentive case function for instigator of action indicated by the verb

_____ = verb

D = Dative case function of animate object

O = Objective case function of inanimate object

(X) = optionality, i.e. either object may occur

(L) = optional locative NP case function

(2) benefactive extended form

-bⁱsⁱl- = benefactive extended shape of -bⁱs-

'hide for' = meaning in English

I. = benefactive extension of the verb

Ag. = Agentive clause, the type of clause in which -bⁱsⁱl- may occur

A. = syntactic pattern in which -bⁱsⁱl- may occur

1. = class of verb according to semantic features of animacy, and so on

In the brackets:

Ag = Agentive case function, instigator of action of verb

_____ = verb

B = Benefactive case function of first object NP

The other entries are the same as in (1) above.

CHAPTER 3

ANALYSES OF BASE-VERB CLAUSES IN SHISA3.0. Introduction

In chapter two, six levels of description were attempted, the sixth level being the semantic level of animacy and inanimacy. The other levels were expounded according to syntactic orders. It was then found that an additional level of delicacy was needed in order to describe more adequately the semantic/syntactic roles of NP's associated with various classes of verbs within different syntactic patterns. For this reason it was decided to carry the analysis a step further to determine the case function of each NP in the corpus of material.

To ascertain the case function of an NP, it will be necessary to define its semantic role, such as the 'doer of the action,' 'the receiver of the action' (the 'fixed object' NP, as it will be termed here), 'the benefactive receiver of the action' of the verb, and so on. Features of animacy will be important in determining such roles and will be indicated by +/-/_ animate . Other items will be described in much the same format as that employed by Scotton (1967, pp. 225-256, 261, see p. 291). Her format is basically Chomskyan, which of course involves 'deep' and 'surface' structures of transformational grammar. However, such is not the use here, for this analysis is concerned with semantic/syntactic description, the syntax being determined from surface phenomena and the three features of semantic domain (1) animacy, (2) semantic role of NP's in association with the verb in sentences, and (3) meaning.

The use of Scotton's conventions is simply a more adequate and economical way of presenting the description desired here (see under "Notes on chapters," Chapter 3, Note 1, p. 291.) In the attempt to attain to explanatory adequacy, the following order of presentation has been adopted for sentences under each clause-type:

Classification of Syntactic Pattern (A, B, A₁, A₂, etc.)

1. The Grammatical Component

- a. formula for syntactic pattern stated
- b. sample sentences illustrating the syntactic pattern
- c. necessary explanations
- d. application of criteria
- e. semantic/syntactic schema

2. Lexical Entries

- a. lists for each class of verbs and verb meanings
- b. symbol of clause classification (Des./Ag./Ent./Sta./ etc. for base-verb clauses plus Roman numerals for extension clauses)
- c. symbol of type of syntactic pattern (A, B, etc.)
- d. indication of class of verb (1, 2, 3, etc.)
- e. case frame (semantic roles in abbreviations)²
 - (1) case function of subject
 - (2) dash (—) to indicate verb entry
 - (3) case functions of other NP's, including where necessary features of animacy, optionality, and/or obligatoriness³

The sample sentences in this chapter contain only base verbs.⁴ Extended verb forms will be treated in subsequent chapters. Base verbs are here classified according to the types of clauses in which they occur: Descriptive, Agentive--with two of its non-passive

clausal affiliations--Entailing, and Stative. Subclassifications are made according to kinds of subjects or objects and their attendant features of action or process, animacy, and so on.

3.1. Descriptive Clauses

3.11. Syntactic Pattern A₁

Descriptive clauses occur in only one syntactic pattern (i.e. S → NP + V), but because of the syntactic features of imperativization and non-imperativization (see p. 63), the verbs are divided into two classes: (1) Syntactic pattern A₁, in which occur verbs that imperativize, and (2) syntactic pattern A₂, in which occur the verbs that do not.

3.111. Grammatical Component

The core elements of this pattern are subject + verb. As is true of all syntactic patterns, an optional locNP, which has no syntactic distinctiveness, may occur. Only where necessary will this NP be discussed, after its treatment in this section; but, for the sake of completeness, it will be included in the case frames under lexical entries.

Sample sentences:

Class 1

Ndiili usinjiile. - Ndiili he=has stood up.

Class 2

a. Omwana ukhamile. - Child he-has disappeared.

b. Amatsi kakhamile. - Water it-has disappeared.

Verbs in class 1 in this corpus are characterized by actor, obligatorily animate subjects, and in class 2 by actor, optionally animate subjects. An optional locNP can become a fronted, grammatical

subject in all descriptive sentences. But in this affiliation, all verbs except -sĭnjil- 'stand up' occur in the locative extended form--if the locative is locational. This extended form can, in turn, occur in the passive affiliation. The verb -sĭnjil-, on the other hand, can occur in both the entailing and passive affiliations by fronting of \pm locNP to become grammatical subject, with or without an additional locative extension. Thus, -sĭnjil- poses problems. It can occur as follows:

Active form (in traditional grammar terms)

Ndiili usinjiile hamuliango.
Ndiili he-has stood up near door.

Entailed form

Hamuliango hĭsinjiilehĭ Ndiili.
Near-door it-has stood up near it Ndiili.

Passive form

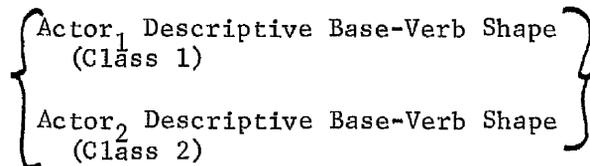
Hamuliango hĭsinjiilwehĭ (or, hĭsinjiilwehĭ) nende Ndiili.
Near-door it-has been stood up near it by Ndiili.

A possible explanation of this behavior is that -sĭnjil- is a verb having an ending identical in shape with that of the -il- extension of other verbs in the same vowel harmony group. (See Appendix II, pp. 313-314.) This verb behaves the same as do other verbs in their base forms and also the same as other verbs in their -il-/-el- extended forms, with one exception: It may occur in the passive affiliation either as -sĭnjilw- with fronted locNP subject, or as -sĭnjililw-, the -il- extended form for it. It is probable that an original base=verb *-sĭng- has disappeared, and the extended form has replaced it as the base-verb with the -il- extension behavior continuing in some circumstances. Also, it is possible for some verbs to occur in a double (i.e. -ilil-) extended

form in Shisa, which fact could account for the form -sinjililw-, a shape which is also identical with the persistive passive extension having a different semantic interpretation.

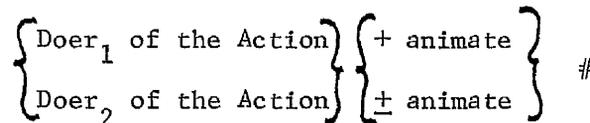
The following schema illustrates the semantic-syntactic subcategorization rules for the grammatical component of syntactic pattern A₁. The form of the schema is, with some variations, the same as that employed by Scotton (1967, pp. 225-226, 261). See pp. 286-87 for explanation of the conventions used.)

0.0 Simple Descriptive Base-Verb Shapes →



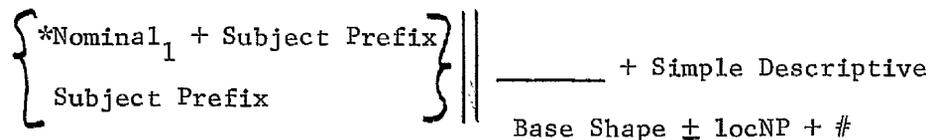
Strict Semantic Subcategorization Rules

1.0 Actor Subjects -



Formal Realization of Actor Subjects

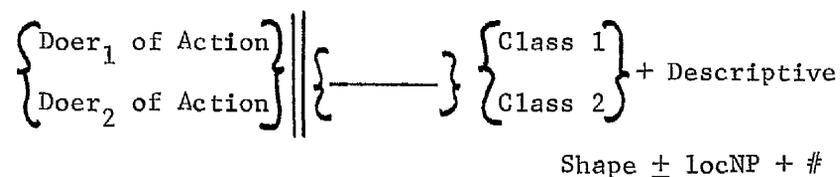
1.0 Actor Subject



*Note: Since all subjects of base-verbs are formally realized in these two shapes, they need not be presented again.

General Semantic/Syntactic Subcategorization Rules

1.0 Actor Subject



Because locative objects do at times need to be considered,
their grammatical schema will be given here.

2.0 Locative Objects →

{Locus of the Action} {± animate} + #

Formal Realization of Locative Objects

{Nominal final
Locative Suffix} || Simple Descriptive Base Shape
± ——— + #

General Semantic/Syntactic Subcategorization Rules

1.0 ± Locative object →

{Locus of Action} || {Actor Subject}
{Class 1
Class 2} + Descriptive Shape
± ——— + #

3.112. Lexical Entries (Starred forms are multivalent; forms
marked x are polysemous in that they may indicate subjective
physical ability--as in this classification, or objective
capability as agentive verbs.)

1. Verbs of Class 1

- sinjil- 'stand up'
- *-ilukh- 'run'
- *x-lol- 'see (be able)'
- x-hulil- 'hear (be able)'
- x-onoon- 'sin'
- x-kon- 'lie down/sleep'
- *-bool- 'speak'
- *-soom- 'read'
- *-reeb- 'ask'
- *-hom- 'smear (mud)'

Des. A₁. 1. [Act ——— (L)]

2. Verbs of Class 2

-khám- 'disappear'

-its- 'come'

Des. A₁. 2. [Act—(L)]3.12. Syntactic Pattern A₂

3.121. Grammatical Component

Syntactic pattern A₂ provides for these core elements: Subject + verb.

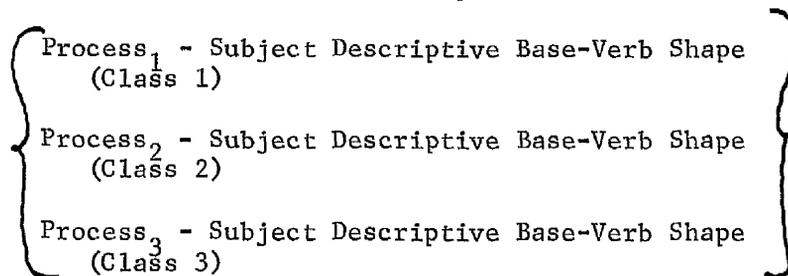
Sample Sentences:

Class 1Mukayisi uchòonyile. - Mukayisi he-has become tired.Class 2Inyama yíbolíle. - Meat it-has spoiled.Class 3a. Omusíani ahúnyanga. - Boy he-smells bad.b. Liseelo líhunvânga. - Hide it-smells bad.

Subjects in this pattern are not actors. They are the objects in which the process or condition identified by the verb develops. They will be termed 'process' subjects. Some of these verbs require animate subjects, others inanimate, and still others are associated with either.

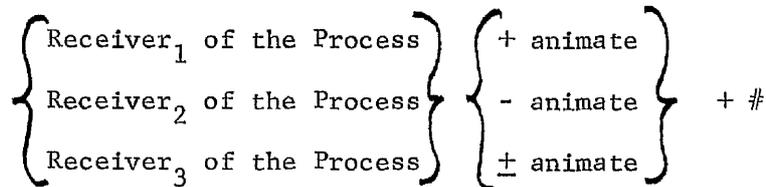
The following schema illustrates the rules for the grammatical component of syntactic pattern A₂.

0.0 Simple Descriptive Base-Verb Shapes

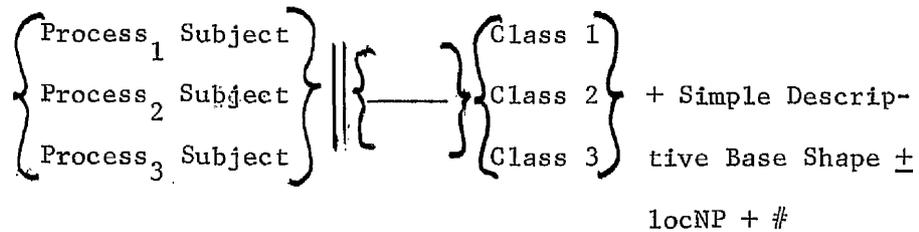


Strict Semantic Subcategorization Rules

1.0 Process subjects →

General Semantic/Syntactic Subcategorization Rules

1.0 Process subjects →



3.122. Lexical entries

1. Verbs of Class 1

-chòony- 'become tired'-khú1- 'grow'**-lwal- 'be/become ill' Des. A₂. 1. [P_c — (L)]

2. Verbs of Class 2

-bol- 'rot/decay'-fúb- 'spoil (in cooking)'-saal- 'sizzle'**-atikh- 'crack' Des. A₂. 2. [P_c — (L)]

3. Verbs of Class 3

x-húny- 'smell (bad)'**-ràáts- 'bleed/flow/leak' Des. A₂. 3. [P_c — (L)]

** It is not certain as to whether verbs marked ** are really descriptive verbs or whether they belong in some other classification. They may occur in a syntactic pattern identical with that of a descriptive verb (i.e. subject + verb), but further investigation

is needed to determine whether the subject NP's perform the case function of process or actor, or whether they perform the role of some other case function. They will later receive further investigation in association with two nominals (p. 118).

3.2. Agentive Clauses

Syntactic patterns in agentive clauses are in accordance with the divisions and classifications indicated in the chart on page 70.

3.21. Syntactic Pattern A

3.211. Grammatical Component

Syntactic pattern A provides for these core elements: subject + verb + object.

Sample sentences:

Class 1

- (a) Kuukhû abisa omwána. - Grandmother she-hides child.
 (b) Kuukhû abisa amáramwa. - Grandmother she-hides bananas.

Class 2

Omúsáàtsa akonile omukhásiwê. - Man he-slept with his wife
 (sexually).

Verbs in syntactic pattern A are obligatorily associated with no instrumental NP's. The subject is obligatorily animate.

NP₂ is the fixed object, is semantically the receiver of the action, may be animate or inanimate with class 1 verbs, and is obligatorily animate with class 2 verbs.

Pronominal affiliations

The object is OP-type and can become pronominalized thus:

$\underline{A} \left\{ \begin{array}{l} \underline{mu} \\ \underline{ka} \end{array} \right\} \underline{bisa} . \quad - \text{She (Grandmother) hides } \left\{ \begin{array}{l} \text{him (child)} \\ \text{them (bananas)} \end{array} \right\} .$

Clausal affiliations

This object can also become a fronted grammatical subject in passive construction, as follows:

$\left\{ \begin{array}{l} \underline{Om\acute{w}ana} \ a \\ \underline{Am\acute{a}ramwa} \ ka \\ \underline{Om\acute{w}ana} \ a \end{array} \right\} \underline{biswa} \ (\underline{n\acute{e}nde} \ \underline{Kuukh\acute{u}}) . \quad - \left\{ \begin{array}{l} \text{Child he-is} \\ \text{Bananas they-are} \end{array} \right\} \text{being}$
 hidden (by Grandmother).

The following schema illustrates the semantic/syntactic sub-categorization rules of syntactic pattern A to be employed in the grammatical component:

0.0 Simple Agentive Verb Shapes →

$\left\{ \begin{array}{l} \text{Agentive Subject Base-Verb Shape} \\ \text{(Class 1, 2)} \end{array} \right\}$

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \begin{array}{l} \text{Receiver}_1 \text{ of the Action} \\ \text{Receiver}_2 \text{ of the Action} \end{array} \right\} \left\{ \begin{array}{l} + \text{animate} \\ + \text{animate} \end{array} \right\} + \#$

Formal Realization of Object #1

$\left\{ \begin{array}{l} \text{Object Prefix} \\ \text{Nominal}_2 \end{array} \right\} \parallel \text{Simple Base-Verb Shape} + \text{---} + \#$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$\left\{ \begin{array}{l} \text{Receiver}_1 \text{ of Action} \\ \text{Receiver}_2 \text{ of Action} \end{array} \right\} \parallel \left\{ \begin{array}{l} \text{Agentive Subject} \\ \text{Agentive Subject} \end{array} \right\} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\}$
 + Base-Verb Shape + --- + #

3.212. Lexical entries

Some verbs are capable of occurring in more than one type of syntactic pattern; these would, therefore, have more than one

lexical entry in the dictionary. In this work, however, each entry will be made with the presentation of each syntactic pattern in the lexical entries for that particular pattern.

1. Verbs of Class 1

-bis- 'hide'

-chĩng- 'carry'

-yí1- 'take (to a place)'

-lĩnd- 'wait for'

-leer- 'bring' Ag. A. 1. [Ag — (D) (O) (L)]

2. Verbs of Class 2

-kon- 'sleep with (sexually)' Ag. A. 2. [Ag — D (L)]

3.22. Syntactic Pattern B

3.221. Grammatical Component

The core elements of syntactic pattern B are subject + verb + object #1 ± object #2.

Sample sentences:

Class 1

Omusiáni amala emilimo (nênde olupânga).
Boy he-finishes work (with machete).

Class 2

Papâ anina Sênje (nămakhúwa amănji).
Papa he-scolds his sister (with many words).

Class 3

- a. Obwóra aboha ing'ombe (nênde omukoye).
Obwora she-ties cow (with rope).
- b. Obwóra aboha tsikhwí (nende omukoye).
Obwora she-ties firewood (with rope).

Class 4

- a. Dóbi aniina khumusáála (nômukoye).
Dobi he-climbs tree (with rope).

- b. Dóbi aniina khupûnda (nómukoye).
Dobi he-climbs on donkey (with rope).

Class 5

- Omulesi ásaaba amakhonokê (nende isáábúuni).
Nursegirl she-washes her hands (with soap).

Class 6

- Omúsiáni aratsa tsimbasi (něshilenje eshibií).
Boy he-kicks kicks (with bad foot).

In sentences of classes 1 - 5, object #1 is the receiver of the action (the 'fixed object'), and object #2 is an optional instrumental phrase. The fixed objects in classes 1, 2, 3, 5 are of the OP-type; the object in class 5 is a body part and thus IP₁ object. Class 4 objects are locative, whose pronominalized forms are of the locS type.

At this point it will be necessary to interpolate an explanation: When a verb and an object with which it can be associated have the same root, this object is termed by traditional grammarians (e.g., Jespersen, 1933, p. 109) a 'cognate object,' e.g., 'dance dances' in English, or okh'wimba ol'wimbo 'to sing song' in Shisa. Not only do these two constituents have the same root, but there also exists a semantically cognate compatibility between the two.

This same sort of semantic compatibility also exists between some verbs and certain of their objects, even when the two are not derived from the same root in a language. (However, the same concept in another language may possess this cognate element, e.g., (1) 'ask questions' in English is rèéba amaréèbo in Shisa; (2) 'kick kicks'--pure cognates in English--is ratsa tsimbasi in Shisa.) Where this semantic compatibility between a verb and its object exists--whether or not they derive from the same root--such objects

will be termed 'co-ordinate' (C) objects. Now to return to the analysis.

With class 6 verbs, then, object #1 is a cognate object in the English interpretation, but it is not a cognate in Shisa. However, the same semantic compatibility prevails. Therefore, it will be termed a 'co-ordinate' object.

Pronominal affiliations

Class 1, 2, 3, 5, 6:

Achimalâ - He finishes it.

Class 4:

Aniinakhwô - He climbs it.

Passive affiliations

Class 1, 2, 3, 5, 6:

Chimalwa nina { yê / lwô } .

It (work) is being finished

{ by him (boy) / with it (machete) } .

Class 4:

Khuniinwakhwo nina { yê / kwô } .

It (tree) is being climbed

{ by him (boy) / with it (rope) } .

Either type of object can become fronted grammatical subject in a passive construction.

The following sketch indicates types of objects, features of animacy in relation to each verb, and other semantic and syntactic features:

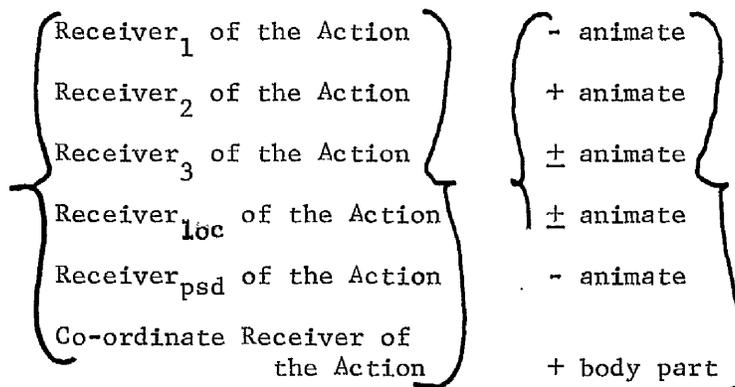
0.0 Simple Agentive Verb Shapes →

{ Agentive Subject Base-Verb Shape }
(Class 1, 2, 3, 4, 5, 6)

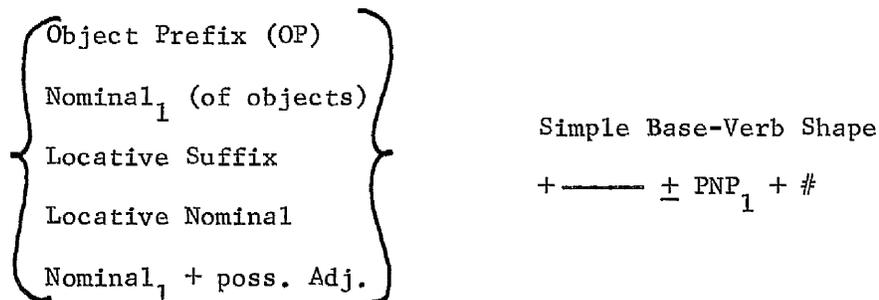
Since all agentive subjects are described as those in syntactic patterns A and B, no further descriptions of them will be given in the sketches.

Strict Semantic Subcategorization Rules

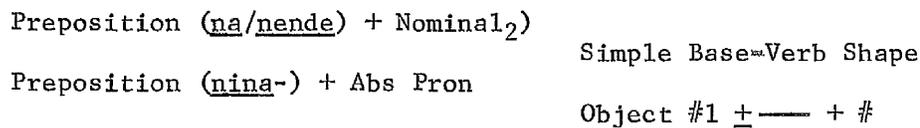
1.0 Object #1 →

Formal Realizations of Objects

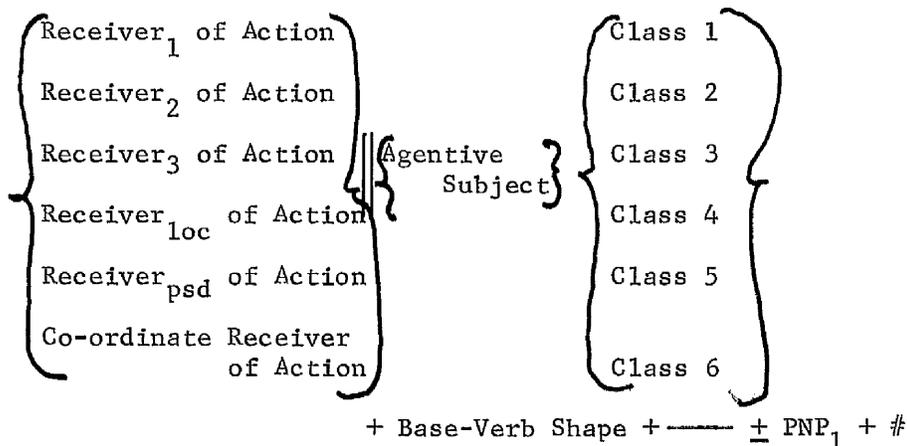
1.0 Object #1 →



2.0 Instrumental Object →

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →



2.1 Object #2 →

{Instrument of Action} || {Agentive Subject} {Class 1 - 6}
 + Base-Verb Shape + Object #1 ± — + #

Since instrument object always behaves the same, it will be
 be given full treatment each time.

3.222. Lexical entries

1. Verbs of Class 1

-mal- 'finish'-rék- 'set (trap)'-funak- 'break/snap'-chet- 'strain'-fung- 'lock'-fumb- 'fold'-khuul- 'pull out'-sòóm- 'read'-ilukh- 'run'-bool- 'say/speak'*-hom- 'smear (mud)'-buul- 'tell/guess'

Ag. B. 1 [Ag ——— O (I) L]

2. Verbs of Class 2

-nin- 'scold'-siny- 'irritate'-rèéb- 'ask'-fwal- 'dress'-rék 'set (trap) for/trap' Ag. B. 2. [Ag ——— D (I) (L)]

3. Verbs of Class 3

-rats- 'kick'-lol- 'see'-kul- 'buy/exchange for'

- rém- 'chop/slash'
- bòh- 'tie/bind'
- mèét- 'add'
- khúp- 'strike'
- eny- 'want/desire'
- lònd- 'follow'
- nyál- 'be able/equal to'
- khaab- 'seek/hunt'
- tsom- 'insert'
- fuub- 'throw'
- bǎmb- 'stretch and fasten'
- many- 'know'
- lǐnd- 'watch over'
- hulil- 'hear/feel/taste/understand'
- heng- 'look'
- onoon- 'spoil'
- sǎmb- 'burn'
- nyòól- 'find'
- khay- 'refuse' Ag. B. 3. [Ag — (DXO)(I)(L):

4. Verbs of Class 4

- niin- 'climb'
- húny- 'smell/take whiff of' Ag. B. 4. [Ag — L (I) (L)]

5. Verbs of Class 5

- sááb- 'wash (body part)'
- heng- 'look at'
- khúp- 'strike'
- sâmb- 'burn'
- rats- 'kick'

-rém- 'slash/cut'

-bóh- 'tie/bind'

-khúul- 'pull out'

Ag. B. 5. [G — 0 (I) (L)]

6. Verbs of Class 6

-rats- 'kick'

-fwal- 'dress/put on (garment)'

-ràéb- 'ask/interrogate'

-khúp- 'strike'

-rém- 'slash'

-onoon- 'sin'

-sòóm- 'read'

-ilukh- 'run'

Ag. B. 6. [Ag — C (I) (L)]

3.23 Syntactic Pattern C

3.231. Grammatical Component

The core elements of syntactic pattern C are these: subject + verb + object #1 + object #2 ± object #3. Since the instrument object (object #3 here) is optional in all agentive clauses and behaves the same as shown in syntactic pattern B, it will not be described again in this section, except in the case frames and when instrumental affiliations are considered.

Sample Sentences:

Class 1

- a. Okwémba aha Tsúma omwána (nende omukhóno omusáatsa).
Okwemba he-gives Tsuma child (with right hand).
- b. Okwémba aha Tsúma omúpíila (nende omukhóno omusáatsa).
Okwemba he-gives Tsuma ball (with right hand).

Class 2

- a. Omúsiáni anína omwána khúpunda (nomukhóno něbilenje).
Boy he-climbs on donkey (to get) child (with one hand and his feet).
- b. Omúsiáni anína tsikhwí khusáála (nómukhóno něbilenje).
Boy he-climbs in tree (to get) firewood (with one hand and his feet).

Class 3

Omúsiáni akhupa omwána amakhóno (nende olusáála).
Boy he-hits child's hands (with stick).

Class 4

- a. Omwáyi aratsa ing'ombe tsimbasi (něshilenje eshiláyi).
Herdboy he-kicks cow kicks (with his good foot).
- b. Omwáyi aratsa omúpiíla tsimbasi (něshilenje eshiláyi).
Herdboy he-kicks ball kicks (with his good foot).

Class 5

Omwéchesía areeba abéechi amaréèbo (nende omunwa).
Teacher he asks pupils questions (orally--with mouth).

Class 6

Sára ahoma indubi obutóyi/nóbutóyi (nende olusáála).
Sara she-smears basket (with) mud (with stick).

All subjects in all classes are animate. Object #1 varies with all classes as follows:

| | |
|--------------------|--------------------|
| Class 1: + animate | Class 4: ± animate |
| Class 2: ± animate | Class 5: + animate |
| Class 3: + animate | Class 6: - animate |

With class 1 verbs, object #1 is obligatorily animate, precedes object #2 (which may be animate or inanimate) and follows the verb immediately, is obligatory with this verb and with object #2.

These criteria are valid for the benefactive object. Object #1 will, therefore, be termed a benefactive object (B). With all other verb classes, object #1 occurs obligatorily in this pattern, but it may occur as the sole fixed object in other patterns. (This is

also true of object #2). For this reason, it may not be the benefactive object because the benefactive object may not occur without the co-occurrence of object #2.

With class 2 verbs, object #2 is a locative NP and denotes the thing climbed. It will, then, be termed the fixed object--the receiver of the action. Object #1 states the purpose of the climbing--to get the child, to get firewood--and will here be termed the object of 'purpose' (P). Also with class 2 verbs, either object may be animate or inanimate.

With class 3 verbs object #1 is obligatorily animate and the possessor of inanimate body-part object #2. These objects are, then, identified as objects of inalienable possession 2 (IP₂) with object #1 the animate possessor and object #2 the inanimate possessed body part or name, and so on of object #1.

With class 4 and class 5 verbs, object #2 is a co-ordinate object; the only difference between these two classes is that object #1 with class 4 is optionally animate, and with class 5 it is obligatorily animate. Object #1 with both classes will be considered the fixed object, and, therefore, referred to as animate dative (D) object or inanimate objective (O) object, as the case may be.

With class 6 verbs, both objects are obligatorily inanimate. Object #2 may occur in two shapes--NP or PNP. It is also possible for these objects to interchange positions, but when they do, object #1 occurs obligatorily as locNP and object #2 may occur only as NP, not as PNP (i.e. when only nominals co-occur):

Sára ahoma obutóvi mundubi (nênde olusáàla).
Sara she-smears mud in basket (with stick).

Object #1 and object #2 of class 6 verbs are the only objects of the entire six classes which may interchange positions. Since

indubi, i.e. object #1, is the receiver of the action of smearing mud, it will be termed the inanimate fixed object (O), and since obutóyi, i.e. object #2, is the material used for smearing, object #2 will be termed object of 'material used' (M).

Pronominal affiliations

These clauses may occur in the following mixed affiliations:

Class 1, 5

A $\left\{ \begin{array}{l} \text{mu} \\ \text{ku} \end{array} \right\}$ he $\left\{ \begin{array}{l} \text{omwána} \\ \text{Tsuma} \end{array} \right\}$ (ninakwô). - He $\left\{ \begin{array}{l} \text{him (Tsuma)} \\ \text{it (ball)} \end{array} \right\}$ gives
 $\left\{ \begin{array}{l} \text{him (child)} \\ \text{him (Tsuma)} \end{array} \right\}$ (with it--hand).

Class 2

A $\left\{ \begin{array}{l} \text{mu} \\ \text{tsi} \end{array} \right\}$ niinakhwô (ninabio). - He for $\left\{ \begin{array}{l} \text{him (child)} \\ \text{it (firewood)} \end{array} \right\}$ climbs
 it (tree) (with them).

Class 3

Amukhupa amakhôno (ninalwô). - He it (child) strikes hands (with
 it--stick).

Class 4

A $\left\{ \begin{array}{l} \text{chi} \\ \text{ku} \end{array} \right\}$ ratsa tsimbasi (ninashio). - He $\left\{ \begin{array}{l} \text{it (cow)} \\ \text{it (ball)} \end{array} \right\}$ kicks kicks
 (with it--good foot).

or,

Atsiratsa $\left\{ \begin{array}{l} \text{ing'ombe} \\ \text{omupiila} \end{array} \right\}$ $\left\{ \begin{array}{l} \text{ninashio} \\ \text{ninashio} \end{array} \right\}$. He them (kicks) kicks $\left\{ \begin{array}{l} \text{cow} \\ \text{ball} \end{array} \right\}$
 (with it--good foot).

Class 6

Achihoma obutóyi/nóbutóyi (ninalwô). - She it (basket) smears
 mud/with mud (with it--stick).

or (sequential affiliation),

Abuhomamwô (ninalwô). - She it (mud) smears in it (basket)
 (with it--stick).

Clausal affiliations

These clauses may occur in passive affiliations as follows:

Class 1

Either object may become fronted grammatical subject in the passive affiliation, but the other one must also occur either as an OP or as an NP:

$$S_1 \rightarrow NP_2 + V(+ -w-) + NP_3 \pm \left\{ \begin{array}{l} PNP_I \\ BNP_{ag} \end{array} \right\}$$

e.g.,

Tsúma aheebwa $\left\{ \begin{array}{l} omwána \\ omupílla \end{array} \right\}$ nende $\left\{ \begin{array}{l} Okwemba \\ omukhono \end{array} \right\}$ omusáàtsa.

Tsuma he-is being given $\left\{ \begin{array}{l} child \\ ball \end{array} \right\}$ $\left\{ \begin{array}{l} by Okwemba \\ with right hand \end{array} \right\}$.

$$S_2 \rightarrow NP_3 + V(\neq -w-) + NP_2 \text{ etc.}$$

e.g.,

$\left\{ \begin{array}{l} Omwána \\ Omupílla \end{array} \right\} \left\{ \begin{array}{l} a \\ ku \end{array} \right\}$ heebwa Tsúma, etc.

$\left\{ \begin{array}{l} Child \text{ he} \\ Ball \text{ it} \end{array} \right\}$ is being given Tsuma, etc.

Class 2

When the locative object occurs as grammatical subject of the passive verb, object #1 occurs as the object in a prepositional phrase of purpose in which an infinitive phrase occurs:

$\left\{ \begin{array}{l} Khumusáàla \\ Khupúnda \end{array} \right\}$ khuniinwakhwô nômusíani, (khulwa) ókhunyóòla $\left\{ \begin{array}{l} omwána \\ tsikhwi \end{array} \right\}$.

$\left\{ \begin{array}{l} In-tree \\ On-donkey \end{array} \right\}$ it is being climbed $\left\{ \begin{array}{l} in \\ on \end{array} \right\}$ it by boy* to get $\left\{ \begin{array}{l} child \\ firewood \end{array} \right\}$.

*Note: Khulwa "for the sake of," a preposition used before the infinitive giving the meaning 'for the sake of getting,' or 'to get.'

The passive construction in this pattern re-inforces the concept that object #1 is an object of purpose (P). Object #1 may also occur as fronted grammatical subject, in which case the locative object occurs as a locative NP:

$\left\{ \begin{array}{l} \text{Om\`w\`ana} \\ \text{Twikhwi} \end{array} \right\} \text{tsi}^a \left\{ \begin{array}{l} \text{niinwa} \\ \text{khumus\`a\`ala} \end{array} \right\} \text{(nende omusiani)}.$
 $\left\{ \begin{array}{l} \text{Child he} \\ \text{Firewood it} \end{array} \right\}$ is being climbed for in tree (by boy).

Class 3

The objects of class 3 verbs are IP₂ objects, i.e. object #1 is animate, and object #2 is a body part. Object #1 is the possessor of object #2, the possessed. Either object may occur as fronted grammatical subject, but when object #2 occurs as such, object #1 follows in the shape of a possessive phrase.

Om\`w\`ana akhupwa amakh\`ono nende $\left\{ \begin{array}{l} \text{omusiani} \\ \text{olus\`a\`ala} \end{array} \right\}.$

Child he-is being struck (his) hands $\left\{ \begin{array}{l} \text{by boy} \\ \text{with stick} \end{array} \right\}.$

or,

Amakh\`ono k\`om\`w\`ana kakhupwa n\`ende $\left\{ \begin{array}{l} \text{omusiani} \\ \text{olus\`a\`ala} \end{array} \right\}.$

Hands of child they-are being struck $\left\{ \begin{array}{l} \text{by boy} \\ \text{with stick} \end{array} \right\}.$

These patterns occur with all IP₂ passive constructions.

Class 4, 5

In sentences in which class 4 verbs occur, object #1 may be animate or inanimate, and object #2 always stands in a semantically compatible relationship with the verb. (See p. 95) Therefore, it will be called a co-ordinate object.

With such verbs having two objects, either object may occur as fronted grammatical subject in the passive affiliation:

$\left\{ \begin{array}{l} \text{Ing'ombe} \\ \text{Tsimbasi} \end{array} \right\} \text{yi} \left\{ \begin{array}{l} \text{ratswa} \\ \text{tsimbasi} \end{array} \right\} \text{n\`ende} \left\{ \begin{array}{l} \text{om\`w\`ayi} \\ \text{eshilenje} \end{array} \right\} \text{eshil\`ayi}.$

$\left\{ \begin{array}{l} \text{Cow it is} \\ \text{kicks they are} \end{array} \right\}$ being kicked $\left\{ \begin{array}{l} \text{kicks} \\ \text{cow} \end{array} \right\} \left\{ \begin{array}{l} \text{by herdboy} \\ \text{with good foot} \end{array} \right\}.$

Class 6

With class 6 verbs, either object has the capacity to occur as fronted grammatical subject with the other co-occurring as NP in a position to the right of the verb:

$\left\{ \begin{array}{l} \text{Indubi} \text{ yi} \\ \text{Obutóyi} \text{ bu} \end{array} \right\} \text{homwa} \left\{ \begin{array}{l} \text{obutóyi/nobutóyi} \\ \text{indubi} \end{array} \right\} \left\{ \begin{array}{l} \text{nende} \\ \text{nênde} \end{array} \right\} \left\{ \begin{array}{l} \text{Sára} \\ \text{olusáàla} \end{array} \right\}.$
 $\left\{ \begin{array}{l} \text{Basket} \\ \text{Mud} \end{array} \right\} \text{it-is being smeared} \left\{ \begin{array}{l} \text{mud/with mud} \\ \text{(on) basket} \end{array} \right\} \left\{ \begin{array}{l} \text{by Sara} \\ \text{with stick} \end{array} \right\}.$

The fact that object #2 can occur in two shapes--as NP or as PNP--differentiates it from object #1. Semantically, object #2 is an object of material used and will be termed so (NPm/PNPm/M). Object #1 is the receiver of the act of smearing mud, as identified by the verb, and is thus termed the inanimate fixed object (0).

The following schema illustrates the rules to be added to the grammatical component for syntactic pattern C. All subjects are agentive, and PNP_I behaves the same as in other patterns. Therefore, these two constituents will not be included in this schematic description.

Strict Semantic Subcategorization Rules

1.0 Object #1. →

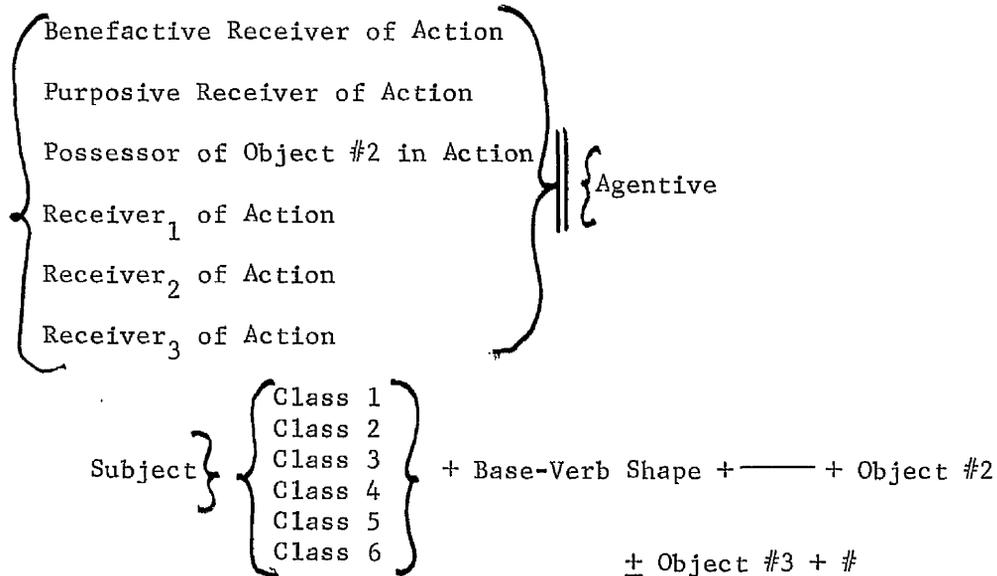
| | | |
|---|-----------|---|
| $\left\{ \begin{array}{l} \text{Benefactive Receiver of the Action} \\ \text{Purposive Receiver of the Action} \\ \text{Possessor of Object \#2 in the Action} \\ \text{Receiver}_1 \text{ of the Action} \\ \text{Receiver}_2 \text{ of the Action} \\ \text{Receiver}_3 \text{ of the Action} \end{array} \right\}$ | + animate | $\left. \begin{array}{l} \\ \\ \\ \\ \\ \\ \end{array} \right\} + \#$ |
| | ± animate | |
| | + animate | |
| | ± animate | |
| | + animate | |
| | - animate | |

2.0 Object #2 →

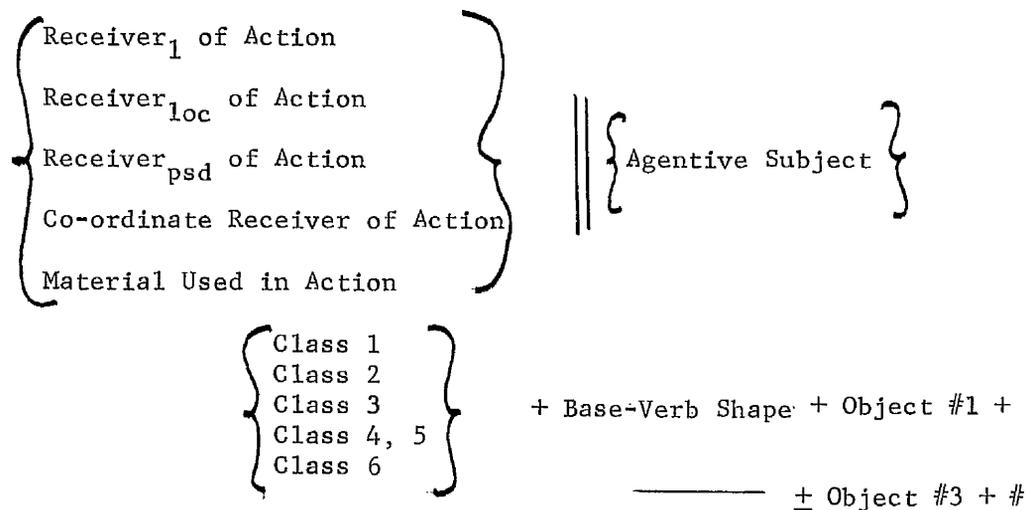
| | | |
|--|-----------|---|
| $\left\{ \begin{array}{l} \text{Receiver}_1 \text{ of the Action} \\ \text{Receiver}_{1bc} \text{ of the Action} \\ \text{Receiver}_{psd} \text{ of the Action} \\ \text{Co-ordinate Receiver of the Action} \\ \text{Material used in the Action} \end{array} \right\}$ | ± animate | $\left. \begin{array}{l} \\ \\ \left\{ \begin{array}{l} - \text{animate} \\ + \text{body part} \end{array} \right\} \\ \\ \\ \end{array} \right\} + \#$ |
| | ± animate | |
| | - animate | |

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →



2.0 Object #2 →



3.232. Lexical entries

1. Verbs of Class 1

-h- 'give' Ag. C. 1. [Ag — B (D Ŷ O) (I) (L)]

2. Verbs of Class 2

-niin- 'climb' Ag. C. 2. [Ag — P L (I) (L)]

3. Verbs of Class 3

-sămb- 'burn'

-khúp- 'strike'

-rats- 'kick'

-rém- 'chop/slash'

-bóh- 'tie/bind'

-khuul- 'pull out (teeth)'

-heng- 'look at'

-tsom- 'insert'

-many- 'know (name)'

-sááb- 'wash (body part)' Ag. C. 3. [Ag — G O (I) (L)]

4. Verbs of Class 4

-rats- 'kick'

-khúp- 'strike'

-rém- 'slash' Ag. C. 4. [Ag — (D)O C (I) (L)]

5. Verbs of Class 5

-fwal- 'dress/put on (garment)'

-reéb- 'ask (question)' Ag. C. 5. [Ag — D C (I) (L)]

6. Verbs of Class 6

-hom- 'smear (mud)' Ag. C. 6. [Ag — O M (I) (L)]

Since it has been ascertained that object #2 of class 6 verbs is an object of material used, a new class of verbs should be added to syntactic pattern B, class 7, in which -hom- 'smear' occurs with one object, but this time with inanimate object of material used (M), and the following lexical entry should be made:

Ag. B. 8. [Ag — M (I) (L)]

This verb has already been classified under syntactic pattern B with class 1 verbs with object #1 occurring as inanimate fixed object (O). Now this further classification completes the base-verb description of -hom- in its role as a two-nominal verb.

Also, since object #1 of class 2 verbs has been termed object of 'purpose' (P), another lexical entry for syntactic pattern B should be made for class 7 verbs as follows:

-niin - 'climb for' Ag. B. 7. [Ag — P (I) (L)]

See. p. 101.

3.24. Clauses of Subgroups of Agentive Verbs

3.241. Ergative Clauses

3.2411. Syntactic Pattern A

As has been stated, ergative clauses are affiliations of agentive clauses in which occur verbs capable of particular patterns of behavior. Some ergative verbs are capable of occurring in one affiliation only, and others in two. This fact indicates that there are two classes of verbs, but the number of constituent members within the ergative clause may be the same. Differences are a matter of arrangement. For example, the syntactic patterns of class 1 verbs are as follows:

$$S_{ag} \rightarrow NP_{ag} + V + NP_{nom}$$

$$S_{\substack{(com) \\ (erg)}} \rightarrow NP_{nom} + V$$

3.24111. Grammatical Component

The agentive clause in which verbs of this class occur provides for these core elements:

subject + ergative verb + object #1 ± object #2

Sample Sentence

Omwámi achaaka omusê (nende amashieesi).
Chief he-begins council meeting (with greetings).

Syntactic behavior for these verbs is the same as for verbs of class 1 in syntactic pattern B (pp. 94-98), i.e. object #1 is the OP type:

Akuchaaka (ninakô). - He it begins (with them--greetings).

Object #1 can occur as grammatical subject in the passive construction:

Kuchaakwa nende {omwâmi
amashieesi}. It is started {by chief
with greetings}.

The agentive subject is animate. Both objects are always inanimate. Because object #1 may occur as grammatical subject in the ergative affiliation, a special name has been assigned to it by grammarians, i.e. nominative NP.

In the ergative affiliation, object #1 occurs as the grammatical subject, SP is in concordial agreement with the nominative subject, and the verb root remains unchanged. NP_{ag} and PNP_I do not occur. Thus the core elements provided for in this pattern of ergative affiliation are: (Nominative) subject + verb.

Sample Sentence:

Class 1

Omuse kuchaakânga. - The council meeting it is beginning.

Pronominal affiliation

Only the SP sequential affiliation is possible:

Kuchaakânga. - It is beginning.

The grammatical schema for the agentive clause of these verbs is the same as for class 1 verbs of syntactic pattern B, and the lexical entries also, on pp. 94-98. But the sketch for the ergative affiliation of these verbs is as follows.

0.0 Simple Ergative Base-Verb Shape →

{ Nominative Subject Base-Verb Shape }
(Class 1)

Strict Semantic Subcategorization Rules

1.0 Nominative subjects →

{Receiver of the Process}{-animate} + #

General Semantic/Syntactic Subcategorization Rules

1.0 Nominative subject →

{Receiver of the Process} || {Process Subject} {Class 1} + Base-Verb
Shape + #

3.24112. Lexical Entries

1. Verbs of Class 1

-teekh- 'cook'

-cháák - 'begin/start' Erg. Ag. A. 1. [Ag — N (I) (L)]

In ergative affiliated clauses:

Erg. A. 1. [N — (L)]

3.2412. Syntactic Pattern B

3.24121. Grammatical Component

In addition to occurring in a clause of the pattern A type described above, the verb -teekh- 'cook' proves its ergative multi-valence by its ability to occur in a second type of ergative affiliation. Core elements of this affiliation are these: Agentive subject + verb ± instrumental object. The agentive syntactic behavior is the same as shown in the agentive syntactic pattern of A above.

Sample Sentence

Class 1

Mamá ateecha (nǒmulilo omukáli). - Mother she-cooks (with hot fire).

The subject is animate agentive, and the instrument object is inanimate and optional.

Pronominal affiliation

This clause occurs in the sequential affiliation:

Ateekha ninakwô. - She cooks with it.

This schema for the ergative affiliation shows the rules to be added to the grammatical component.

0.0 Simple Ergative Base-Verb Shape →

{ Agentive Subject Ergative Verb Shape }
(Class 1)

Strict Semantic Subcategorization Rules

1.0 Agentive subject →

{ Doer of the Action } { + animate } + #

General Semantic/Syntactic Subcategorization Rules

1.0 Agentive subject →

{ Doer of Action } || { ————— } { Class 1 } + Base-Verb
Shape + #

3.24122. Lexical Entries

1. Verb of class 1

-teekh- 'cook' Erg B. 1. [Ag — (I) (L)]

3.24123. Summary of Lexical Entries of Ergative Verbs

Verb:

-chääk- 'begin/start' Erg. Ag. A. 1. [Ag — N (I) (L)]

Erg. A. 1. [N — (L)] ←

Erg. Ag. A. 1. [Ag — N (I) (L)]

Erg. 1. A. 1. [N — (L)] ←

Erg. 2. B. 1. [Ag — (I) (L)] ←

3.242. Instrumental Clauses

The one verb (-sǎmb-) occurring in the instrumental affiliation has been observed as an obligatorily two-nominal and optionally three-nominal verb in agentive syntactic pattern B as a class 3 verb and as a verb of IP₁ in class 5. It was also observed in agentive syntactic pattern C as a verb of IP₂ in class 3. As an obligatorily two-nominal verb in both class 3 and 5 of syntactic pattern B, its object is of the OP type, occurring in the sequential affiliation, or in a mixed affiliation when PNP₁ occurs concurrently with object #1.

In syntactic pattern C, it may occur in mixed affiliations, and in all these patterns and classes it can occur in passive affiliations.

3.2421. Syntactic Pattern A

3.24211. Grammatical Component

Syntactic pattern A provides for these core elements:

(Instrument) subject + Verb + object #1

Sample Sentences

Class 1

- a. Omulilo kúsamba omwána. - Fire it-burns child.
- b. Omulilo kúsamba inzû. - Fire it-burns house.

The object may be animate or inanimate. The subject is always instrumental.

Pronominal affiliations

Object #1 is of the OP type:

Ku $\left\{ \begin{array}{l} \text{mu} \\ \text{chi} \end{array} \right\}$ sămba. - It (fire $\left\{ \begin{array}{l} \text{him} \\ \text{it} \end{array} \right\}$ (child) (house)) burns.

Passive affiliations also occur:

$\left\{ \begin{array}{l} \text{Om\`w\`ana} \\ \text{Inz\`u} \end{array} \right\}$ a yi sambwa (n\`ende omulilo). - $\left\{ \begin{array}{l} \text{Child} \\ \text{House} \end{array} \right\}$ $\left\{ \begin{array}{l} \text{he} \\ \text{it} \end{array} \right\}$ is being burned (with fire).

The following sketch illustrates the rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Receiver of the Action} \right\} \left\{ + \text{animate} \right\} + \#$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Receiver of Action} \right\} \left\| \left\{ \text{Instrument Subject} \right\} \left\{ \text{Class 1} \right\} + \text{Base-Verb Shape} + \text{---} + \#$

3.24212. Lexical Entries

1. Verbs of Class 1

-sămb- 'burn' Instr. A. 1. [I — (D)(O) (L)]

3.2422. Syntactic Pattern B

3.24221. Grammatical Component

Syntactic pattern B provides for these core elements:

(Instrument) subject + verb + object #1 + object #2

Sample Sentence

Class 1

Omulilo k\`usamba om\`wana amakh\`ono. - Fire it-burns child's hands.

The subject is the instrument. Object #1 is animate possessor of object #2, and object #2 is inanimate body part. Therefore, the two objects form objects of IP₂.

Pronominal affiliations

Object #1 is the OP type:

Kumusamba amakhóno. - It burns his hands.

Clausal affiliations

Either object may occur as grammatical subject in the passive affiliation, but with differences:

$\left\{ \begin{array}{l} \text{Omwána asambwá amakhóno} \\ \text{Amakhóno kómwána kasambwa} \end{array} \right\}$ (nómulilo). Child's hands are
being burned (with fire).

The following semantic/syntactic subcategorization rules obtain for the rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Possessor of Object \#2} \right\} \left\{ + \text{animate} \right\} + \#$

2.0 Object #2 →

$\left\{ \text{Receiver}_{\text{psd}} \text{ of the Action} \right\} \left\{ \begin{array}{l} - \text{animate} \\ + \text{body part} \end{array} \right\} + \#$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Possessor of Object \#2} \right\} \left\| \left\{ \text{Instrument Subject} \right\} \left\{ \text{Class 1} \right\} + \right.$
Base-Verb Shape + — + Object #2 + #

2.0 Object #2 →

$\left\{ \text{Receiver}_{\text{psd}} \text{ of Action} \right\} \left\| \left\{ \text{Instrument Subject} \right\} \left\{ \text{Class 1} \right\} + \right.$
Base Verb Shape + Object #1 + — + #

3.24222. Lexical Entries

1. Verbs of Class 1

-sǎmb- 'burn' Instr. B. 1 [I — G O (L)]

3.23223. Summary of Lexical Entries of Instrumental Verbs

Verb:

-sǎmb- 'burn' Ag. B. 3. [Ag — (D) (O) (I) (L)]

- Ag. B. 5. [G — O (I) (L)]
 Ag. C. 3. [Ag — G O (I) (L)]
 Instr. A. 1. [I — (D)(O) (L)] ←
 Instr. B. 1. [I — G O (L)] ←

This concludes the description of agentive base-verbs in this study.

3.3. Entailing Clauses

3.31. Syntactic Pattern A

3.311. Grammatical Component

Syntactic pattern A provides for these core elements: subject + verb + object #1.

Sample Sentences:

Class 1

Liloba liátikha tsinzáfwa. - Ground it-cracks cracks.

Class 2

a. Omukhási araatsa amatsáyi. - Woman she-bleeds blood.

b. Isíongo yiraatsa amătsi. - Waterpot it-leaks water.

Both objects are co-ordinate objects, inanimate. They are neither OP nor locS types and, therefore, do not occur in pronominal affiliations, but the subject may occur in a SP affiliation.

Clausal affiliation. Object #1 may occur as a fronted grammatical subject in the entailing affiliation in an interchange of positions with NP₁ of the referent sentence. In this affiliation, NP₁ in the object position to the right of the verb occurs as a locative NP; SP is in concordial agreement with the new subject, and the verb radical remains unchanged:

- a. Liloba liátikha tsinzáfwa. - Ground it-cracks cracks.
 b. Tsinzáfwa tsiatikha mwiloba. - Cracks they-crack in ground.

Object #1 of class 1 verbs is the fixed object.

It will be termed the 'co-ordinate receiver' of the process (P_{cC}) identified by the verb, and NP_1 (particularly in its entailed position as locNP) indicates the locus of the action (L_1).

Object #1 of class 2 verbs will be termed the 'co-ordinate doer' of the action indicated by the verb and, therefore, performs a co-ordinate actor case function (Act_C). The subject locNP is directional locative (L_2), but these verbs do not tolerate locNP's in subject position.

The following schema shows the semantic/syntactic subcategorization rules to be added to the grammatical component.

0.0 Simple Base-Verb Shapes →

$$\left\{ \begin{array}{l} \text{Locative}_1\text{-Subject Base-Verb Shape} \\ \text{(Class 1)} \\ \text{Locative}_2\text{-Subject Base-Verb Shape} \\ \text{(Class 2)} \end{array} \right\}$$

Strict Semantic Subcategorization Rules

1.0 Subject →

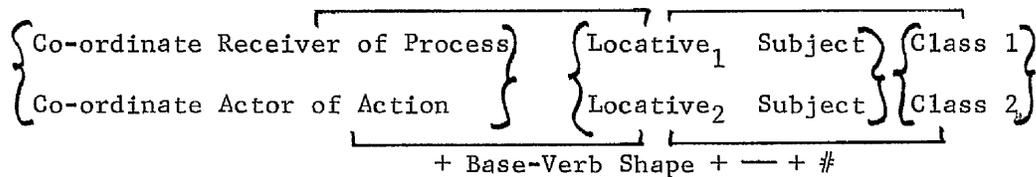
$$\left\{ \begin{array}{l} \text{Locus}_1 \text{ of the Action} \\ \text{Locus}_2 \text{ of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ \pm \text{animate} \end{array} \right\} + \#$$

2.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Co-ordinate Receiver of the Process} \\ \text{Co-ordinate Receiver of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ \pm \text{animate} \end{array} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →



3.312. Lexical Entries

1. Verbs of Class 1

-atikh- 'crack' Ent. A. 1. [L₁ — Pc_C (L)]

2. Verbs of Class 2

-rääts- 'bleed/leak' Ent. A. 2. [L₂ — Act_C (L)]

It can now be seen that these two verbs are not truly descriptive--as we tentatively thought on p. 91, where they occur in syntactic pattern A₂. It is only as these verbs are observed in relationship to the maximum number of nominals possible to them that these facts are evident. What have heretofore been termed descriptive lexical entries will now be termed verbs of syntactic pattern B of entailing verbs, as follows:

1. Verbs of Class 1

-atikh- 'crack' Ent. B. 1. [L₁ — (L)]

2. Verbs of Class 2

-rääts- 'bleed/leak' Ent. B. 2. [L₂ — (L)]

3.4. Stative Clauses

3.41. Syntactic Pattern A

3.411. Grammatical Component

Only one verb, būl- 'not be,' occurs in this pattern. The core elements are subject + verb + locS.

Sample Sentence:

Class 1

- a. Omukháàna abulahô. - Girl she-is not here.
 b. Omútokâ kubulahô. - Motorcar it-is not here.

This is a polysemous verb, and with the semantic interpretation of 'not be' occurs obligatorily with locS in the referent sentence. It occurs in no transposed forms, except sequential SP affiliation. The subject may be either animate or inanimate.

The following schema identifies the semantic/syntactic sub-categorization rules for syntactic pattern A, which should be added to the grammatical component.

0.0 Simple Base-Verb Shape →

{ Stative-Subject Base-Verb Shape }
 { (Class 1) }

Strict Semantic Subcategorization Rules

1.0 Subject →

{ Stative Subject } { + animate } + #

General Semantic/Syntactic Subcategorization Rules

1.0 Subject →

{ Stative Subject } { — } { Class 1 } + Base-Verb Shape +
 locS + #

3.412. Lexical Entries

1. Verbs of Class 1

-bú- 'not be' St. A. 1. * [St ——— L_{st} (L)]

*Since L_{st} represents 'stative locative suffix,' it will be placed on the verb underline space near the end.

3.42. Syntactic Pattern B

3.421. Grammatical Component

Core elements for this pattern are these: subject + verb + object #1.

Sample Sentences:

Class 1

- a. Omukhási abula tsingokhó. - Woman she-has no chickens.
- b. Omukhási abula obusfe. - Woman she-has no meal.
- c. Omútoká kubula omundeléba. - Motorcar it-has no driver.
- d. Omútoká kubula omúpfila. - Motorcar it-has no tyre.

Class 2

Omwána akona tsindóolo. - Child he-sleeps sleep.

Polysemous verb - búl-, when its meaning is 'not have,' requires an object. The subject and object NP's may be either animate or inanimate. The position assumed here, with the knowledge that there are differences of opinion (see Lyons, 1969, pp. 301, 390-395), is that the 'have not' verb -búl- is a negative verb of state or condition, the subject being stative and the object being dative or objective in case function.

Only two verbs (-kon- 'sleep' and elwal- 'be/become sick') occur in class 2. The subject is obligatorily animate and is the item in which the process or condition identified by the verb takes place. Therefore, the subjects will be termed 'stative process' subjects.

The object of class 2 verbs is obligatorily inanimate. It is a co-ordinate object: 'sleeping sleep,' 'sick a sickness.'

Clauses in which these stative verbs occur (i.e. verbs of class 1 and 2 of syntactic pattern B), do not occur in any pronominal or other affiliations, except the sequential SP affiliation.

The following sketch indicates the semantic/syntactic subcategorization rules for syntactic pattern B to be added to the grammatical component.

0.0 Simple Base-Verb Shapes →

$$\left\{ \begin{array}{l} \text{Stative Process-Subject Base-Verb Shape} \\ \text{(Class 1, 2)} \end{array} \right\}$$

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Stative}_{\text{neg}} \text{ Possessed Item in the Condition} \\ \text{Co-ordinate Object in the Process} \end{array} \right\} \left\{ \begin{array}{l} \text{+ animate} \\ \text{+ animate} \end{array} \right\} + \#$$

Formal Realization of Co-ordinate Object

1.0 Object #1 →

$$\left\{ \text{Nominal} \right\} \text{ Simple Stative Base-Verb Shape } + \text{---} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Stative}_{\text{neg}} \text{ Possessed Item in Condition} \\ \text{Stative Co-ordinate Object in Process} \end{array} \right\} \left\{ \begin{array}{l} \text{Stative} \\ \text{Stative} \end{array} \right\}$$

$$\left\{ \begin{array}{l} \text{Non-Possessor Subject} \\ \text{Process Subject} \end{array} \right\} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\} + \text{Stative negative} \\ \text{Base-Verb Shape } + \text{---} + \#$$

3.422, Lexical Entries

1. Verbs of Class 1

-bú1- 'not have'

St. B. 1. * [St ___ (D_{st} X O_{st}) (L)]

*St = Stative, D_{st} = animate stative object, O_{st} = inanimate stative object, Pc_{st} = process-stative, C_{st} = stative co-ordinate object.

2. Verbs of Class 2

-lwal- 'be/become sick' St. B. 2. [Pc_{st} — C_{st} (L)]
 -kon- 'sleep'

3.5. Conclusion

In this chapter the largest unit of description has been the sentence of the uni-clause, uni-verbal type, following the classification of verbs into four general clause types and two subtypes: (1) Descriptive, (2) Agentive (with subtypes: (a) ergative and (b) instrumental), (3) Entailing, and (4) Stative. A further division yielded syntactic patterns (i.e. number of NP's occurring within clause types). A still further subdivision within syntactic patterns classified verbs according to kinds of NP's (i.e. animate/inanimate, meaning; etc.) with which they could be associated semantically. Word order was also found to be important. A final classification was the semantic-syntactic role of each NP associated with a verb in a syntactic pattern. These constraints yielded the following results:

3.51. Descriptive Clauses

1. One syntactic pattern
2. Two verb classes based on ability or inability to imperativize
3. One NP--the subject NP--of two kinds: Actor and Process
4. Case functions: (a) Actor and (b) Process

3.52. Agentive Clauses

1. Three syntactic patterns and two subgroups, one (the ergative) occurring in one syntactic pattern as agentive and one as ergative; and in the second subgroup (the instrumental) occur four syntactic patterns, two agentive and two instrumental.
2. Fourteen verb classes and two subclasses were distinguishable (based on optionality and/or obligatoriness of occurrence of kinds and number of NP's and affiliations) from three types of syntactic patterns and four patterns in the subclasses.
3. The subject of all general classes was found to be agentive. In the subclasses was one agentive, two nominative, and one instrumental.
4. Syntactic patterns varied as follows according to kinds and number of NP's and according to optionality and obligatoriness of each:

| <u>Syntactic Pattern</u> <u>and No. of NP's</u> | <u>Kinds of NP's, obligatoriness and</u> <u>optionality of occurrence</u> |
|--|--|
| a. A--2 | Subject + object |
| b. B--3 | Subject + object \pm PNP _I |
| c. C--4 | Subject + Obj. #1 + Obj. #2 \pm PNP _I |
| Erg. | |
| A--1 | Subject (agentive/nominative) |
| B--1-2 | Subject \pm PNP _I /NP _{loc1} |
| Inst.--2-3 | Subject (instrumental) |
| A--2 | Subject + object #1 |
| B--3 | Subject + object #1 + object #2 |

Note: In their agentive syntactic patterns, ergative

verbs occur in syntactic pattern B, and instrumental verbs occur in patterns B and C.

5. Case functions represented

- a. Subject: Agentive (and Nominative and Instrumental)
- b. Objects:

Syntactic Pattern

A: D, O, (± L -- This occurs in all)

B: D, O, I, L, G, M, C, P

C: B, D, O, I, G, M, C, P, L

Ergative: N

Instrumental: D, O, G

Note: See pp. 284-285 for abbreviations.

It was found that in agentive clauses, together with their subclasses, eleven case functions are identifiable:

Agentive, nominative, instrumental, dative, objective (the inanimate counterpart of animate dative), obligatory locative, benefactive, genitive, purpose, co-ordinate, material, and the optional locative common to all types of clauses. These case functions may be added to the actor and process case functions found in descriptive clauses. Case functions determined so far total thirteen.

3.53 Entailing Clauses

1. Two syntactic patterns
2. Four verb classes based on types of locatives and objects occurring in syntactic patterns, and on features of animacy and/or inanimacy of NP's.
3. These verbs occur in two syntactic patterns: (A) S → subject + verb + object, and (B) S → subject + verb.

4. Case functions

- a. Subject: L_1 and L_2
- b. Objects: Co-ordinate - Actor (Act_C)
Co-ordinate - Process (Pc_C)

Four subcategories of case functions have now been determined.

3.54. Stative Clauses

1. Two syntactic patterns occur
2. Verbs are classified according to kinds and number of NP's with which they can be associated in these syntactic patterns:

| <u>Syntactic Pattern</u> <u>and No. of NP's</u> | <u>Kinds of NP's and</u> <u>obligatoriness of occurrence</u> |
|--|---|
|--|---|

- | | |
|----------------|--------------------------------|
| a. A--1 + locS | Subject + locS (-h \hat{o}) |
| b. B-2 | Subject + object #1 |

3. Case functions

- a. Subject: Stative (St), Process $_{st}$ (Pc_{st})
- b. Objects: (According to syntactic pattern)
 - A: locS (L_{st1})
 - B: D_{st} , O_{st} , C_{st}

Six more subcategories of case functions have now been determined, making a total of thirteen case functions and stensubcategories of case functions.

The classifications of verbs according to clause types, syntactic patterns, semantic features of animacy and/or inanimacy-- and others, and case functions of kinds of NP's with which they can be associated, yield for base verbs a description adequate for the grammatical component and for proper lexical entries (i.e. lexical entries which indicate the context of the grammatical

component). These factors will be observed in the analysis of these same verbs occurring in their various extended forms in syntactic patterns in the chapters which will follow. Comparisons and contrasts will be noted, as well as new factors which may occur.

3.55, Summary of Facts of Base Verbs

Testing base verbs according to the specified criteria produced these results:

3.56, Descriptive Clauses

A. Kinds of verbs

1. There were eight uni-nominal verbs
2. Some verbs proved to be polysemous. With one meaning they occurred, for example, in descriptive clauses; with the other they occurred in other clause types or in other syntactic patterns. There were six such verbs occurring in descriptive clauses: -kon- 'sleep/lie down,' -lol- 'see,' -hulil- 'hear,' -onoon- 'sin/spoil,' -ilukh- 'run,' -húny- 'smell (bad),' and others in agentive clauses.
3. Other verbs were found to be multivalent, occurring in syntactic patterns of only one nominal + verb, and again in multi-nominal patterns of other clause types, for example, -rééb-, 'ask,' -sááb- 'wash,' -hom- 'smear (mud).'

B. Syntactic patterns

There was only one basic syntactic pattern (i.e. subject NP + verb) with two variations: Actor subjects with imperativizing verbs and process subjects with nonimperativizing verbs.

C. Case Functions

Two case functions were identified: Actor (Act) and process (Pc). It was later established that the subjects of referent sentences in which the verbs -ráats- 'bleed/leak' and -atikh-

'crack' occur do not fulfill the case functions of actor and process subjects in the same ways other subjects of verbs occurring in the descriptive group do. The syntactic patterns in which they occur can be the same as those of descriptive verbs (i.e. subject + verb), but the case functions are locative, rather than actor or process. Also, a permutation of NP's (when two NP's occur) is possible with these verbs, and not with descriptive verbs. They can, then, be said to be descriptive verbs only in so far as they may occur in the same type of syntactic patterns, i.e. one nominal + verb; but as far as case function is concerned, they belong to the entailing group and were finally placed in that classification.

3.57. Agentive Clauses

A. Kinds of verbs

1. There were 50 agentive verbs.
2. Nine were polysemous: those in the descriptive group which were polysemous, plus three agentive verbs: -lĭnd- 'wait for/watch over,' (minimum two-nominal and maximum three, depending upon meaning); -niin- 'climb/climb for,' (minimum two-nominal and maximum four); and -lōnd- 'follow,' (minimum two-nominal, maximum three).
3. Forty-six are multivalent, occurring in more than one type of syntactic pattern, most of them in the agentive group.
4. Two verbs (-chāák- 'begin' and -teekh- 'cook' occur as a subgroup of agentive verbs: Ergative.
5. One verb (-sāmb- 'burn') occurs in another subgroup of agentive verbs: Instrumental.

6. Four verbs are univalent: -bis- 'hide,' -chǐng- 'carry,' -yǐl-, 'take,' -leer- 'bring,' occurring only as two-nominal verbs.

B. Syntactic patterns

Typical of agentive non-transposed clauses is an agentive subject--usually-animate--and one or two obligatory, fixed objects, either of which is capable of sequential affiliations or--in the case of two fixed objects--of mixed affiliations, and a verb which is capable of occurring in the passive form in the passive affiliation. Possible also are affiliations of the two subgroups of verbs

Agentive: These verbs occur in three syntactic patterns with five or six subclassifications of verbs according to their ability or inability to be associated with animate and/or inanimate NP's--or with other types of object NP's, such as coordinate, locative, or IP, and so on, objects.

- 3.571. Subgroup 1: Ergative. Ergative verbs occur in one or two syntactic patterns, depending upon the verb type, for example: an agentive clause of the pattern Subject + Verb + NP_{nom} ± PNP_I may occur as an ergative affiliation of the pattern (1) Subject NP_{nom} + Verb, or (2) Subject + Verb ± PNP_I. (See pp. 221-223.)

- 3.572. Subgroup 2: Instrumental. Instrumental verbs may occur in two syntactic patterns: (1) in two basic agentive clauses (i.e. a: NP_{ag} + V + NP_{a/i} ± PNP_I; b: NP_{ag} + V + NP_a + NP body part ± PNP_I; (2) and in two instrumental affiliations: (i.e. a: NP_I + V + NP_{a/i}; b: NP_I + V + NP_a + NP body part). In affiliation a there is one object; it may be either animate

or inanimate; in affiliation b the combination of two objects --an animate object followed by a body part--compose the objects of inalienable possession.

C. Case functions

Eleven case functions in agentive clauses were identified, as follows: agentive (Ag), dative (D) (i.e. animate fixed object), object (O) (i.e. inanimate fixed object), instrumental (I), nominative (N) (i.e. ergative object), locative (L), beneficiary (B), inalienable possession: genitive possessor (G) + body part (O), material used (M), co-ordinate (C), and purpose (P).

3.58. Entailing Clauses

A. Kinds of verbs

There are two entailing verbs: -rääts- 'bleed/leak' and -atikh- 'crack'.

1. The verb -rääts- 'bleed/leak' may be associated either with an animate or inanimate locative subject NP--minus the locative prefix in subject position.
2. The verb -atikh- 'crack' is associated only with an inanimate locative subject NP--again minus the locative prefix in subject position.
3. These verbs occur in the entailing affiliation, and it is in this transposed form of the clause that the subject NP's (now obligatorily in a position to the right of the verb) occur obligatorily in the shape of locNP (i.e. class 1, -atikh-, as an L₁--locational--locNP, and class 2, -rääts- as an L₂--directional--locNP. The NP₂ of the referent clauses occurs as fronted grammatical subject in the entailing

affiliation and fulfills the case function of co-ordinate-process for verbs of class 1 and of co-ordinate-actor for verbs of class 2. No pronominal affiliations occur, except SP sequential affiliation.

B. Syntactic patterns

One syntactic pattern occurs: Subject + Verb + NP₂, and another, formerly classed as descriptive, was identified: subject + entailing verb.

C. Case functions

Two case functions were identified: The locational locative (L₁) and the directional locative (L₂); additionally, the co-ordinate-process and co-ordinate-actor case functions are operative as NP₂ of referent sentences.

3.59. Stative Clauses

A. Kinds of verbs

1. One polysemous verb (-búl- 'not be/not have') occurs.
2. Two multivalent verbs occur (-kon- 'sleep/lie down' and -lwal- 'be/become ill'; -kon- 'sleep with' is a second meaning of this polysemous verb).

B. Syntactic patterns

There are three syntactic patterns.

1. The verb -búl- occurs in two syntactic patterns, one to each meaning: (a) Subject + Verb + locS -hò for the meaning 'not be' (i.e. 'not be here/not be present'). (b) Subject + Verb + Object for the meaning 'not have.' The two other verbs -kon- and -lwal- occur in syntactic pattern (b) also.
2. No affiliations occur with any of these verbs, except SP sequential affiliation.

C. Case functions

The stative function (St) was identified with stative modifications of some case functions: locative-stative (L_{st}), process-stative subject (Pc_{st}), stative-dative (D_{st}), stative-objective (O_{st}), and stative-co-ordinate (C_{st}).

PART III

VERBAL EXTENSIONS OF SHISA

CHAPTER 4

INTRODUCTION TO VERBAL EXTENSIONS

4.0. Introductory

It was stated on page one of the 'Notes for the Introduction to Thesis' (p. 288) that if a verb root cannot be contracted, it is a minimal root; if it can, it is an extended form, for it is possible to suffix certain particles to Shisa minimal verb roots, whereby the meaning and the syntactic behavior of the verb is commonly altered, i.e. 'extended.' Such verb forms are termed 'extended' verb roots, and the suffixes themselves are termed verbal 'extensions.' These verbal extensions form a very large and important part of the Shisa language, in which there are fifteen distinguishable, productive extensions. As with base-verb sentences, the sample sentences will be termed 'referent' sentences.

Nine of these extensions (termed here (1) 'benefactive,' (2) 'instrumental,' (3) 'locative,' (4) reciprocal,' (5) 'back-and-forth,' (6) 'comitative,' (7) 'neuter,' (8) 'passive,' and (9) 'causative') commonly affect both the semantic and the syntactic behavior of the verb. The others are characterized by differences in semantic interpretation, rather than by changes in syntax. The first six of the extensions listed above will be treated in this analysis, with the passive extension being employed as one of the criteria for classifying verbs and clauses.

The variety of behavior patterns associated with a single shape gives rise to the conviction that there are probably two or

three homophonous extensions occurring in some shapes. For example, in the extension shape -il-/-el-, three distinct sets of syntactic behavior patterns occur. Another set of such extensions has the characteristic shape of -an-.

Each extension of these sets of three will be treated as a separate extension, for example the extensions occurring in the -il-/-el- set will be treated as these three extensions: (1) benefactive, (2) instrumental, and (3) locative. Those occurring in the -an- set will be treated as (1) reciprocal, (2) back-and-forth, and (3) comitative. The passive extension will be considered with each of these six as the analysis proceeds.

The verbal extension shapes to be considered here are listed below, together with their Roman numeral lexical symbols, their names (as they are here termed), and general meanings of each.

| <u>Lexical Symbol</u> | <u>Characteristic Shapes</u> | <u>Name</u> | <u>Meaning</u> |
|-----------------------|------------------------------|----------------|------------------------------------|
| * I | <u>-il-</u> / <u>-el-</u> | Benefactive | 'to/for/from/of' |
| * II | <u>-il-</u> / <u>-el-</u> | Instrumental | 'with' |
| *III | <u>-il-</u> / <u>-el-</u> | Locative | 'in/by/on/at/etc.' |
| IV | <u>-an-</u> | Reciprocal | 'each other' |
| V | <u>-an-</u> | Back-and-forth | 'back-and-forth/ alternatively' |
| VI | <u>-an-</u> | Comitative | 'along (take/ bring)' |

*Note: Starred forms are governed by the rules of vowel harmony (See pp. 313-4, Appendix II).

From the lists given above, the various extensions can be identified in terms of three criteria: (1) a general shape, (2) assignable meaning(s), and additionally, (3) syntactic-semantic behavior. Generally speaking, no one criterion can suffice, for

any one of these criteria occurs occasionally with base verbs, but no base verb occurs with all three concurrently; for example: The verb of the shape -sɪnjil- 'stand up' has an ending identical with that of a dissyllabic verb in the benefactive, instrumental, or locative extension, but it is a base-verb form. The verb -h- 'give' is associated obligatorily with a benefactive object, but it is not in the shape of a benefactive extended verb. Also, -h- is associated with a second object, just as a verb in the benefactive or instrumental extension behaves, but the shape is that of a base verb. It is, therefore, necessary that all three criteria be present in identifying verbal extensions.

The function of an extension can commonly be correlated with the capacity of the extended verbal to be associated with (1) an extra object (the object of the extension.--The object of the base verb, where one occurs, often remains.), (2) one object less, or (3) the same number of objects.

Guthrie (1962, p. 205) terms the extra object, the one associated with the extension, the direct object, and the corresponding direct object of the base verb a 'fixed' object. This analysis agrees with this view, but since case functions are also being investigated, these objects will be analyzed a step further and assigned terms according to the semantic/syntactic roles they play in association with the verb. For example, the object of an extension may perform the benefactive, instrumental, reciprocal, and so on, case function and will be termed accordingly.

With some extensions the object may be either a nominal or its sequential affiliative co-referent OP/locS. With others, the object is characterized neither by a nominal nor OP/locS. Rather, it is

the extension itself with a semantic interpretation and syntactic alterations which indicate the occurrence of the extra object, for example:

Tsúma aboha Dóbi. - Tsuma he-ties up Dobi. =
Dóbi aboha Tsúma. - Dobi he-ties up Tsuma.
Dóbi nende Tsúma babohanâ. - Dobi and Tsuma they-tie each other up.

In this case the two objects of two sentences have become fronted grammatical subjects, with the extension being a plural object occurring as a type of sequential affiliation substituting for the, now fronted, nominal objects: Tsúma and Dóbi. In the extended form of the verb, the subject is plural (two nominals), SP is plural (ba- 'they'), and the extension object will be considered to be plural--and here termed 'each other.'

With some verbs the base verb is associated with an object nominal, or its sequential affiliation, but in the extended form no object occurs, for example:

Omundu áfunga omuliango. - Man he-locks door (base verb).

Omuliango kúfunjíishe. - Door it-is locked (extended verb).

This might be termed a type of ergative affiliation. In this kind of extension, the object nominal of the base verb becomes fronted grammatical subject of the extended form.

In some extensions (not described in this analysis) the extended verb has the capacity to support the same number (and often the same kinds) of objects as do their base-verb counterparts. Other verbs are associated with a certain number of nominals in their base forms and with the same number of nominals (but of different kinds) in the extended forms. These are exceptional and

will be discussed in those chapters in which the particular extensions involved are presented.

In the extension descriptions in the following chapters, verbs will be analyzed within clause divisions according to the same criteria employed in classifying base verbs, i.e. according to

1. the number and kinds of nominals with which verbs can be associated in the particular extension under consideration
2. the capacity to occur in sequential or mixed affiliations
3. the capacity to occur in clausal affiliations, i.e. passive, entailing, or other
4. Semantic features of animacy/inanimacy
5. the semantic/syntactic role of NP's

Also, sub-divisions of all extended-verb clauses into syntactic patterns with the grammatical component and lexical entries of each and of verbs according to their association with animate/inanimate objects, as well as the case functions performed by the various NP's, will continue to be observed in all verbal-extension chapters.

CHAPTER 5

THE BENEFACTIVE EXTENSION

5.0. Introduction

It was asserted on page 134 that an extension can be identified according to three criteria: (1) a general shape, (2) assignable meaning(s), and (3) syntactic/semantic behavior. In the benefactive extension two extension shapes occur, -il-/-el- (depending upon the rules of vowel harmony), with various patterns of syntactic behavior. One particular set of behavior patterns can be seen in the following sentences.

1. Omwáyi aboha ing'ombe nênde omukoye.
Herdboy he-ties cow with rope.
- *2. Omwáyi aboyela ing'ombe nênde omukoye.
Herdboy he-ties-for cow with rope.
- *3. Omwáyi aboyela omúkhasi ing'ombe omukoye.
Herdboy he-ties-for woman cow rope.
4. Omwáyi aboyela omukhási ing'ombe nênde omukoye.
Herdboy he-ties-for woman cow with rope.

Sentence 1 is a base-verb sentence, which is acceptable to the Bashisa. The pattern is

S → NP + V + NP + PNP.

Sentence 2 consists of the same pattern, except that the verb is in the -il-/-el- extended form. It is not acceptable to the Bashisa. Sentence three adds a new object (omukhási) and changes the PNP to NP. This sentence is also unacceptable. But sentence 4 adds the new object (omukhási) and retains the PNP. This is now acceptable. These facts indicate that some sort of relationship exists between the verbal extension -el- and the new object omukhási.

This new object is animate obligatorily. It follows the verb immediately and precedes the fixed object, which may be animate or inanimate:

Omwayi aboyela omukhási ing'ombe nênde omukoye.
Herdboy he-ties-for woman cow with rope.

Omwayi aboyela omukhási tsikhwî nende omukoye.
Herdboy he-ties-for woman firewood with rope.

The final object is in the shape of PNP and is the instrumental object, which has already been identified. The new object may not occur without the fixed object. These facts conform to the criteria set up earlier for the benefactive object (p. 101); therefore, it will here be termed the 'benefactive object,' and the extension will be termed the 'benefactive extension.'

The benefactive concept is not always present in the benefactive extension. Sometimes it is disadvantageous, or 'away from,' or 'of,' or 'about,' rather than simply 'to' or 'for' the object concerned. For example:

Mukayisi áchoonyeele Makokha. would be translated in English as 'Mukayisi is tired of (not 'tired to/for') Makokha.'

These facts have so far been established: Verbs which occur in this extended form are commonly associated with a new, an additional, object. This new object is obligatory with the benefactive extension; it co-occurs with the fixed object (i.e. in clauses in which a fixed object occurs); it is obligatorily animate, occurs in referent sentences only in the position immediately following the extended verb as object #1.

It has not yet been established what type of object it is, whether OP, locS, or some other kind possibly. It is not yet known if it occurs in affiliations and if it does, in what kinds it

occurs: Sequential, mixed, passive, or others. It is not yet known whether all verbs can occur in this extension, nor what the behavior is for the various types of clauses in which benefactive extended verbs occur. Such features as animacy, obligatoriness, and word order need further investigation, and this will now be done.

5.1. Descriptive Verbs in Benefactive Extended Shape

5.11. Syntactic Pattern A₁

5.111. Grammatical Component

Core elements of syntactic pattern A₁ are these: subject + benefactive verb + object #1.

Sample Sentence:

Class 1

Oyáálo asinjilila Pâpa. - Oyaalo he-stands in for Father.

Verbs of this pattern are of the imperativizing group of descriptive verbs: Sĭnjila! (sing.) Sĭnjile! (plur.). The following constraints obtain for clauses in which these extended verbs occur:

Class 1

Subject: + animate, actor of the action indicated by the verb

Object: + animate, benefactive receiver of the action identified by the verb

Pronominal affiliation

The object is of the OP-type and occurs in the sequential affiliation:

Amusĭnjilila. - He for him (Father) stands in.

Clausal affiliation

The object may occur as fronted grammatical subject in the passive construction with the NP subject of the referent sentence occurring obligatorily as PNP in a position to the right of the verb, which occurs in the passive extended form.

Papâ asinjililwa nênde Oyaálo. - Father he-is being represented by Oyaalo.

The following sketch indicates the rules governing the semantic/syntactic operations for the proper production of sentences in benefactive syntactic pattern A₁:

0.0 Simple Benefactive Shapes →

{ Actor-Subject Benefactive Shape }
(Class 1)

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{ Benefactive Receiver of the Action } { + animate } + #

Formal Realization of Benefactive Object

1.0 Object #1 →

{ Object Prefix } || Simple Benefactive Shape + _____ + #
{ Nominal }

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{ Benefactive Receiver of Action } || { Actor Subject } { Class 1 }
+ Benefactive Shape + _____ + #

5.112. Lexical Entries

1. Verbs of Class 1

-sinjilil- 'stand in for'

-réebel- 'ask for'

-homé1- 'smear for'

-sòomé1- 'read to/for'

-boole1- 'speak/talk to'

I. Des. A₁. 1. [Act ____ B (L)]

5.12. Syntactic Pattern A₂

5.121. Grammatical Component

Core elements of syntactic pattern A₂ are the same as for A₁:

subject + benefactive verb + object #1.

Sample Sentences:

Class 1

- a. Mukayisi áchoonyeele Makokha.
Mukayisi he-has become tired of Makokha.
- b. Mukayisi áchoonyeele emilimo.
Mukayisi he-has become tired of work.

Verbs of this pattern are of the non-imperativizing group. The following constraints obtain for clauses in which these extended forms occur:

Class 1

Subject: + animate, and will be termed the process receiver of the process described by the verb

Object: ± animate, and will here be termed the disadvantaged benefactive receiver of the process indicated by the verb.

Affiliations

Verbs occurring in this syntactic pattern occur in the same kinds of pronominal and clausal affiliations as those in syntactic pattern A₁.

The following schema indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

0.0 Simple Benefactive Shapes →

{ Process-Subject Benefactive Shape }
 { (Class 1) }

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{ Disadvantaged Benefactive Receiver of the Action } { ± animate }
 + #

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{ Benefactive Receiver of Action } || { Process Subject }
 { (Class 1) } + Benefactive Shape + _____ + #

5.122. Lexical Entries

1. Verbs of Class 1

-chòonyel- 'get tired of' I. Des. A₂. 1. [Pc _____ B (L)]

5.2. Agentive Verbs in Benefactive Extended Shape5.21. Syntactic Pattern A

5.211. Grammatical Component

Core elements of this pattern are these: subject + benefactive
 verb + object #1 + object #2.

Sample Sentences:

Class 1

- a. Kuukhû abisiile abàana orupáka.
 Grandmother she-hid kittens for children.
- b. Kuukhû abisiile abàana amáramwa.
 Grandmother she-hid bananas for children.

The subjects are obligatorily animate. Object #1 is benefactive receiver of the action identified by the verb. Object #2

is the fixed receiver of the action indicated by the verb and may be animate or inanimate.

Pronominal affiliations

These sentences occur in mixed affiliations of the OP-NP type:

A $\left\{ \begin{array}{l} \text{ba} \\ \text{ru} \end{array} \right\}$ bisiile $\left\{ \begin{array}{l} \text{orupáka} \\ \text{abáána} \end{array} \right\}$. She $\left\{ \begin{array}{l} \text{for them (children) hid kittens} \\ \text{them (kittens) hid for children} \end{array} \right\}$.

Clausal affiliations

These sentences also occur in passive affiliations as follows:

$\left\{ \begin{array}{l} \text{Abáána} \\ \text{Orupáka} \end{array} \right\}$ $\left\{ \begin{array}{l} \text{ba} \\ \text{ru} \end{array} \right\}$ bisiilwe $\left\{ \begin{array}{l} \text{orupáka} \\ \text{abáána} \end{array} \right\}$ (nende Kúúkhú).

$\left\{ \begin{array}{l} \text{Children} \\ \text{Kittens} \end{array} \right\}$ they were hidden $\left\{ \begin{array}{l} \text{kittens} \\ \text{for children} \end{array} \right\}$ (by Grandmother).

The following sketch illustrates the semantic/syntactic rules involved in the production of sentences occurring in syntactic pattern B.

0.0 Simple Benefactive Shapes →

$\left\{ \begin{array}{l} \text{Agentive-Subject Benefactive Shape} \\ \text{(Class 1)} \end{array} \right\}$

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Beneficiary of the Action} \right\} \left\{ + \text{animate} \right\} + \#$

2.0 Object #2 →

$\left\{ \text{Receiver of the Action} \right\} \left\{ \pm \text{animate} \right\} + \#$

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

$\left\{ \text{Beneficiary of Action} \right\} \parallel \left\{ \text{Agentive Subject} \right\} \left\{ \text{Class 1} \right\} +$
Benefactive Shape + _____ + Object #2 + #

2.1 Object #2 →

$\left\{ \text{Receiver of Action} \right\} \parallel \left\{ \text{Agentive Subject} \right\} \left\{ \text{Class 1} \right\} +$
Benefactive Shape + Object #1 + _____ + #

5.212. Lexical Entries

1. Verbs of Class 1

-bisil- 'hide for'

-chĩnjil- 'carry for'

-yilil- 'take (to a place) for'

-leere1- 'bring to/for'

I. Ag. A. 1. [Ag _____ B (D & O) (L)]

5.22. Syntactic Pattern B

5.221. Grammatical Component

Syntactic pattern B provides for these core elements: subject + benefactive verb + object #1 + object #2 ± object #3.

Sample sentences:

Class 1

Okuyúchi arechela Kúúkhu omubéro (nende olusáála).
Okuyuchi he-sets trap for Grandmother (with stick).

Class 2

- a. Omukháana aboyela omukhási ing'ombe (nende omukoye).
Girl she-ties for woman cow (with rope).
- b. Omukháana aboyela omukhási tsikhwi (nende olusáála).
Girl she-ties for the woman firewood (with rope).

Class 3

- a. Omusiani aniinila omukhási khumusáála (nömukoye).
Boy he-climbs for woman in tree (with rope).
- b. Omusiani aniinila omukhási khupúnda (nende omukoye).
Boy he-climbs for woman on donkey (with rope).

Class 4

- a. Omusiani aniinila omukhási omwána (nende omukoye).
Boy he-climbs for woman (to get) child (with rope).
- b. Omusiani aniinila omukhási tsikhwi (nende omukoye).
Boy he climbs for woman (to get) firewood (with rope).

Class 5

Omukháana asaabila nyinawê amakhónoké (nende isáábúuni).
 Girl she-washes her hands for her mother (with soap).

Class 6

Omukháana ahome1a Kúukhu obutóyi/nóbutóyi (nólusáála).
 Girl she smears mud/with mud for Grandmother (with stick).

Class 7

Sára afwalila omukhási omwána (nómukhóno mulála).
 Sara she-puts dress on child for woman (with one hand).

Class 8

Sára afwalila omukhási ingubo (nómukhóno mulála).
 Sara she-puts on dress for woman (with one hand).

With verbs of syntactic pattern B in the benefactive extended shape, these constraints obtain: All subjects are agentive and animate. Object #1 in all sentences is benefactive (i.e. it must follow the verb immediately, it precedes object #2, is animate, and is the benefactive recipient--of advantage or of disadvantage--of the action identified by the verb). Object #2 varies according to the verb with which it is associated, i.e. according to the degree of multivalence of the verb and types of object NP's co-occurring with it. For example, -rechel- 'set (trap) for' is, in its base shape only an obligatorily two-nominal and optionally three-nominal verb. In the benefactive extended shape, it may occur only in syntactic pattern B, as shown above. On the other hand, -homé1- 'smear (mud)' has a wider range of multivalence. In its base shape, it has the capacity to occur in one- (descriptive), two-, three-, or four-nominal (all agentive) patterns. Each NP co-occurring with it performs a separate and distinct case function, differing from the case functions of each of the other co-occurring NP's.

In the two-nominal (optionally three-nominal pattern, it may

occur with only one of its non-instrument objects--either with object #1, the fixed object (i.e. the receiver of the act of smearing mud) or with object #2 (i.e. the object of material used). The position assumed in this study in this type of syntactic pattern (i.e. where a verb does not occur in its maximum degree of multivalence) is that the verb will be classified in one class when it occurs only with object #1 (of its full multivalent capacity), and in another class when it occurs only with object #2 (of its full multivalent capacity).

Since optional PNP_1 is common to all these agentive syntactic patterns, in which only one of these objects occurs, and has no further syntactic distinctiveness in these relationships, it is not here given consideration.

In accordance with this stance, the following constraints obtain for #2 objects:

Class 1: - animate, receiver₁ of the action identified by the verb

Class 2: + animate, receiver₂ of action identified by verb

Class 3: + animate, locative receiver of the action

Class 4: + animate, object of purpose in the action, may co-occur with the locative receiver of the action (preceding it) in class 3 in a syntactic pattern of greater multivalence.

Class 5: - animate, body part (IP₁) receiver object, co-occurring with genitive agentive subject

Class 6: - animate, object of material used in the action identified by the verb

Class 7: + animate, receiver₂ of action indicated by verb

Class 8: - animate, co-ordinate object of action of verb

Pronominal affiliations

All benefactive objects (i.e. object #1) may occur in mixed affiliations as OP or as a nominal co-occurring with OP form of object #2 or, in the case of class 3 verbs, as OP with the locS form of object #2:

- a. $\underline{A} \left\{ \begin{array}{l} \underline{mu} \\ \underline{ku} \end{array} \right\} \underline{rechela} \left\{ \begin{array}{l} \underline{omubéro} \\ \underline{Kuukhu} \end{array} \right\} (\underline{ninalwô}). - \text{He} \left\{ \begin{array}{l} \text{for her} \\ \text{it (trap)} \end{array} \right\}$
 sets $\left\{ \begin{array}{l} \text{trap} \\ \text{for Grandmother} \end{array} \right\}$
 (with it--stick).

or with class 6,

- b. $\underline{A} \left\{ \begin{array}{l} \underline{mu} \\ \underline{bu} \end{array} \right\} \underline{home} \left\{ \begin{array}{l} \underline{obutóyi/nðbutóyi} \\ \underline{Kuukhu} \end{array} \right\} (\underline{ninalwô}). - \text{She} \left\{ \begin{array}{l} \text{for her} \\ \text{it (mud)} \end{array} \right\}$
 smears mud
 for
 /with mud
 Grandmother
 (with it).

- c. $\underline{Amuniinilakhwô} (\underline{ninakwô}). - \text{He for her climbs it (tree)}$
 (with it--rope).

With object #2 these constraints obtain: With class 3, it may occur pronominally only as locS, as seen in sentence c above. With class 6, it may occur as OP with object #1 nominal in mixed affiliations. With all other classes, object #2 may occur in mixed affiliations with object #1, as in a above.

Passive affiliations

All sentences except those of class 5 may occur in passive affiliations as follows:

Class 3:

| | | | |
|---|--|---|---|
| $\left. \begin{array}{l} \text{Khumusáála} \text{ } \text{khu} \\ \text{Omusáála} \text{ } \text{ku} \\ \text{Omukhási} \text{ } \text{a} \end{array} \right\}$ | $\text{niinilwakhwô omukhási}$ | $\left. \begin{array}{l} \text{nômufani} \\ \text{nômukoyo} \end{array} \right\}$ | . |
| $\left. \begin{array}{l} \text{In-tree} \text{ } \text{it} \\ \text{Tree} \text{ } \text{it} \\ \text{Woman} \text{ } \text{she} \end{array} \right\}$ | $\text{is being climbed in for woman}$ | $\left. \begin{array}{l} \text{by boy} \\ \text{with rope} \end{array} \right\}$ | . |
| $\left. \begin{array}{l} \text{In-tree} \text{ } \text{it} \\ \text{Tree} \text{ } \text{it} \\ \text{Woman} \text{ } \text{she} \end{array} \right\}$ | $\text{is being climbed for in tree}$ | $\left. \begin{array}{l} \text{by boy} \\ \text{with rope} \end{array} \right\}$ | . |

Class 5:

As will be seen later, IP₂ sentences may occur in passive affiliation (but not IP₁) together with benefactive object #1 with the benefactive extended shape of the verb.

Class 6, 7, 8:

Only the NP form of object #2 may occur as fronted grammatical subject in passive affiliation.

All other classes (including class 6 as modified above) may occur in passive affiliations as follows:

| | | | | |
|---|-----------------------|--|--|---|
| $\left. \begin{array}{l} \text{Kuukhû} \text{ } \text{a} \\ \text{Omubéro} \text{ } \text{ku} \end{array} \right\}$ | rechelwa | $\left. \begin{array}{l} \text{omubéro} \\ \text{Kuukhu} \end{array} \right\}$ | $\left. \begin{array}{l} \text{nende omufani} \\ \text{nende olusáála} \end{array} \right\}$ | . |
| $\left. \begin{array}{l} \text{Grandmother} \text{ } \text{she} \\ \text{Trap} \text{ } \text{it} \end{array} \right\}$ | is being set | $\left. \begin{array}{l} \text{for trap} \\ \text{for Grandmother} \end{array} \right\}$ | $\left. \begin{array}{l} \text{by boy} \\ \text{with stick} \end{array} \right\}$ | . |

The following schema shows the semantic/syntactic subcategorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Beneficiary of the Action} \right\} \left\{ + \text{animate} \right\} + \#$

2.0 Object #2 →

| | | |
|---|--|-----|
| $\left. \begin{array}{l} \text{Receiver}_1 \text{ of the Action} \\ \text{Receiver}_2 \text{ of the Action} \\ \text{Receiver}_{\text{loc}} \text{ of the Action} \\ \text{Purposive Receiver of the Action} \\ \text{Receiver}_{\text{psd}} \text{ of the Action} \\ \text{Material Receiver used in Action} \\ \text{Receiver}_3 \text{ of the Action} \\ \text{Co-ordinate object of the Action} \end{array} \right\}$ | $\left. \begin{array}{l} - \text{animate} \\ + \text{animate} \\ + \text{animate} \\ + \text{animate} \\ \left. \begin{array}{l} - \text{animate} \\ + \text{body part} \end{array} \right\} \\ - \text{animate} \\ + \text{animate} \\ - \text{animate} \end{array} \right\}$ | + # |
|---|--|-----|

3.0 Object #3 →

{Instrument of the Action}

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Benefactive Receiver of Action} || {Agentive Subject}
 {Class 1, 2, 3, 4, 5, 6, 7} + Benefactive Shape + _____
 + object #2 ± object #3 + #

2.1 Object #2 →

Receiver₁ of Action
 Receiver₂ of Action
 Receiver_{loc} of Action
 Purposive Receiver of Action
 Receiver_{psd} of Action
 Material Receiver used in Action
 Receiver₃ of Action
 Co-ordinate object of Action

{Agentive Subject}

{Class 1
 Class 2
 Class 3
 Class 4
 Class 5
 Class 6
 Class 7
 Class 8}

+ Benefactive Shape + Object #1 + _____

± Object #3 + #

5.222. Lexical Entries

1. Verbs of Class 1

-teeshel- 'cook for'

-malil- 'finish for'

-rechel- 'set (trap) for'

-funachil- 'break for'

- chetél- 'strain for'
- funjil- 'lock for'
- fumbil- 'fold for'
- khuulil- 'pull out for'
- sòomel- 'read to/for'
- ilushil- 'run to/for'
- boolel- 'say/talk to'
- chàáchil- 'begin for'
- réébel- 'ask about for'
- homél- 'smear (mud) for'
- buulil- 'tell to/for'
- onoonél- 'spoil for'

I. Ag. B. 1 [Ag _____ B O (I) (L)]

2. Verbs of Class 2

- ratsíl- 'kick for'
- lolél- 'see for'
- kulil- 'buy for'
- remel- 'chop for'
- boyel- 'tie for'
- mèétel- 'add for'
- khupil- 'strike for'
- enyél- 'want for'
- löndel- 'follow for'
- nyalil- 'be able for'
- khaabil- 'hunt for'
- tsomél- 'insert for'
- fuubil- 'throw to/for'
- bámbil- 'stretch for'
- lëndil- 'watch over for'

-huliilfi- 'hear for'

-henjel- 'look for'

-sãmbil- 'burn for'

-khayil- 'refuse for'

-nyðólel- 'find for'

-hunyii- 'smell for'

I. Ag. B. 2. [Ag _____ B (D ð O) (I) (L)]

3. Verbs of Class 3

-niinil- 'climb s.th. for s.o.'

-hunyii- 'take whiff of for'

I. Ag. B. 3. [Ag _____ B L (I) (L)]

4. Verbs of Class 4

-niinil- 'climb to get for'

I. Ag. B. 4. [Ag _____ B P (I) (L)]

5. Verbs of Class 5

-sããbil- 'wash (body part) for'

-khuulil- 'pull for'

-boyel- 'tie for'

-henjel- 'look for'

-tsomé- 'insert for'

I. Ag. B. 5. [G _____ B O (I) (L)]

6. Verbs of Class 6

-homé- 'smear (mud) for'

I. Ag. B. 6. [Ag _____ B M (I) (L)]

7. Verbs of Class 7

-fwalil- 'dress/put on garment for'

-rãébel- 'ask for'

I. Ag. B. 7. [Ag _____ B D (I) (L)]

8. Verbs of Class 8

-fwalil- 'dress for'

-rëébel- 'ask for'

-sòómel- 'read for'

-ilushíl- 'run for'

I. Ag. B. 8. [Ag _____ B C (I) (L)]

Of all base-verbs considered in chapter 3, only the verb -h- 'give' occurred with a benefactive object in the base-verb association. This verb does not occur in the benefactive extension.

5.23. Syntactic Pattern C

5.231. Grammatical Component

Core elements of syntactic pattern C are as follows: subject + benefactive verb + object #1 + object #2 + object #3 + object #4.

Sample Sentences:

Class 1

- a. Omwáyi aratsila Dóbi ing'ombe tsimbasi (něshilenje eshibíi).
Herdboy he-kicks cow kicks for Dobi (with bad foot).
- b. Omwáyi aratsila Dóbi omúpíila tsimbasi (něshilenje eshibíi).
Herdboy he-kicks ball kicks for Dobi (with bad foot).

Class 2

- a. Dóbi aniinila omukhási omwána khumusáála (nǒmukoye).
Dobi he-climbs tree for woman (to get) child (with rope).
- b. Dóbi aniinila omukhási tsikhwí khumusáála (nǒmukoye).
Dobi he-climbs tree for woman (to get) firewood (with rope).
- c. Dóbi aniinila omukhási omwána khupúnda (nǒmukoye).
Dobi he-climbs on donkey for woman (to get) child (with rope).
- d. Dóbi aniinila omukhási tsikhwí khupúnda (nǒmukoye).
Dobi he-climbs donkey for woman (to get) firewood (with rope).

Class 3

- a. Tóma aratsila Dóbi ing-ombe omurwe (něshilenje eshibíi).
Tom he-kicks cow's head for Dobi (with bad foot).
- b. Tóma aratsila Dóbi omútokâ omúpíila (něshilenje eshibíi).
Tom he-kicks car's tires for Dobi (with bad foot).

Class 4

Awinja ahomela Mâma indubi obutôye/nôbutôyi (nëshisââla).
 Awinja she-smears basket for Mother with mud (with stick).

Class 5

Sâra afwalila omukhâsi omwânawê ingubo (nômukhóno mulála).
 Sara she-puts dress on woman's child for her (with one hand).

With verbs of syntactic pattern C in the benefactive extended shape, the following constraints obtain: All subjects are animate and agentive. Object #1 in all sentences is benefactive, conforming to the criteria recounted on p. 139. Verbs of the greatest multivalence occur in this pattern in their maximum capacity for multivalence. The status of PNP_T here is the same as in syntactic pattern B and, for this reason, will be treated the same as in pattern B.

The following constraints obtain for object #2:

Class 1: + animate, receiver of the action identified by the verb

Class 2: + animate, purposive object of the action

Class 3: + animate, genitive possessor of IP₂ possessed object
 receiver of the action

Class 4: - animate, receiver of the action indicated by the verb

Class 5: + animate, receiver of the action indicated by the verb

These constraints obtain for object #3:

Class 1: - animate, co-ordinate object of the action

Class 2: + animate, locative receiver of the action identified
 by the verb

Class 3: - animate, IP₂ possessed object receiver of the action
 indicated by the verb

Class 4: - animate, object of material used in the action
 identified by the verb

Class 5: - animate, co-ordinate object of the action

Pronominal affiliations

All sentences occur in mixed affiliations with more than one arrangement of the components possible to each sentence:

Class 1, 5

A $\left\{ \begin{array}{l} \underline{\text{mu}} \\ \underline{\text{chi}} \end{array} \right\} \underline{\text{ratsila}} \left\{ \begin{array}{l} \underline{\text{ing'ombe}} \underline{\text{tsimbasi}} \\ \underline{\text{Dóbi}} \underline{\text{tsimbasi}} \end{array} \right\} (\underline{\text{nínashíó}}).$

He $\left\{ \begin{array}{l} \text{for him kicks cow kicks} \\ \text{it kicks for him kicks} \end{array} \right\} \text{(with it).}$

Class 2

A $\left\{ \begin{array}{l} \underline{\text{mu}} \\ \underline{\text{tsi}} \end{array} \right\} \underline{\text{niinilakhwô}} \left\{ \begin{array}{l} \underline{\text{tsikhwi}} \\ \underline{\text{omukhási}} \end{array} \right\} (\underline{\text{ninakwô}}).$

He $\left\{ \begin{array}{l} \text{for her climbs it (to get) firewood} \\ \text{(to get) it climbs it (tree) for woman} \end{array} \right\} \text{(with it--rope).}$

Class 3

A $\left\{ \begin{array}{l} \underline{\text{mu}} \\ \underline{\text{chi}} \end{array} \right\} \underline{\text{ratsila}} \left\{ \begin{array}{l} \underline{\text{ing'ombe}} \underline{\text{omúrwe}} \\ \underline{\text{Dóbi}} \underline{\text{omúrwe}} \end{array} \right\} (\underline{\text{nínashíó}}).$

Except for Class 2 verbs in which object #3 is a locS type of nominal, object #3 does not occur as a pronoun in mixed affiliations, rather it is object #1 and #2 which co-occur in the mixed affiliations.

Clausal affiliations

Object #1 and #2 can become fronted grammatical subjects in passive affiliations (and locative object #3 of class 2) as follows:

Class 1, 5

$\left\{ \begin{array}{l} \underline{\text{Dóbi}} \\ \underline{\text{Ing'ombe}} \underline{\text{yi}} \end{array} \right\} \underline{\text{ratsilwa}} \left\{ \begin{array}{l} \underline{\text{ing'ombe}} \underline{\text{tsimbasi}} \\ \underline{\text{Dóbi}} \underline{\text{tsimbasi}} \end{array} \right\} (\underline{\text{něshilenje}} \underline{\text{eshibfi}}).$

$\left\{ \begin{array}{l} \text{Dobi he-is being kicked for, cow (with) kicks} \\ \text{Cow it-is being kicked kicks for Dobi} \end{array} \right\} \text{(with bad foot).}$

Class 2

| | |
|---|------------------------------|
| $\left\{ \begin{array}{l} \text{Omukhási } \underline{a} \\ \text{Tsikhwí } \underline{tsi} \end{array} \right\} \text{niinilwa } \left\{ \begin{array}{l} \underline{tsikhwí} \\ \text{omukhási} \end{array} \right\} \text{khumusáála}$ | } (nömusifani) (nömukoye) |
| $\left\{ \begin{array}{l} \text{Khumusáála } \underline{khu} \\ \text{Omusáála } \underline{ku} \end{array} \right\} \text{niinilwakhwô } \underline{\text{omukhási tsikhwí}}$ | |
| $\left\{ \begin{array}{l} \text{Woman she-is climbed for, for firewood} \\ \text{Firewood it-is climbed for, for woman} \end{array} \right\} \text{ in tree}$ | |
| $\left\{ \begin{array}{l} \text{In-tree} \\ \text{Tree} \end{array} \right\} \text{ it-is climbed in for woman for firewood}$ | } (by boy) (with rope) |

Class 3

| | |
|---|--|
| $\left\{ \text{Omúrwe } \underline{\text{kwèing'ombe kuratsilwa Dóbi}} \right\} \left\{ \begin{array}{l} \underline{\text{nende Tóma}} \\ \underline{\text{nëshilenje eshibii}} \end{array} \right\}$ | |
| $\left\{ \text{Cow's head it-is being kicked for Dobi} \right\} \left\{ \begin{array}{l} \text{(by Tom)} \\ \text{(with bad foot)} \end{array} \right\}$ | |

The following schema illustrates the semantic/syntactic rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

| | |
|---|--|
| $\left\{ \text{Benefactive Receiver of the Action} \right\} \left\{ \begin{array}{l} + \text{ animate} \end{array} \right\} + \#$ | |
|---|--|

2.0 Object #2 →

| | |
|---|--|
| $\left\{ \begin{array}{l} \text{Receiver}_1 \text{ of the Action} \\ \text{Purpose of the Action} \\ \text{Possessor of object \#2} \\ \text{Receiver}_2 \text{ of the Action} \\ \text{Receiver}_3 \text{ of the Action} \end{array} \right\}$ | $\left\{ \begin{array}{l} \underline{+} \text{ animate} \\ \underline{+} \text{ animate} \\ \underline{+} \text{ animate} \\ - \text{ animate} \\ \underline{+} \text{ animate} \end{array} \right\} + \#$ |
|---|--|

3.0 Object #3 →

| | |
|--|---|
| $\left\{ \begin{array}{l} \text{Co-ordinate object}_1 \text{ of the Action} \\ \text{Receiver}_{loc} \text{ of the Action} \\ \text{Receiver}_{psd} \text{ of the Action} \\ \text{Material used in the Action} \\ \text{Co-ordinate object}_2 \text{ of the Action} \end{array} \right\}$ | $\left\{ \begin{array}{l} - \text{ animate} \\ \underline{+} \text{ animate} \\ \left\{ \begin{array}{l} - \text{ animate} \\ \underline{+} \text{ body part} \end{array} \right\} \\ - \text{ animate} \\ \underline{+} \text{ animate} \end{array} \right\} + \#$ |
|--|---|

4.0 Object #4 →

{Instrument object of the Action}

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Benefactive Receiver of Action} || {Agentive Subject}
 {Class 1, 2, 3, 4, 5} + Benefactive Shape + _____ + object #2
 + object #3 ± object #4 + #

2.1 Object #2 →

$\left. \begin{array}{l} \text{Receiver}_1 \text{ of Action} \\ \text{Purpose of Action} \\ \text{Possessor of Object \#2} \\ \text{Receiver}_2 \text{ of Action} \\ \text{Receiver}_3 \text{ of Action} \end{array} \right\} || \left\{ \text{Agentive Subject} \right\} \left. \begin{array}{l} \text{Class 1} \\ \text{Class 2} \\ \text{Class 3} \\ \text{Class 4} \\ \text{Class 5} \end{array} \right\}$
 + Benefactive Shape + object #1 + _____ + object #3
 ± object #4 + #

3.1 Object #3 →

$\left. \begin{array}{l} \text{Co-ordinate object}_1 \text{ in Action} \\ \text{Receiver}_{loc} \text{ of Action} \\ \text{Receiver}_{psd} \text{ of Action} \\ \text{Material used in Action} \\ \text{Co-ordinate object}_2 \text{ in Action} \end{array} \right\} || \left\{ \text{Agentive Subject} \right\} \left. \begin{array}{l} \text{Class 1} \\ \text{Class 2} \\ \text{Class 3} \\ \text{Class 4} \\ \text{Class 5} \end{array} \right\}$
 + Benefactive Shape + object #1 + object #2 + _____
 ± object #4 + #

One point should be made clear. The sentences in syntactic pattern C are all referent sentences and are occasionally used by the Shisa but shorter sentences are more common. There is a greater inclination to form two sentences rather than one longer utterance employing all the constituents given in these sentences.

5.232. Lexical Entries

1. Verbs of Class 1

-ratsíl- 'kick for'-khupil- 'strike for'-remel- 'chop/slash for'

I. Ag. C. 1. [Ag _____ B (D Ø O) C (I) (L)]

2. Verbs of Class 2

-niinil- 'climb for'

I. Ag. C. 2. [Ag _____ B P L (I) (L)]

3. Verbs of Class 3

-khuulil- 'pull out for'-khupil- 'strike for'-ratsíl- 'kick for'-remel- 'chop/slash for'-boyel- 'tie for'-sàábil- 'wash (body part) for'-sãmbil- 'burn for'-henjel- 'look at for'-tsomé1- 'insert for'

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

4. Verbs of Class 4

-homé1- 'smear (mud) for'

I. Ag. C. 4. [Ag _____ B O M (I) (L)]

5. Verbs of Class 5

-fwalil- 'dress for'-ràébel- 'give examination for'

I. Ag. C. 5. [Ag _____ B D C (I) (L)]

5.24. Subgroups of Agentive Verbs

5.241. Ergative Verbs

Only the verb -teeshe1- 'cook for' occurs in the ergative affiliation, and only the sentence with the agentive subject may occur.

5.2411. Syntactic Pattern A

5.24111. Grammatical Component

Core elements for syntactic pattern A are these: subject + ergative benefactive verb + object #1 ± object #2.

Sample Sentences:

Class 1

Omukhási ateeshela abachéni (nende omulilo omukáli).
 Woman she-cooks for guests (with hot fire).

The subject is animate and agentive, as was determined for the same type in the base-verb sentences. Since the object is animate, follows the verb immediately, and co-occurs with the benefactive extended verbal shape and since the benefactive extension occurs obligatorily with a benefactive object, the object will be termed a benefactive object. Since this is a affiliation, the criterion requiring a co-occurring fixed object with base verbs or with the benefactive extension of base verbs does not seem to apply here.

Pronominal affiliations

The benefactive object may occur as OP in the sequential affiliation, and the instrumental NP behaves as usual.

Abateeshela (ninakwô). - She for them cooks (with it).

Passive affiliations

The benefactive object may also occur in the passive

affiliation as a fronted grammatical subject, and the subject NP of the non-passive sentence occurs obligatorily as PNP in a position to the right of the verb. PNP_I does not occur.

Abachéni bateeshelwa nênde omukhási.
 Guests they-are being cooked for by woman.

The following schema indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{Benefactive Receiver of the Action} {+ animate} + #

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Benefactive Receiver of Action} ||| {Agentive Subject} {Class 1}
 + Ergative Benefactive Shape + _____ ± object #2 + #

5.24112. Lexical Entries

1. Verbs of Class 1

-teeshel- 'cook for'

I. Erg. Ag. A. 1. [Ag _____ B (I) (L)]

5.3. Conclusion

Verbs occurring in the benefactive extended shape co-occur obligatorily with a new, a benefactive, object, which is the object of the benefactive extension. This new object occurs in a position immediately to the right of the extended verb, is obligatorily animate, and may not occur without the co-occurrence of a/the fixed object of the base verb.

The benefactive object is of the OP type and occurs in sequential affiliations with descriptive verbs and in mixed affiliations

when it co-occurs with the fixed object(s) (i.e. object #2 or object #3, which in association with base verbs were object #1 and object #2, respectively) with agentive verbs.

It occurs in passive affiliations with both descriptive and agentive extended verbs in the benefactive extension shape. It indicates the person (or animate object) to/for/about/from/of whom something is done.

Stative and entailing verbs do not occur in this extended shape, and only six descriptive verbs do. Instrumental verbs also do not occur, but ergative -teeshel- 'cook for' may occur with the agentive subject. For those which do occur with the benefactive extension the following constraints obtain:

A. Uni-nominal (i.e. descriptive-clause type) verbs

1. Descriptive verbs occur as two-nominal: subject + benefactive object.
2. Criteria for the grammatical subject of referent base verbs of agentive clauses obtain here, with one exception (see 5. below).
3. The benefactive object is obligatory, of the OP-type, and occurs in sequential affiliations.
4. These verbs occur in passive constructions, the benefactive object occurring as fronted grammatical subject, with the SP in concordial agreement.
5. Subject NP occurs obligatorily in the passive affiliation as PNP in position to the right of the verb, and $PNP_{\bar{1}}$ does not occur.
6. Descriptive verbs occur in one syntactic pattern of two parts.

To sum up, descriptive clauses, when they occur in the benefactive extension, behave as two-nominal, agentive clauses, except that the subject NP of the referent sentence occurs obligatorily as PNP in a position to the right of the verb in the passive affiliation. Two-nominal agentive clauses still behave as agentive clauses. Ergative clauses with agentive subjects behave the same as minimum two- and maximum three-nominal agentive verbs except in the passive affiliations in which PNP_{ag} occurs obligatorily and PNP_I does not occur.

B. Multi-nominal Agentive-clause Type Verbs

The criteria for these verbs are as follows:

1. Subject syntactic behavior is the same as in base-verb clauses.
2. Subdivision of verbs into classes in which \pm PNP_I occurs and into those in which no PNP_I may occur still obtains.
3. The benefactive object is in the position of object #1; object #1 of the base verb referent sentence occurs as object #2, and object #2, as object #3. PNP_I, when it occurs, occurs finally.
4. The patterns of optionality and obligatoriness of fixed objects remain the same, i.e. the fixed, obligatory object of a two-nominal verb of a base-verb sentence is still obligatory; objects of \emptyset -to-2-object and 1-to-2-object verbs (e.g., -reeb- 'ask') still occur in various syntactic patterns, and so on.
5. With verbs of the \emptyset -to-2-object class, the benefactive object is obligatory (making these verbs now obligatorily two-nominal) and can occur as the only object NP, or as

OP in sequential affiliation or with the other objects in mixed affiliations, depending upon their occurrence in various syntactic patterns.

6. In all clauses in which other objects co-occur (except the optional instrumental NP), the benefactive object can co-occur with them in mixed affiliations.

5.4 Summary of Facts of the Benefactive Extension

Forty-seven verbs occur in the benefactive extension (some of them in more than one class and/or syntactic pattern), and of these only descriptive and agentive verbs occur.

A. Kinds of verbs

1. Three descriptive verbs occur in the benefactive shape: -sinjilil-, -itsil-, and -choonyel-, each associated with a benefactive object and thus occurring as two-nominal verbs behaving as two-nominal agentive base verbs.
2. Four of the two-nominal, agentive base verbs now occur with the additional benefactive object and are thus obligatorily three-nominal.
3. Thirty-nine other agentive verbs of the group with which two, three, or four object NP's can be associated, are, in this extension, associated with the additional benefactive object and occur in three syntactic patterns. Although the Bashisa commonly employ only one fixed object NP concurrently with the benefactive object, they do on occasion employ more.

B. Syntactic patterns

1. Descriptive verbs occur in only one syntactic pattern:

$$S \rightarrow NP_{act/pc} + ben V + NP_{ben}$$

2. Agentive verbs may occur in three syntactic patterns:

a. $S \rightarrow NP_{ag} + ben V + NP_{ben} + NP_{obj.fx.}$

b. $S \rightarrow NP_{ag} + ben NP_{ben} + NP_{obj.fx.} \pm PNP_I$

c. $S \rightarrow NP_{ag} + ben V + NP_{ben} + NP_{obj.fx.} + NP_{obj.fx.} \pm PNP_I$

Although the Bashisa prefer a maximum three-nominal sentence structure, the four-nominal construction may occur (and does occur with IP₂, co-ordinate, purpose, and material-used objects). These patterns, therefore, were also treated. It was noted that the benefactive object follows the verb immediately.

C. Case functions

The benefactive case function was identified as occurring with many verbs, with which--in their base shapes--it could not be associated. This case function occurs here with certain verbs for the first time only, having been identified earlier with the base shape -h- 'give' (pp. 101-102).

CHAPTER 6

THE INSTRUMENTAL EXTENSION

6.0. Introduction

A group of verbs is capable of occurring in the extended shape -il-/-el-, which is the same shape as that identified as the benefactive extension in the preceding chapter. The number and kinds of object NP's, however, differ, which fact would indicate that this is a homophonous extension, for example:

1. Omukháàna aboha tsikhwî nende omukoye.
Girl she-ties firewood with rope.
- *2. Omukháàna aboha omukhási tsikhwî nende omukoye.
Girl she-ties woman firewood with rope.
- *3. Omukháàna aboha tsikhwî omukoye.
Girl she-ties firewood rope.
- *4. Omukháàna aboha omukhási tsikhwî omukoye.
Girl she-ties woman firewood rope.
5. Omukháàna aboyela omukhási tsikhwî nende omukoye.
Girl she-ties for woman firewood with rope.
- *6. Omukháàna aboyela omukhási tsikhwî omukoye.
Girl she-ties for woman firewood rope.
7. Omukháàna aboyela tsikhwî omukoye.
Girl she-ties firewood with rope.

Among these strings of utterances, sentence 1 is the base-verb sentence and occurs in Shisa as an acceptable utterance by the Bashisa. Object #1 is the fixed object, and object #2 is the prepositional instrument NP, according to terms determined earlier in this thesis. In sentence 2 an object has been added in a position between the verb and the fixed object, but this sentence is unacceptable to the Bashisa. Sentence 3 has the same number of

objects as sentence 1, but the preposition does not occur. This, too, is unacceptable, as is also sentence 4 with the addition of the new object and the change in the PNP_I to NP_I . Sentence 5, though, with the addition of the extension shape to the verb, is acceptable. This fact indicates a definite relationship between the extension of the verb and the new object. A glance at sentence 6 shows that the newly extended verb does not tolerate a new object and a change in the constituents of PNP_I concurrently. However, in sentence 7 the extra object does not occur with the extended verb, but the preposition has been eliminated from PNP_I , and this is now acceptable. From these findings certain conclusions can be drawn. The extended form of the verb tolerates in number or form of the constituents only one change at a time in a sentence. It was established in the preceding chapter that the type of clause in which a new, animate object NP was added (concurrently with the extended verb) in a position immediately following the verb would be termed benefactive; the new object would be termed the benefactive object, and the extended form of the verb would be termed the benefactive extended form.

Sentence 7 introduces a new syntactic pattern: The fixed object occurs in the position of object #1 in relation to the now extended form of the verb and preceding the instrument NP; but with the non-occurrence of the benefactive object it is now possible for PNP_I to occur simply as NP_I in the same position as formerly (although some Bashisa say it may occur also in a position immediately following the verb; however, in the referent sentences they gave, it was always in the position following the fixed object).

These facts lead to the conclusion that there is a definite

relationship between the verbal extension -il-/-el- and the instrumental object (NP_I) (without the preposition) when no benefactive object occurs. For these reason, also, the extension will be termed the instrumental extension. The shape, meaning, and (in part) syntactic behavior, then, have been established.

But certain problems yet remain to be solved: Whether there is any change in the syntactic behavior of the modified instrument object; for example, with the base-verb shape and with the benefactive extended shape of the verb, the instrument object could not commonly occur as fronted, grammatical subject (except in the instrumental clausal affiliation in which only one verb occurs); whether fronting is now possible in the modified shape; what type of object the new shape of the instrument object is--OP, locS, or nominal only; in which--if any--affiliations it occurs (sequential, mixed, clausal, others); types of verbs occurring in this extension (descriptive, agentive, entailing, stative); what--if any--constraints are imposed upon uninominal verbs in this extension; nominals which now occur obligatorily and/or optionally; the syntactic behavior of the subject; any changes in clause types; constraints which now obtain with multi-nominal verbs; which clause types occur; whether or not verb classes are further subdivided--if so, how; positions of object NP's if/when more than one occur, and so on.

These, and possibly other, questions will need to be answered in this chapter. The same plan as was followed in the preceding chapter of presenting the behavior of extended forms of the verbs will be continued for all extensions.

6.1. Descriptive Verbs in Instrumental Extended Shape

6.11. Syntactic Pattern A₁

6.111. Grammatical Component

The core elements required for this pattern are as follows:

subject + instrument verb + object #1.

Sample Sentences:

Class 1

Omusaàkhulu asinjiliile amáánike omwéne.
Old man he-stood up by his own strength.

Only one uni-nominal verb occurs in this pattern, but some multivalent verbs may also occur. The benefactive object may not occur in this extension, and the instrument NP--occurring now as NP_I and not as PNP_I--is obligatory. There is, then, one NP less in this extension than in the benefactive. Whereas the benefactive NP is animate and occurs obligatorily in a position immediately following the benefactive extended form of the verb, the instrument object is obligatorily inanimate and usually occurs in a position immediately following the fixed object (when a fixed object occurs); although some Bashisa say it may follow the verb immediately, they always gave the referent sentences with this object following the fixed object--when a fixed object occurred in a syntactic pattern.

Pronominal affiliations

The instrument object can occur as OP in the sequential affiliation with descriptive instrument extended shapes of verbs.

Akasinjiliile. - He stood up by means of it (his strength).

Passive affiliations

It also has the capacity to occur in a passive sentence as fronted grammatical subject (although, in general, among the

informants there was a reluctance to employ the passive construction at any time). The grammatical subject of the referent sentence occurs obligatorily as a prepositional phrase in a position to the right of the passive extended shape whereas with base verbs it is optional.

Amàáni kasinjililwe nende omisââkhulu.

Strength it-was stood up by means of it by old man.

The following sketch indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

0.0 Simple Instrumental Shape →

{ Actor-Subject Instrumental Shape }
{ (All Classes) }

Strictly Semantic Subcategorization Rules

1.0 Object #1 →

{ Instrument of the Action } { - animate } + #

Formal Realization of Instrument-Extension Object

1.1 Instrument-Extension Object →

{ Object Prefix } ||| Simple Instrumental Shape + _____ + #
{ Nominal }

General Semantic/Syntactic Subcategorization Rules

1.2 Object #1 →

{ Instrument of Action } ||| { Actor Subject } { Class 1 } +
Instrumental Shape + _____ + #

6.112. Lexical Entries

1. Verbs of Class 1

-sInjilil- 'stand up by means of'

-homél- 'smear (mud) with'

-teeshe1- 'cook with'

-ràábel- 'ask with (orally)'

-hulililil- 'hear with'

-boolel- 'say with'

-henjel- 'look at with'

-lolél- 'see with'

-sòómel- 'read with' II. Des. A₁. 1. [Act _____ I (L)]

6.2. Agentive Verbs in Instrumental Extended Shape

Entailing and stative verbs do not occur in the instrumental shape. Only a few descriptive verbs occur, and the rest are agentive; also, agentive verbs which are not associated with PNP_I do not occur in this extension. In these clauses, the fixed object is in a position immediately following the verb (usually), followed by the obligatory instrument NP.

6.21. Syntactic Pattern A

6.211. Grammatical Component

Syntactic pattern A provides the following core elements:

subject + instrument verb + object #1 + object #2.

Sample Sentences:

Class 1

Àwínja afunjila omuliango olufúngwo.
Awinja she-locks door with key.

Class 2

- a. Omukháàna aboyela omwána omukoye.
Girl she-ties child with rope.
- b. Omukháàna aboyela tsikhwí omukoye.
Girl she-ties firewood with rope.

Class 3

Papâ asinyila abandu amakhûwakê.
 Father he-irritates people with his words.

Class 4

- a. Asîla aniinila khupûnda omutûnga.
 Asila he-climbs on donkey with supporting stick.
- b. Asîla aniinila khushikulu omûtungu.
 Asila he-climbs mountain with supporting stick.

Class 5

Omukháana asaabila amakhónoke isáábúûni.
 Girl she-washes her hands with soap.

Class 6

Omusifani aratsila tsimbasi eshilenje eshiláyi.
 Boy he-kicks kicks with good foot.

Class 7

Omulesi áhomela obutóyi olusáála.
 Nursegirl she-smears mud with stick.

All subjects are agentive and animate. Object #1 is the fixed object receiver of the action of base verbs with classes 1 - 5.

Object #2 is the inanimate instrument object of the instrument extension shape, i.e. it will be so termed in this study. The following constraints obtain for object #1 of syntactic pattern A:

Class 1: - animate, fixed receiver₁ object of action identified by the verb

Class 2: ± animate, fixed receiver₂ object of action

Class 3: + animate, fixed receiver₃ object of action

Class 4: ± animate, fixed locative receiver of action

Class 5: - animate, possessed (IP₁) object of action

Class 6: - animate, co-ordinate object of action

Class 7: - animate, object of material used in action indicated by the verb

Pronominal affiliations

Object #2, the instrument object, may occur alone as the sole object in the sequential affiliation with all classes of verbs, for example:

Alufunjilâ. - She locks up with it.

These verbs in classes 1, 2, 3, 5, 6, 7 may also occur with their two object nominals in mixed affiliations:

A $\left\{ \begin{array}{l} \text{ku} \\ \text{lu} \end{array} \right\}$ funjila $\left\{ \begin{array}{l} \text{olufûngwo} \\ \text{omuliango} \end{array} \right\}$.

She $\left\{ \begin{array}{l} \text{it (door)} \\ \text{with it (key)} \end{array} \right\}$ locks $\left\{ \begin{array}{l} \text{with key} \\ \text{door} \end{array} \right\}$.

Class 4 occurs in a mixed sequential affiliation:

Akuniinilakhwô. - He with it (supporting stick) climbs
it (mountain).

Passive affiliations

Either object may occur as fronted grammatical subject in passive affiliations. However, passive affiliations in this extension are not highly acceptable. The occurrence of possessive adjectives and locatives provide variations in the passive patterns. The following patterns occur:

Class 1, 2, 6, 7

$\left\{ \begin{array}{l} \text{Olufûngwo lufunjilwa} \\ \text{Olufûngwo lufunjilwa omuliango} \\ \text{Omuliango kûfunjilwa olufûngwo} \end{array} \right\}$ (nênde Awinja)
 $\left\{ \begin{array}{l} \text{Key it-is being locked-up-with} \\ \text{Key it-is being locked-with door} \\ \text{Door it-is being locked with key} \end{array} \right\}$ (by Awinja)

Sentences in which possessive adjectives occur:

Class 3

Abandu básinyilwa amakhûwa kaPâpa.

People are being irritated by Father's words.

Class 5

{ Amakhóno kòmukháana ka } saabilwa { isáábúuni }
 { Isáábúuni yi } { omukháana amakhóno }

Girl's hands they-are being washed with soap.

Again, two ways of saying the same thing.

Sentences in which locative object occurs:

Class 4

{ Khushikulu omutûnga kuniinilwakhwô }
 { Eshikulu khú } niinilwakhwô omutûnga } (nende Asila).

{ On-mountain it } stick it-is being climbed with it on it }
 { Mountain it } is being climbed on it with stick } (by Asila).

The following sketch illustrates the rules governing the system which is operative in these extended verb forms.

0.0 Simple Instrumental Shapes →

{ Agentive-Subject Instrumental Shape }
 { (Classes 1, 2, 3, 4, 5, 6, 7) }

Strict Semantic Subcategorization Rules

1.0 Object #1 →

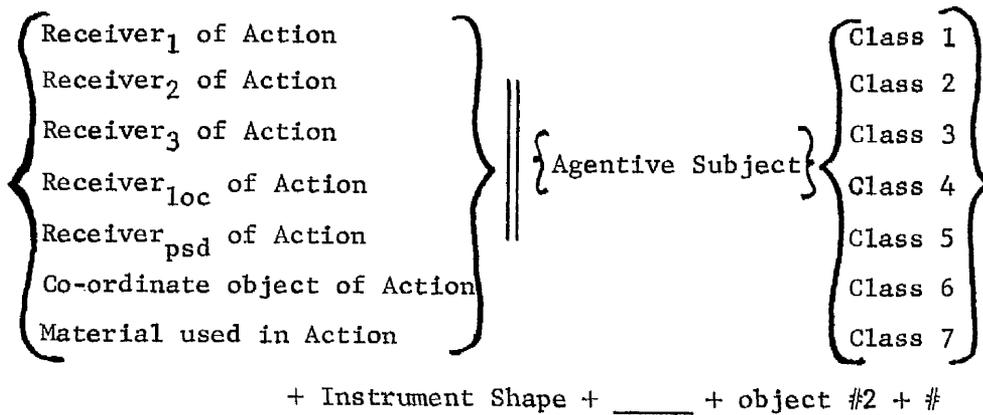
{ Receiver₁ of the Action } - animate }
 { Receiver₂ of the Action } ± animate }
 { Receiver₃ of the Action } + animate }
 { Receiver_{loc} of the Action } ± animate } + #
 { Receiver_{psd} of the Action } { - animate }
 { Co-ordinate Object of Action } { ± body part }
 { Material used in the Action } - animate }

2.0 Object #2 →

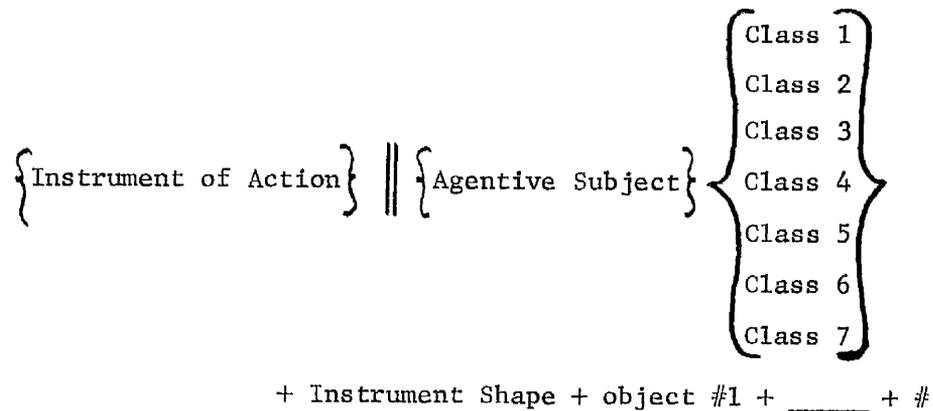
{ Instrument of the Action }

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →



2.1 Object #2 →



6.212. Lexical Entries

1. Verbs of Class 1

- malíl- 'finish with'
- rechel- 'set (trap) with'
- homé1- 'smear (mud) with'
- funachil- 'break with'
- chetél- 'strain with'
- funjil- 'lock (up) with'
- fumbil- 'fold with'
- khuulil- 'pull out with'
- sòómel- 'read with'

-ilushíl- 'run with'

-boolel- 'speak/talk with'

-chááchil- 'begin with'

-teeshel- 'cook with'

-buulil- 'tell with'

-onooné1- 'spoil with' II. 'Ag. A. 1. [Ag _____ O I (L)]

2. Verbs of Class 2

-ratsíl- 'kick with'

-lolé1- 'see with'

-ku1íl- 'buy with'

-remel- 'chop/slash with'

-boyel- 'tie with'

-mèé1el- 'add with'

-khupil- 'strike with'

-anyé1- 'desire/want with'

-lõndel- 'follow with'

-nyalil- 'be able with'

-khaabil- 'hunt with'

-tsoné1- 'insert with'

-fuubil- 'throw with'

-bãmbil- 'stretch with'

-manyíl- 'know with'

-lĩndil- 'watch over with'

-buulil- 'tell with'

-huliilíl- 'hear with'

-henjel- 'look at with'

-onooné1- 'spoil with'

-sãmbil- 'burn with'

-khayíl- 'refuse with'

-nyòólel- 'find with'

II. Ag. A. 2. [Ag ____ (D X O) I (L)]

3. Verbs of Class 3

-sinyíl- 'irritate/annoy with'

-fwalil- 'dress with'

-rèébel- 'ask with' II. Ag. A. 3. [Ag ____ D I (L)]

4. Verbs of Class 4

-niinil- 'climb with'

-hunyil- 'smell with' II. Ag. A. 4. [Ag ____ L I (L)]

5. Verbs of Class 5

-sàábil- 'wash (body part) with'

-remel- 'chop/slash with'

-ratsíl- 'kick with'

-boyel- 'tie with'

-henjel- 'look at with'

-khupil- 'strike with'

-tsomé1- 'insert with'

-lolé1- 'see with'

-hulii1í1- 'hear with'

-sámbil- 'burn with'

-khuulil- 'pull out with' II. Ag. A. 5. [G ____ O I (L)]

6. Verbs of Class 6

-fwalil- 'dress with'

-ratsíl- 'kick with'

-remel- 'chop/slash with'

-khupil- 'strike with'

-rèébel- 'ask with'

-sòómel- 'read with'

-ilushíl- 'run with' II. Ag. A. 6. [Ag _____ C I (L)]

7. Verbs of Class 7

-homél- 'smear (mud) with' II. Ag. A. 7. [Ag _____ M I (L)]

The verb -h- 'give' was the only obligatorily three-nominal base verb, its first object NP being the benefactive object. This verb does not occur in the instrumental extended shape.

6.22. Syntactic Pattern B

6.221. Grammatical Component

Core elements of syntactic pattern B are as follows: subject + instrument verb + object #1 + object #2 + object #3.

Sample Sentences:

Class 1

- a. Omúsíani aniinila omwána khumusáála omukoye.
Boy he-climbs tree with rope (to get) child.
- b. Omúsíani aniinila tsikhwí khumusáála omukoye.
Boy he-climbs tree with rope (to get) firewood.
- c. Omúsíani aniinila omwána khupúnda omukoye.
Boy he-climbs on donkey with rope (to get) child.
- d. Omúsíani aniinila tsikhwí khupúnda omukoye.
Boy he-climbs on donkey with rope (to get) firewood.

Class 2

Omurémi aremela omundu omukhóno olupánga.
Chopper he-chops man's hand with machete.

Class 3

Omwéchesía areebela abééchi amaréèbo omúnwa.
Teacher he-asks pupils questions with mouth (orally).

Class 4

Omukháána ahomela indubi obutóyi/nōbutóyi amakhóno.
Girl she-smears basket with mud with her hands.

All subjects are animate and agentive. Objects #1 and #2 are fixed objects, and object #3 is the instrumental NP, which is inanimate.

Again it should be asserted that while the Bashisa do employ sentences like these, they are not so common as those with two objects. However, the fact that they do use them shows them to be a part of the syntactic structure of the language. It is more common, for example, to state the event expressed in sentence b above like this:

Omusiani aniinila khumusáála omukoye, khulwa ókhureenya.
 Boy he-climbs in tree with rope, in order to gather firewood.

But this is not a uni-clause, univerbal sentence and is, therefore, outside these terms of reference.

The following constraints obtain for object #1 of syntactic pattern A:

- Class 1: ± animate, object of the purpose of the action identified by the verb
- Class 2: + animate, possessor of object #2 of the action
- Class 3: + animate, fixed object receiver₁ of the action
- Class 4: - animate, fixed object receiver₂ of the action indicated by the verb

These constraints obtain for object #2 of syntactic pattern A:

- Class 1: ± animate, locative fixed receiver-object of the action identified by the verb
- Class 2: { - animate }
 { + body part }, possessed receiver-object of the action
- Class 3: - animate, co-ordinate object of the action
- Class 4: - animate, object of material used in the action

Pronominal affiliations

The following mixed affiliations may occur:

Class 1

- a. A $\left\{ \begin{array}{l} \text{mu} \\ \text{tsi} \end{array} \right\}$ niinilakhwô omukoye. - He for $\left\{ \begin{array}{l} \text{him} \\ \text{it} \end{array} \right\}$ climbs with rope.
- b. Akuniinilakhwô $\left\{ \begin{array}{l} \text{omwána} \\ \text{tsikhwi} \end{array} \right\}$. - He with it (rope) climbs in
it (tree) (to get) $\left\{ \begin{array}{l} \text{child} \\ \text{firewood} \end{array} \right\}$.

In affiliation a, the instrument object is in the shape of a NP, and the other two NP's occur in the form of OP, the affiliation pattern being OP-locS-NP. In affiliation sentence b the instrument object occurs as OP and the others as NP's, the affiliation pattern being again OP-locS-NP.

Class 2, 3, 4:

- A $\left\{ \begin{array}{l} \text{mu} \\ \text{ku} \\ \text{lu} \end{array} \right\}$ remela $\left\{ \begin{array}{l} \text{omukhóno olupânga} \\ \text{omundu olupânga} \\ \text{omundu omukhono} \end{array} \right\}$.
- He $\left\{ \begin{array}{l} \text{his (man's) hand cuts with machete} \\ \text{it (hand) man's cuts with machete} \\ \text{with it cuts man's hand} \end{array} \right\}$.

It can now be seen that any nominal has the capacity to occur as OP, except the locative nominal, which occurs as locS.

Passive affiliations

These verbs occur in various patterns in the passive affiliation:

- $\left\{ \begin{array}{l} \text{Omukoye kúniinilwa omwána khumusáála} \\ \text{Omwána aniinilwa khumusáála omukoye} \\ \text{(Khumusáála khu)} \\ \text{Omusáála ku} \end{array} \right\} \text{niinilwakhwô omwána omukoye} \left. \right\} \text{(nõmusfani)}.$
- $\left\{ \begin{array}{l} \text{Rope it-is being climbed with (to get) child in tree} \\ \text{Child he-is being climbed for in tree with rope} \\ \text{(In-tree)} \\ \text{Tree} \end{array} \right\} \text{it is being climbed in it with rope (to get) child} \left. \right\} \text{(by boy)}.$

Class 2

{ Omundu áremelwa omukhóno olupánga
Omukhóno kwómundu kuremelwa olupánga
Olupánga luremelwa omundu omukhóno } (nende omusiáni).

{ Man his hand is being slashed with machete
 Hand of man it-is being slashed with machete
 Machete with it is being slashed man's hand } (by boy).

Class 3

{ Abééchi bareebelwa amaréébo omúnwa
Amaréébo kareebelwa abééchi omúnwa
Omúnwa kureebelwa abééchi amaréébo } (nende omwéchesia).

{ Pupils they are being asked questions with mouth (orally)
 Questions they are being asked pupils with mouth
 With mouth is being asked (of) pupils questions }

(by teacher).

Class 4

{ Indubi yíhomelwa obutóyi/nóbutóyi amakhóno
Obutóyi buhomelwa mundubi amakhóno
Amakhóno kahomelwa indubi obutóyi/nóbutóyi } (nómukháana).

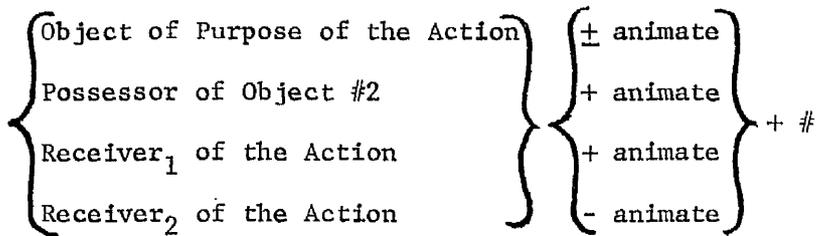
{ Basket it-is being smeared with mud with hands
 Mud it-is being smeared in basket with hands
 Hands they-are being smeared mud with } (by girl).

It can be seen that there are differences in behavior between any two sentences. Class 1 treats of the behavior of the locative-object sentence. Class 2 shows the behavior of the objects of inalienable possession. The only difference between the behavior of the constituents of Class 3 and Class 4 is that the fixed receiver of the object occurs as a locative shape NP when the object of material used occurs as fronted grammatical subject. The PNP_{ag} does not commonly occur, but it may.

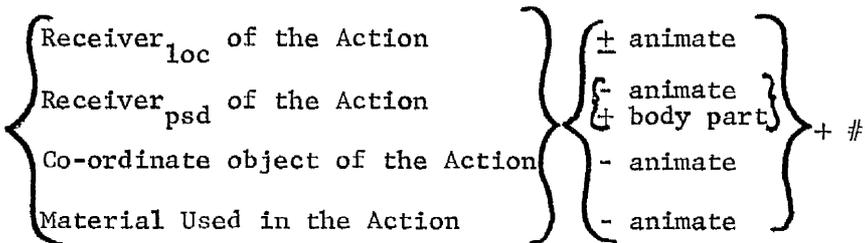
The following schema indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →



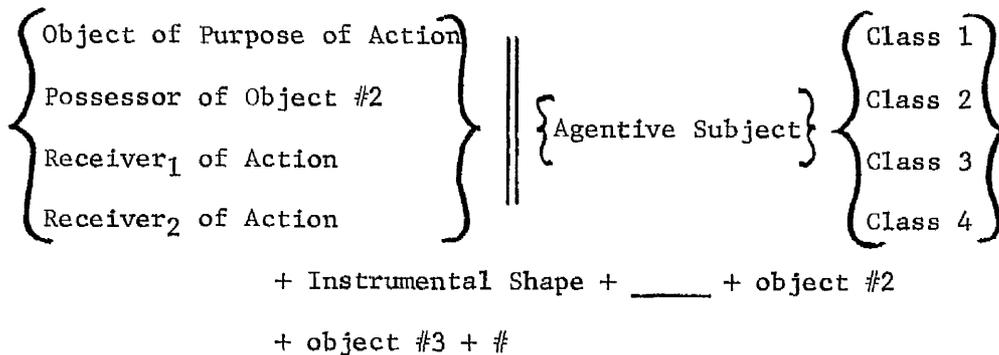
2.0 Object #2 →



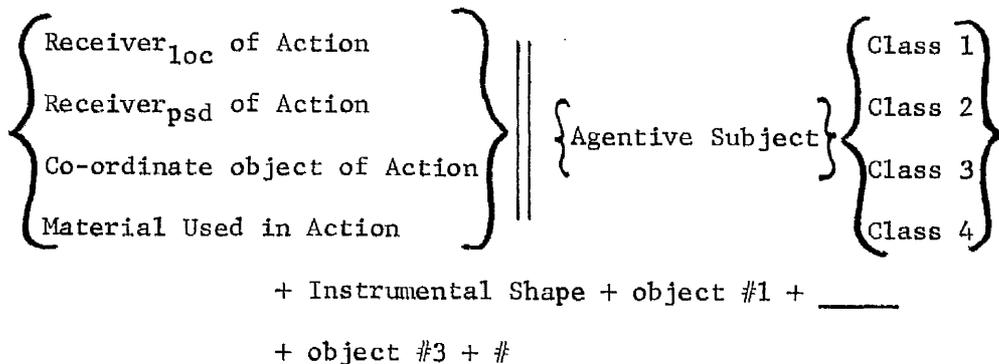
3.0 Object #3 →

$$\{ \text{Instrument of the Action} \}$$
General Semantic/Syntactic Subcategorization Rules

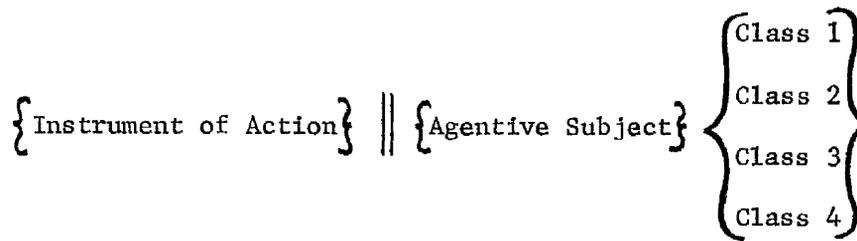
1.1 Object #1 →



2.1 Object #2 →



3.1 Object #3 →



+ Instrumental Shape + object #1 + object #2 + _____ + #

6.222. Lexical Entries

1. Verbs of Class 1

-niinil- 'climb with' II. Ag. B. 1 [Ag _____ P L I (L)]

2. Verbs of Class 2

-sămbil- 'burn with'

-khupil- 'strike with'

-ratsil- 'kick with'

-remel- 'chop/slash with'

-boyel- 'tie with'

-khuulil- 'pull out with'

-săabil- 'wash with'

-tsomél- 'insert with'

-henjel- 'look at with'

-lolél- 'see with'

-huliiifil- 'hear with' II. Ag. B. 2. [Ag _____ G O I (L)]

3. Verbs of Class 3

-fwalil- 'put on garment with'

-rêébel- 'ask with' II. Ag. B. 3. [Ag _____ D C I (L)]

4. Verbs of Class 4

-homél- 'smear with' II. Ag. B. 4. [Ag _____ O M I (L)]

6.3. Ergative Clauses in Instrumental Extended Shape

Only the ergative affiliation in which occurs the agentive grammatical subject can occur in the instrumental extended form.

6.31. Syntactic Pattern A

6.311. Grammatical Component

Core elements provided by agentive-ergative syntactic pattern are these: Agentive subject + ergative verb (-teekh-) + instrument object.

Sample Sentence:

Class 1

Omukhási ateeshelanga omulilo omukáli.
Woman she-is cooking with hot fire.

Pronominal affiliation

This sentence may occur in sequential affiliation:

Akuteeshelânga. - She it is cooking with.

But it does not occur in the passive affiliation

The following schema illustrates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{Instrument of the Action} {- animate} + #

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Instrument of Action} || {Agentive Subject} {Class 1}
+ Instrument Shape + _____ + #

6.312. Lexical Entries

1. Verbs of Class 1

-teeshel- 'cook with' II. Erg. A. 1. [Ag _____ I (L)]

6.4. Conclusion

The instrumental extended shape of the verb requires a co-occurring instrumental object NP--not PNP, commonly increasing by one the number of OP- or locS-type objects with which the verb can be associated. For example, descriptive base verbs occurring in the instrumental extended shape are obligatorily associated with the subject NP of the base verb and with the instrumental object NP.

Although PNP_I in base-verb sentences, or with other extended forms of verbs, never occurs as grammatical subject or as an OP-type object, this object, now in the shape of NP_I, may occur as OP-type and may occur in the sequential affiliation. It may also occur as fronted grammatical subject in a modified passive affiliation, the modification being that the subject of the referent sentence occurs obligatorily as PNP in a position to the right of the instrumental extended shape of the verb.

The principal difference in agentive clauses is that the number of OP- or locS-type object NP's is increased by one--the now obligatory NP_I--with the instrumental shape. No object is added, but the shape is different--PNP_I to NP_I--making an OP-type object capable of sequential or mixed affiliational behavior. Pronominal and passive affiliations are increased accordingly.

Nine descriptive verbs (some of them multivalent) occur in this extension, and most agentive verbs do. One ergative verb (-teeshel- 'cook with') does, but stative and entailing verbs do not.

Agentive base verbs not associated with PNP_I do not occur in this extended form and are, therefore, not associated with NP_I either.

Descriptive verbs occurring in this shape are associated with actor subjects and occur in one syntactic pattern. Agentive verbs occur in two syntactic patterns, and one ergative verb occurs in one syntactic pattern. Both the agentive and ergative verbs are associated with agentive subjects.

6.41. Summary of Facts of the Instrumental Extension

A. Kinds of verbs

1. Nine verbs which occur in descriptive base-verb clauses occur in the instrumental extension.
2. Forty-two agentive verbs occur, but some are multivalent or polysemous, having the capacity to occur in more than one type of syntactic pattern or in more than one verb class.

One (agentive) ergative verb (-teeshe1- 'cook with') occurs.

3. IP_1 and IP_2 constructions may both occur in this extension. whenever $NP_{body\ part}$ of IP_1 occurs (whether with any extended or base shape of the verb), it must co-occur with the possessive adjective of the genitive possessor NP and be in agreement in number and class number with the body-part object NP, for example:

G O Adj.poss.

Awinja akhupile eshilenje shie

Awinja she-struck her leg. (i.e. 'her own leg')

B. Syntactic patterns

1. Only one syntactic pattern occurs with descriptive verbs in

the instrumental extension:

$S \rightarrow NP_{act} + instr V + NP_I$

2. Agentive verbs occur in two syntactic patterns. IP objects are associated with verb classes in these two patterns:

a. $S \rightarrow NP_{ag} + instr V + NP_{obj.fx.} + NP_I$

b. $S \rightarrow NP_{ag} + instr V + NP_{obj.fx.1} + NP_{obj.fx.2} + NP_I$

c. One ergative verb (-teeshed: 'cook with') occurs in one syntactic pattern: $S \rightarrow NP_{ag} + instr V + NP_I$

The instrumental NP commonly follows the fixed object(s) although it may precede it.

C. Case functions

No new case functions were identified, but it was observed that the shape of the instrument NP was altered from PNP_I to NP_I in association with the instrumental extended form of the verb.

CHAPTER 7

THE LOCATIVE EXTENSION

7.0. Introduction

All verbs were found to occur in their base forms with an optional locative NP. But whether there are verbs which, or contexts in which, verbs may not occur with locative NP's in the -il-/-el- extended shapes remains to be investigated. The problem at this point is to ascertain the circumstances in which the -il-/-el- extension and a locative NP can co-occur and when they cannot. The following are examples of co-occurrence and non-occurrence of these two constituents. The starred forms may not occur.

- A. 1. Abàána bachoonyile (khushifûmbi).
Children they-have become tired (on chair).
- *2. Abàána bachoonyile khushifûmbi munzû.
Children they-have become tired on chair in house.
- *3. Abàána bachoonyèèle.
Children they-have become tired.
4. Abàána bachoonyèèle khushifûmbi.
Children they-have become tired on chair.
5. Abàána bachoonyèèle khushifûmbi (munzû).
Children they-have become tired on chair (in house).
- B. 1a. *Omukhási ayilila tsifwa khushiïro.
Woman she-takes greens to market.
- b. *Omukhási ayilila tsingokhò khushiïro.
Woman she-takes chickens to market.
- 2a. Omukhási ayilila tsifwa mushikápo.
Woman she-takes greens in basket.
- b. Omukhási ayilila tsingokhò mushikápo.
Woman she-takes chickens in basket.
- c. Omukhási ayilila tsifwa mushikápo khushiïro.
Woman she-takes greens in basket to market.

- d. Omukhási ayilila tsingokhò mushikápo khushiiro.
 Woman she-takes chickens in basket to market.
- 3a. Omukhási ayila tsifwa (khushiiro).
 Woman she-takes greens (to market).
- b. Omukhási ayila tsingokhò (khushiiro).
 Woman she-takes chickens (to market).

Sentence A. 1. is a base-verb sentence acceptable to the Bashisa; the locative NP is optional; the verb is unaffected. Sentence A. 2. is unacceptable with two obligatory locNP's and a base-verb shape. But A. 4. with a locational locative NP and locative verb shape is acceptable. (If two locNP's co-occur, at least one is locational locative, and both may be.) Locational locNP is the only kind of locative NP capable of occurring with this extended verb shape, however, because the verb is locational.

Sentence A. 3. is unacceptable, having a locative extended verb shape and no co-occurring locational locative NP--or its equivalent. (see p. 73.) In sentence A. 4. the locNP and the locative extension (-il-/el-) co-occur. This sentence is acceptable to the Bashisa, as is also sentence A. 5. with two locational locNP's, one of them optional, and the other obligatory.

The verb in the group of sentences under B is a verb of direction: -yil- 'take (to a place).' In sentences under B. 1., the extended form of the verb cannot co-occur with only the directional locative khushiiro 'to market.'

In sentences under B, features of animacy do not obstruct the relationship, as sentences B. 1. a/b illustrate. But the extended form co-occurring with the locational locNP (mushikápo 'in basket') is acceptable. Sentences B. 2. c/d also show that a directional locative (khushiiro 'to market') may co-occur with a locational

locNP--which is obligatory. Therefore, the following conclusions can be made: If a verb is directional, a directional locNP is obligatory. If it occurs in the locative extended shape, a second locNP, a locational locNP, is also obligatory. With directional verbs in the locative extended form we conclude, then, that two locNP's are obligatory: a directional and a locational. If the extended form of the verb is locational, only a locational locNP is obligatory.

Neither NP_I nor benefactive objects may co-occur with obligatory locational locNP with -il-/-el- extended form of the verb. If a benefactive object co-occurs, the extension is benefactive, and any co-occurring locNP would only be optional. An animate fixed object #1 may co-occur, but not the benefactive object. The same is true of NP_I (but not of PNP_I). If a fixed object co-occurs with the base verb, it may remain with the extended form. PNP_I may co-occur with locative extended verb forms together with co-occurring locNP('s).

Observations will now be made of verbs in the locative extended shape and their behavior in the various types of clauses.

7.1. Descriptive Verbs in the Locative Extended Shape

7.11. Syntactic Pattern A₁

7.111. Grammatical Component

Syntactic pattern A₁ provides for these core elements: subject + locative verb + object #1.

Sample Sentences:

Class 1

- a. Omulwále usinjiliile khumundu.
Sick person he-is standing leaning on man.

- b. Omulwále usinjiliile khumutúnga.
Sick person he-is standing leaning on stick.

Class 2

Omusiani yeelushila khunjila.
Boy he-runs on road.

With class 1 verbs, the subject is obligatorily animate, and locational locNP object may be animate or inanimate. With class 2 verbs, the subject is also obligatorily animate, but locational locNP is obligatorily inanimate. Verbs in both classes are locational, requiring only one locNP. These are some of the verbs which imperativize.

Pronominal affiliations

Locational locNP object may occur as locS in sequential affiliation.

Usinjiliilekhwô. - He is standing leaning on him/it.

Clausal affiliations

Loc₁NP of the verb -sĭnjilil- also occurs as fronted grammatical subject in the passive affiliations subject NP occurring as PNP (optionally) in a position to the right of the verb:

| | |
|--|--|
| $\left. \begin{array}{l} \text{Khumutúnga} \text{ } \text{khu} \\ \text{Omutúnga} \text{ } \text{ku} \end{array} \right\}$ | $\text{sĭnjililwekhwô (nende omulwále).}$ |
| $\left. \begin{array}{l} \text{On-stick} \\ \text{Stick} \end{array} \right\}$ | $\text{it is being leaned on it (by sick person) in standing position.}$ |

The unusual behavior of -sĭnjil-/sĭnjilil- was discussed on pp. 87-88. In the passive affiliation it follows the same pattern as do agentive verbs. But a different affiliation pattern occurs with other descriptive verbs: The object #1 locNP may occur as a fronted NP, either as grammatical subject or simply as a fronted NP. No change in the verb radical occurs, but the locS co-occurs. The

following example illustrates this affiliation which in this study will be termed the 'locative affiliation.' The following is an example:

Khunjila { khwilushilakhwô omusiani
Omusiani yeelushilakhwô }
 On-road { it-is running on it boy }
 { boy he-is running on it }

The following sketch shows the semantic/syntactic subcategorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Subjects of Locative Shapes →

{ Actor-Subject Locative Shape } { + animate } + #
 (Class 1, 2)

1.0 Object #1 →

{ Locational Locus_a of the Action } { ± animate } + #
 { Locational Locus_b of the Action } { - animate }

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

{ Locational_{loc} Locus_a of Action } || { Actor Subject } { Class 1 }
 { Locational_{loc} Locus_b of Action } { Class 2 }
 + Locative Shape + _____ + #

7.112. Lexical Entries

(Starred forms are multivalent. Forms marked x are polysemous in that they may indicate subjective physical ability, as in this classification, or objective capacity as, for example, with agentive verbs.

1. Verbs of Class 1

-sinjilil- 'stand up at/on,' etc.

-khamil- 'disappear in/from,' etc.

-itsíl- 'come on,' etc. III. Des. A₁. 1. [Act _____ L₁]

2. Verbs of Class 2

*x-lolél- 'see in,' etc.

x-hulíííí- 'hear in,' etc.

x-onoonél- 'sin in,' etc.

x-konél- 'sleep/lie on,' etc.

x-boolel- 'speak in,' etc.

*-sóomel- 'read in/at,' etc.

*-rèébel- 'ask in,' etc.

*-homél- 'smear (mud) in/on,' etc.

*-ilushíl- 'run in/on,' etc.

III. Des. A₁ 2. [Act _____ L₁]

7.12. Syntactic Pattern A₂

Verbs occurring in this pattern do not imperativize and are associated with process subjects in base-verb referent sentences.

7.121. Grammatical Component

Syntactic pattern A₂ with locative extended verb shapes provides for these core elements: subject + locative verb + object #1.

Sample Sentences:

Class 1

a. Abáána bachoonyéèle khushifûmbi.
Children they-have become tired on chair.

b. Abáána bachoonyéèle khupûnda.
Children they-have become tired on donkey.

Class 2

Inyama yíhunyilanga khushífulía.
Meat it-smells bad in cooking pot.

Verbs of syntactic pattern A₂ are of the non-imperativizing

group, having process subjects. Subjects of class 1 verbs may be animate or inanimate, but those of class 2 are obligatorily inanimate. The locative NP is locational. Object #1 of class 1 verbs may be either animate or inanimate; all others are obligatorily inanimate.

Pronominal

LocS sequential affiliation may occur:

Bachoonyéèlèkhwô. - They-have become tired on it (chair).

Passive affiliation

One verb only (-chòonyel- 'become tired on/in', etc.) occurs in the passive affiliation. There does not seem to be any satisfactory explanation for this phenomenon unless it is semantic:

Eshifûmbi shîno shichoonyéèlèlwekhwô abàána.

This chair it-has been got tired of on it children.

This passive pattern is like the referent sentence of class 2 verbs of syntactic pattern A_1 , in which object #1 becomes fronted grammatical subject.

In the examples on page 187, it was seen that an optional locative may also occur with a base verb. In this case, it could be stated generally that the stronger the locative environment of a verb (i.e. locational NP), the more likely is the locative extended shape to occur. It occurs quite commonly in relative clauses in which the locative NP precedes the verb of the main clause, in which case the locS that is in concordial agreement with the locative NP is affixed to the locative verb, for example:

Háno nahabundu aha ábandu banyooleelehò omwîbi.

This is the place where people found at it thief.

A sentence of a different pattern, in which the preceding locative may be directional, contains a locative verb if the locS is locational, for example:

Ereele tsinyaanya háno, ne tsiboleelehò.
I put tomatoes here, and they spoiled here.

The following sketch delineates the necessary semantic/syntactic rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Subjects of Simple Locative Shapes →

$$\left\{ \begin{array}{l} \text{Process-Subject}_1 \text{ Locative Shape} \\ \text{Process-Subject}_2 \text{ Locative Shape} \end{array} \right\} \left\{ \begin{array}{l} + \text{ animate} \\ - \text{ animate} \end{array} \right\} + \#$$

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Locational}_{1\text{loc}} \text{ Locus}_a \text{ of Action} \\ \text{Locational}_{1\text{loc}} \text{ Locus}_i \text{ of Action} \end{array} \right\} \left\{ \begin{array}{l} \pm \text{ animate} \\ - \text{ animate} \end{array} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Locational}_{1\text{loc}} \text{ Locus}_a \text{ of Action} \\ \text{Locational}_{1\text{loc}} \text{ Locus}_i \text{ of Action} \end{array} \right\} \parallel \left\{ \text{Process Subject} \right\}$$

$$\left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\} + \text{Locative Shape} + \text{ ______ } + \#$$

7.122. Lexical Entries

1. Verbs of Class 1

-chòonyel- 'become tired on,' etc.

-khulil- 'grow in,' etc.

*-lwalil- 'be/become ill in,' etc.

III. Des. A₂. 1. [Pc ______ L₁]

2. Verbs of Class 2

-fubil- 'spoil in'

x-hunyii- 'smell bad in,' etc.

-boléi- 'rot in/on,' etc.

-saalil- 'sizzle in'

III. Des. A₂. 2. [Pc ______ L₁]

7.13. Syntactic Pattern B

7.131. Grammatical Component

Some descriptive verbs of syntactic pattern A_1 of base verbs are (or may be) directional verbs. Therefore, they require two locNP's--a directional and a locational. This fact demands that these verbs occur in a different syntactic pattern from the locational verbs. Nevertheless, the subjects are still actor subjects of imperativizing verbs. This type of sentence will be "syntactic pattern B." This pattern provides for these core elements: subject + locative verb + object #1 + object #2.

Sample Sentences:

Class 1

- a1. Omundu úkhamiile mumukânda mushiïro.
Man he-disappeared in crowd in the market.
2. Omundu úkhamiile mumutsúru hashiïro.
Man he-disappeared in forest near market.
- b1. Omútokâ kukhamiile mumukânda mushiïro.
Motorcar it-disappeared in crowd in the market.
2. Omútokâ kukhamiile mumutsúru hashiïro.
Motorcar it-disappeared in forest near market.

These are also of the imperativial group of descriptive verbs. Subject may be animate or inanimate, and so may object #1, but object #2 is obligatorily inanimate and in these sentences is the locational locNP, locative object #1 being directional. The verb is directional and in the locative extended shape. For these reasons, two locNP's are obligatory, one being obligatorily capable of being a directional locNP and the other a locational locNP.

Pronominal affiliations

These sentences may occur in mixed affiliations in which

locational locNP occurs as locNP and directional as locS, or vice versa:

Ukhamiileh^ô mumutsúru. - He disappeared there into forest.

or,

Ukhamiilemw^ô hashiuro. - He disappeared into it near market.

Clausal affiliations

On page 187, it was shown that--except for the verb -sínjilil- 'stand in,' etc.--descriptive verbs do not tolerate the locative prefix on object #1, i.e. directional locNP, when it occurs as fronted grammatical subject. But they do tolerate object #2 as a locative NP in that position provided object #1 occurs in its object position and the subject of the referent sentence occurs concurrently as NP, rather than PNP, in a position immediately to the right of the verb--the verb is not in the passive extended form:

$$\left\{ \begin{array}{l} \text{Omutsúru ku} \\ \text{Hashiuro há} \end{array} \right\} \text{khamiile} \left\{ \begin{array}{l} \text{mw^ô} \\ \text{h^ô} \end{array} \right\} \text{omundu} \left\{ \begin{array}{l} \text{hashiuro} \\ \text{mumutsúru} \end{array} \right\} .$$

$$\left\{ \begin{array}{l} \text{Forest} \\ \text{Near-market} \end{array} \right\} \text{it-has disappeared} \left\{ \begin{array}{l} \text{into-it} \\ \text{near-it} \end{array} \right\} \text{a man} \left\{ \begin{array}{l} \text{near market} \\ \text{into forest} \end{array} \right\} .$$

The following schema indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Subjects of Locative Shapes →

$$\left\{ \begin{array}{l} \text{Actor-Subject Locative Shape} \\ \text{(Class 1)} \end{array} \right\} \left\{ \begin{array}{l} \pm \\ \pm \end{array} \text{animate} \right\} + \#$$

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Directional}_{\text{loc}} \text{ Locus of the Action} \end{array} \right\} \left\{ \begin{array}{l} \pm \\ \pm \end{array} \text{animate} \right\} + \#$$

2.0 Object #2 →

$$\left\{ \begin{array}{l} \text{Locational}_{\text{loc}} \text{ Locus of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \\ - \end{array} \text{animate} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \text{Directional}_{\text{loc}} \text{ Locus of Action} \right\} \parallel \left\{ \text{Actor Subject} \right\}$$

$$\left\{ \text{Class 1} \right\} + \text{Locative Shape} + \text{_____} + \text{object \#2} + \#$$

2.0 Object #2 →

$$\left\{ \text{Locational}_{\text{loc}} \text{ Locus of Action} \right\} \parallel \left\{ \text{Actor Subject} \right\}$$

$$\left\{ \text{Class 1} \right\} + \text{Locative Shape} + \text{object \#1} + \text{_____} + \#$$

7.132. Lexical Entries

1. Verbs of Class 1

-khamil- 'disappear at/near,' etc.

-itsil- 'come on,' etc.

-ilushil- 'run on,' etc.

III. Des. B. 1. [Act _____ L₂ L₁]

7.2. Agentive Verbs in the Locative Extended Shape

Agentive verbs were classified according to number, kinds and combinations of NP's with which they could be associated. This classification will be continued as a point of reference for observing differences occurring in locative extended form with additional consideration given to locational and directional locative factors. Variations or subdivisions will be noted and added.

The co-occurrence of the instrument phrase is not common but may occur with some verbs. The occurrence of the locative NP could, then, with some patterns increase the object OP- or locS-type nominals by one; or, in the case of the occurrence of both a locational and a directional locative, by two.

It should be stated that the occurrence of one locative NP theoretically presupposes the potentiality for the occurrence of a

theoretically unlimited string of locative NP's, for example:

Omusíani aniinila mumútokâ khunjila hamwálo hěshikulu mushialo
 Boy he-climbs in motorcar on road near river by hill in the

shíóMwihila hěkulu wa- etc., etc.
 country of Mwihila (i.e. in grass patch) above . . .

The first two locative NP's have, in this instance, syntactic distinctiveness, but the others do not. Therefore, such strings will not be considered here. Sentences containing more than two locative NP's are not included in the corpus of material.

The various syntactic patterns will now be presented, but the format will be altered to accommodate the occurrences of locational and directional. It should be stated that, where the area indicated by the locative is large enough, directional verbs may also occur as locational locative verbs, but locational verbs do not occur as directional.

For the sake of clarity, verbs will be presented in two broad categories: (1) locational, in which all verbs may occur, and (2) directional. The first to be presented will be the locational.

7.21. Locational Verbs

7.211. Syntactic Pattern A

7.2111. Grammatical Component

Core elements for syntactic pattern A are these: subject + locative verb + object #1 + object #2.

Sample Sentences:

Class 1

- a. Omukhási abisiile ingokhò mubulimo.
 Woman she-hid chicken in grass/bushy area.
- b. Omukhási abisiile isiongo mubulimo.
 Woman she-hid waterpot in bushy area.

Class 2

- a. Omukhási achinjiile omwána khumukôngo.
Woman she-carried child on back.
- b. Omukhási achinjiile amátúuma khumurwe.
Woman she-carried maize on her head.
- c. Omútokâ kuchinjiile abandu mukarî.
Motorcar it-carried people inside.
- d. Omútokâ kuchinjiile amátúuma mukarî.
Motorcar it-carried maize inside.

All subjects are agentive. With class 1 verbs they are obligatorily animate; with class 2 they may be animate or inanimate.

The following constraints obtain for object #1:

Class 1: \pm animate, receiver₁ of the action identified by the verb

Class 2: \pm animate, receiver₂ of the action indicated by the verb

The following constraints obtain for object #2:

Class 1, 2: - animate, locational locus of action of verb

Pronominal affiliations

Both classes of verbs have the capacity to occur in the OP-locS sequential affiliation.

Achibisiilemwô. - She hides it (chicken) in it (bush).

Passive affiliations

Both classes of verbs may occur in the following patterns of passive affiliations.

- a. Ingokhô yibisiilwe mubulimo (nênde omukhási).
Chicken it-was hidden in bush by woman.

- b. $\left. \begin{array}{l} \text{Mubulimo } \underline{mú} \\ \text{Obulimo } \underline{bu} \\ \text{Mubulimo } \underline{ingokho} \text{ yibisiilwemwo} \end{array} \right\} \underline{bisiilwemwô} \underline{ingokhô} \left. \right\} (\underline{nende} \underline{omukhási}).$

$\left. \begin{array}{l} \text{In-grass} \\ \text{Grass} \end{array} \right\} \text{it is being hidden in it chicken} \left. \right\} (\text{by woman}).$
 $\left. \begin{array}{l} \text{In-grass} \\ \text{Grass} \end{array} \right\} \text{chicken it-is being hidden in it} \left. \right\}$

When the locNP is fronted, whether with or without the locative, its concordial suffix occurs on the verb.

The following sketch delineates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Subjects of Simple Locative Shape →

$$\left\{ \begin{array}{l} \text{Agentive-Subject Locative Shape} \\ \text{(Class 1)} \end{array} \right\} \left\{ \begin{array}{l} + \text{ animate} \\ \pm \text{ animate} \end{array} \right\} + \#$$

1.0 Object #1 →

$$\left\{ \text{Receiver of the Action} \right\} \left\{ \pm \text{ animate} \right\} + \#$$

2.0 Object #2 →

$$\left\{ \text{Locational}_{\text{loc}} \text{ Locus of the Action} \right\} \left\{ - \text{ animate} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

$$\left\{ \text{Receiver of Action} \right\} \parallel \left\{ \text{Agentive Subject} \right\} \left\{ \text{Class 1, 2} \right\} \\ + \text{ Locative Shape} + \text{ ______ } + \text{ object \#2} + \#$$

2.1 Object #2 →

$$\left\{ \text{Locational}_{\text{loc}} \text{ Locus of Action} \right\} \parallel \left\{ \text{Agentive Subject} \right\} \left\{ \text{Class 1, 2} \right\} \\ + \text{ Locative Shape} + \text{ object \#1} + \text{ ______ } + \#$$

7.2112. Lexical Entries

1. Verbs of Class 1

-bisil- 'hide in/under,' etc.

-nyóólel- 'find in,' etc.

-lǐndil- 'wait for in,' etc.

-konél- 'lie on,' etc.

III. Ag. A. 1. [Ag ______ (D Ø O) L₁]

2. Verbs of Class 2

-chǐnjil- 'carry in/on,' etc.

-yilil- 'take in/on,' etc.

-leerel- 'bring in/on,' etc.

III. Ag. A. 2. [Ag _____ (D & O) L₁]

7.212. Syntactic Pattern B

7.2121. Grammatical Component

Syntactic pattern B provides for these core elements: subject
+ locative verb + object #1 + object #2 ± object #3.

Sample Sentences:

Class 1

Omundu ásinyila abandu mumútokâ (námakhûwakê).
Man he-annoys people in motorcar (with his words).

Class 2

Abatíiyi bamaliile emilimo elwányi (nèinyundo).
Workmen they-finished work outside (with hammer).

Class 3

- a. Abáayi bakhupiile ing'ombe khunjila (nětsisáala).
Herdboys they-beat cow on road (with sticks).
- b. Abáayi bakhupiile ing'oma khunjila (nětsisáala).
Herdboys they-beat drum on road (with sticks).

Class 4

Omukháana asaabila amakhónoke munzu (něisáábúuni).
Girl she-washes her hands in house (with soap).

Class 5

Omwayi aratsila tsembasi mushikuuri (něbilenje bibilí).
Herdboy he-kicks kicks in pasture (with both feet).

Class 6

Omukháana ahomela obutóyi/nóbutóyi munzû (námakhóno).
Girl she-smears mud/with mud in house (with hands).

Class 7

- a. Ndiili aniinila omwána mumutsúru (nómukoye).
Ndiili he-climbs (to get) child in forest (with rope).
- b. Ndiili aniinila tsikhwí mumutsúru (nómukoye).
Ndiili he-climbs (to get) firewood in forest (with rope).

All subjects are animate and agentive. Since the areas indicated by the PNP's are great enough to encompass the action indicated by the verb, all locative NP's are locational and inanimate. The instrument PNP is optional and inanimate. For object #1 the following constraints obtain:

Class 1: + animate, receiver₁ of the action identified by the verb

Class 2: - animate, receiver₂ of the action

Class 3: ± animate, receiver₃ of the action

Class 4: - animate, + body part, possessed receiver of the action indicated by the verb

Class 5: - animate, co-ordinate object of the action

Class 6: - animate, material used in the action

Class 7: ± animate, object of purpose of the action identified by the verb

Pronominal affiliations

All sentences may occur in the OP-locS affiliations for example:

Abasinyilamwô (ninakô).

He annoys them (people) in it (motorcar) (with them--his words).

Passive affiliations

These sentences may occur in passive affiliations as follows:

Class 1, 2, 3, 5, 6, 7:

a. Abandu básinyilwa mumútokâ (nende { omundu / amakhúwa kômundu } .

People they-are being annoyed (by man)
(with man's words) .

b. Mumútoka { musinyilwamwô abandu / abandu básinyilwamwô } { (nênde omundu) / (nâmakhúwa kômundu) } .

In-motorcar people they-are being annoyed in it

{ (by man)
(with man's words) } .

Class 4:

- a. Amakhóno kómukháana kasaabilwa munzû (nèisàábúùni).
Hands of girl they-are being washed in house (with soap).

The possessive phrase may not be separated in passive commutations.

- b. Munzû { musaabilwamwô amakhóno kómukháana } (nèisàábúùni).
amakhóno komukháana kasaabilwamwô

In-house girl's hands they-are being washed in it (with soap).

Verbs of class 4 occur in the passive affiliation without the PNP_{ag}, but this particular PNP does occur in the passive affiliation with the other classes of verbs in this syntactic pattern.

The following schema illustrates the semantic/syntactic subcategorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

| | | | | |
|---------------------------------------|---|----------------------------|---|-----|
| Receiver ₁ of the Action | } | + animate | } | + # |
| Receiver ₂ of the Action | | - animate | | |
| Receiver ₃ of the Action | | ± animate | | |
| Receiver _{psd} of the Action | | {- animate + body part} | | |
| Co-ordinate Object of the Action | | - animate | | |
| Material used in the Action | | - animate | | |
| Object of Purpose in the Action | | ± animate | | |

2.0 Object #2 →

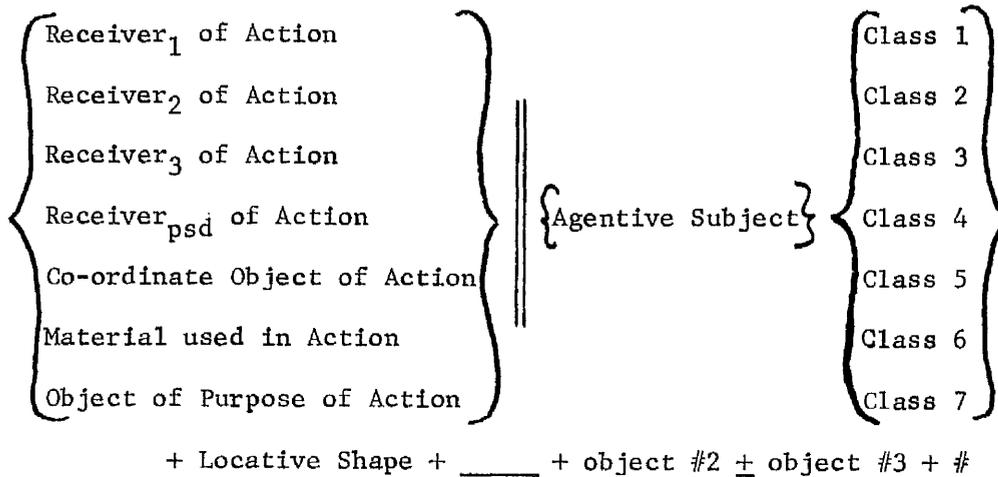
{ Locational_{loc} Locus of the Action } { - animate } + #

3.0 Object #3 →

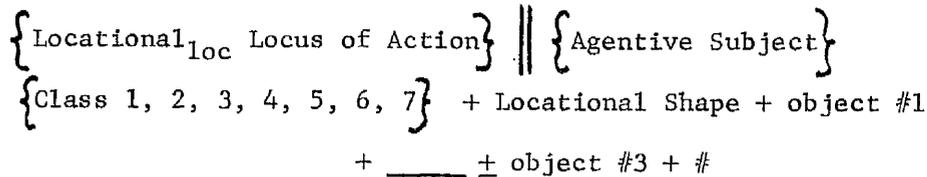
{ Instrument of the Action }

General Semantic/Syntactic Subcategorization Rules

1. Object #1 →



2.1 Object #2 →



7.2122. Lexical Entries

1. Verbs of Class 1

- niníl- 'scold in,' etc.
- sinvíl- 'annoy/irritate in,' etc.
- fwalíl- 'dress in,' etc.
- rèébel- 'ask in,' etc.
- konél- 'sleep with in,' etc.

III. Ag. B. 1. [Ag _____ D L₁ (I)]

2. Verbs of Class 2

- chááchíl- 'begin under,' etc.
- funachíl- 'break in,' etc.
- malíl- 'finish in,' etc.
- buulíl- 'tell in,' etc.
- fumbíl- 'fold in,' etc.
- khuulíl- 'pull out in,' etc.

- sòóme1- 'read in,' etc.
- ilushí1- 'run on/in,' etc.
- teeshe1- 'cook in,' etc.
- boole1- 'speak in,' etc.
- rechel- 'set (trap) in,' etc.
- funjil- 'lock in,' etc.
- cheté1- 'strain in,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

3. Verbs of Class 3

- fuubil- 'throw in,' etc.
- boyel- 'tie in,' etc.
- sám bil- 'burn in,' etc.
- enyé1- 'want in,' etc.
- khupil- 'strike in,' etc.
- kulí1- 'buy in,' etc.
- remel- 'chop/slash in,' etc.
- ratsí1- 'kick in,' etc.
- manyí1- 'know in,' etc.
- huliilí1- 'hear in,' etc.
- lolé1- 'see in,' etc.
- onooné1- 'spoil in,' etc.
- líndil- 'watch over in,' etc.
- khaabil- 'seek in,' etc.
- tsomé1- 'insert in,' etc.
- bám bil- 'stretch in,' etc.
- mééte1- 'add in,' etc.
- nyóóle1- 'find in,' etc.
- henjel- 'look at in,' etc.

-nyalil- 'be able in,' etc.

-löndel- 'follow in,' etc.

III. Ag. B. 3. [(Ag _____ (D X O) L₁ (I)]

4. Verbs of Class 4

-sáabil- 'wash (body part) in,' etc.

-sämbil- 'burn in,' etc.

-boyel- 'tie in,' etc.

-khupil- 'strike in,' etc.

-remel- 'chop/slash in,' etc.

-ratsíl- 'kick in,' etc.

-lolél- 'see in,' etc.

-khuuil- 'pull out in,' etc.

-henjel- 'look at through,' etc.

-tsomél- 'insert in,' etc.

III. Ag. B. 4. [G _____ O L₁ (I)]

5. Verbs of Class 5

-ratsíl- 'kick in,' etc.

-fwalil- 'dress in,' etc.

-réébel- 'ask in,' etc.

-khupil- 'strike in,' etc.

-remel- 'chop/slash in,' etc.

-oononél- 'sin in,' etc.

-sóomel- 'read in,' etc.

-ilushíl- 'run in,' etc.

III. Ag. B. 5. [Ag _____ C L₁ (I)]

6. Verbs of Class 6

-homél- 'smear in,' etc.

III. Ag. B. 6. [Ag _____ M L₁ (I)]

7. Verbs of Class 7

-niinil- 'climb (to get s. th.) in,' etc.

III. Ag. B. 7. [Ag _____ P L₁ (I)]

7.213. Syntactic Pattern C

7.2131. Grammatical Component

Core elements of syntactic pattern C are these: subject + locative verb + object #1 + object #2 + object #3 ± object #4 + #

Sample Sentences:

Class 1

- a. Omwáyi aratsila ing'ombe tsimbasi mushikuuri (něshilenje).
Herdboy he-kicks cow kicks in pasture (with one foot).
- b. Omwáyi aratsila omúpílla tsimbasi mushikuuri (něshilenje).
Herdboy he-kicks ball kicks in pasture (with one foot).

Class 2

Omwéchesia areebela abééchi amaréèbo mwisoomelo (nǒmunwa).
Teacher he-asks pupils questions in school (with mouth--orally).

Class 3

Omulesi ásaabila omwána amakhóno munzû (něisáábúuni).
Nursegirl she washes child's hands in house (with soap).

Class 4

Sára ahomela indubi obutóyi/nǒbutóyi munzû (nǒlusáála).
Sara she-smears basket with mud in house (with stick).

All subjects are animate and agentive. Object #3 is inanimate locational locNP; and object #4 is optional, inanimate instrument PNP. Object #1 and #2 vary in their semantic/syntactic roles. The following constraints obtain for object #1.

Class 1: ± animate, receiver₁ of the action indicated by the verb

Class 2: + animate, receiver₂ of the action

Class 3: + animate, possessor of object #2 of the action

Class 4: - animate, receiver₃ of the action indicated by the verb

The following constraints obtain for object #2:

Class 1: - animate, co-ordinate object of the action

Class 2: - animate, co-ordinate object of the action

Class 3: - animate, + body part, possessed receiver of the action

Class 4: - animate, material used in the action identified by the verb

Pronominal affiliations

All sentences may occur in mixed affiliations as follows:

Class 1, 2: OP-locS-NP-PSCP

A $\left\{ \begin{array}{l} \text{chi} \\ \text{tsi} \end{array} \right\}$ ratsilamwô $\left\{ \begin{array}{l} \text{tsimbasi} \\ \text{ing'ombe} \end{array} \right\}$ (ninashio).

He $\left\{ \begin{array}{l} \text{it (cow)} \\ \text{them (kicks)} \end{array} \right\}$ kicks in it (pasture) $\left\{ \begin{array}{l} \text{kicks} \\ \text{cow} \end{array} \right\}$ (with it--foot).

Class 3: OP-locS-NP-PSCP

Amusaabilamwô amakhôno (ninayô).

She (nursegirl) washes his (child's) hands (with it--soap).

Class 4: OP-locS-NP/PNP-PSCP

A $\left\{ \begin{array}{l} \text{chi} \\ \text{bu} \end{array} \right\}$ homelamwô $\left\{ \begin{array}{l} \text{obutóyi/nóbutóyi} \\ \text{indubi} \end{array} \right\}$ (ninalwô).

She $\left\{ \begin{array}{l} \text{it (basket)} \\ \text{it (mud)} \end{array} \right\}$ smears in it (house) $\left\{ \begin{array}{l} \text{with mud} \\ \text{basket} \end{array} \right\}$ (with it--stick).

Passive affiliations

Several variations of passive affiliations are possible with the fronting of the various objects, as follows:

Class 1, 2:

a. Abèéchi bareebelwa amaréèbo mwisoomelo $\left\{ \begin{array}{l} \text{(nómúnwa)} \\ \text{(nómwachesia)} \end{array} \right\}$.

Pupils they-are being asked questions in school $\left\{ \begin{array}{l} \text{(by} \\ \text{teacher)} \\ \text{(orally)} \end{array} \right\}$.

- b. Amaréèbo kareebelwa abéèchi mwisoomelo { (nǒmwéchesia) }
 { (nǒmunwa) }.

Questions they-are being asked pupils in school

{ (by teacher) }
 { (with mouth) }.

- c. Mwisoomelo { múreebelwamwô abéèchi amaréèbo } { (nǒmunwa) }
 { abéèchi bareebelwamwô amaréèbo } { (nǒmwéchesia) }
 { amaréèbo kareebelwamwô abéèchi }

In-school { is being asked questions of pupils } { (orally) }
 { pupils are being asked questions } { (by teacher) }
 { questions are being asked pupils }

Class 3:

- { Omwána asaabilwa amakhóno } { (nende omulesi) }
 { Amakhóno kǒmwána kasaabilwa } munzû { (nende isaábúuni) }.
 Child's hands are being washed in house { (by nursegirl) }
 { (with soap) }.

Class 4:

- a. Indubi yíhomelwa obutóyi/nǒbutóyi munzû { (nǒmulesi) }
 { (nǒlusáála) }.

Basket it-is being smeared mud in house { (by nursegirl) }
 { (with stick) }.

- b. Obutóyi buhomelwa mundubi munzû { (naSára) }
 { (nǒlusáála) }.

Mud it-is being smeared in basket in house { (by Sara) }
 { (with stick) }.

- c. Munzû { indubi yíhomelwamwô obutóyi/nǒbutóyi } { (naSára) }
 { muhomelwamwô indubi obutóyi/nǒbutóyi } { (nǒlusáála) }
 { obutóyi buhomelwamwô mundubi }

In-house { basket it-is being smeared with mud }
 { it-is being smeared in it basket with mud }
 { mud it-is being smeared in it in basket }
 { (by Sara) }
 { (with stick) }.

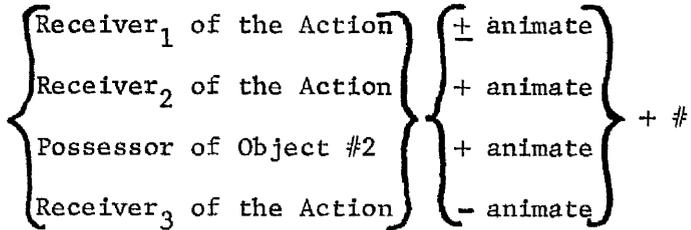
When locNP occurs as fronted grammatical subject, its concordial verbal suffix co-occurs obligatorily. This locNP may be fronted, and either of the non-locative objects may also be fronted concurrently. In such instances, the non-locative NP is the subject with the SP in concordial agreement with it. If object #2 occurs as fronted grammatical subject, object #1 occurs in the shape of

a locNP with class 4 verbs and is directional.

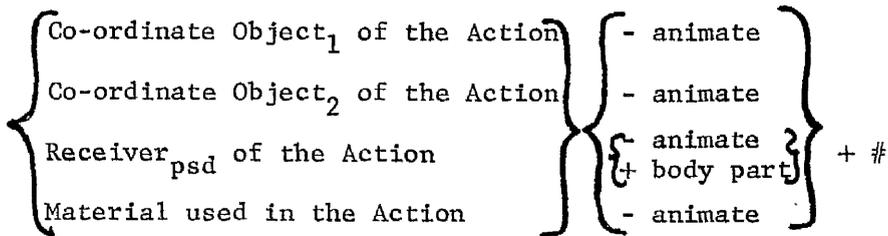
The following sketch indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

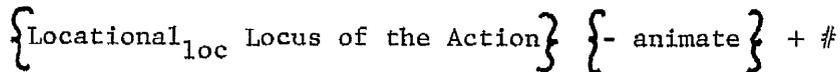
1.0 Object #1 →



2.0 Object #2 →



3.0 Object #3 →

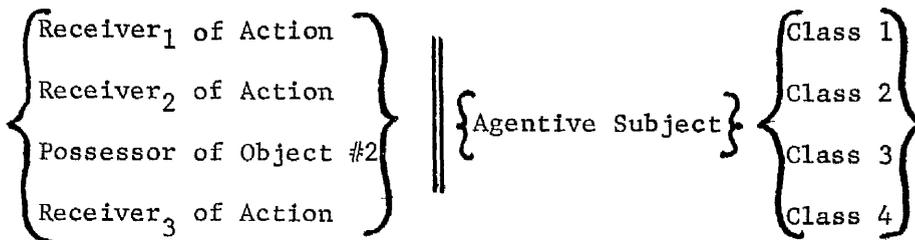


4.0 Object #4 →

Instrument of the Action

General Semantic/Syntactic Subcategorization Rules

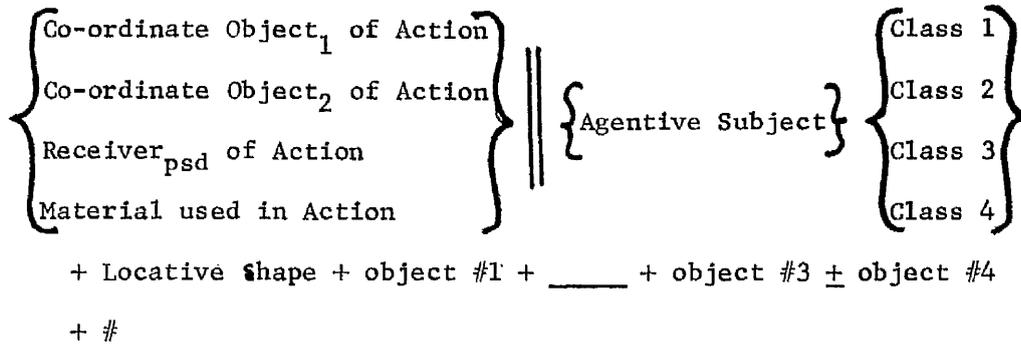
1.1 Object #1 →



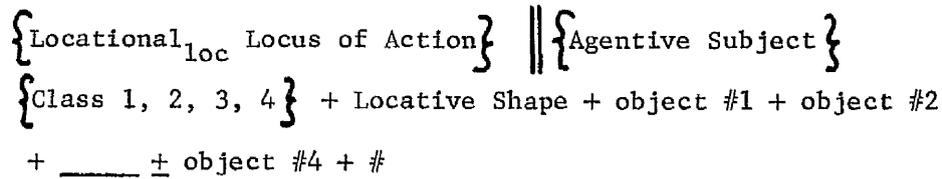
+ Locative Shape + _____ + object #2 + object #3

± object #4 + #

2.1 Object #2 →



3.1 Object #3 →



7.2132. Lexical Entries

1. Verbs of Class 1

-ratsíl- 'kick in,' etc.

-khupil- 'strike in,' etc.

-remel- 'chop/slash in,' etc.

III. Ag. C. 1. [Ag _____ (D X O) C L₁ (I)]

2. Verbs of Class 2

-fwalil- 'dress in,' etc.

-rèébel- 'ask in,' etc.

III. Ag. C. 2. [Ag _____ D C L₁ (I)]

3. Verbs of Class 3

-sámbil- 'burn in,' etc.

-sáábil- 'wash in,' etc.

-khupil- 'strike in,' etc.

-ratsíl- 'kick in,' etc.

-remel- 'chop/slash in,' etc.

-boyel- 'tie at,' etc.

-khuulil- 'pull out in,' etc.

-henjel- 'look at in,' etc.

-lolél- 'see in,' etc.

-tsomé1- 'insert in,' etc.

III. Ag. C. 3. [Ag _____ G O L₁ (I)]

4. Verbs of Class 4

-homé1- 'smear in,' etc.

III. Ag. C. 4. [Ag _____ O M L₁ (I)]

7.22. Directional Verbs

7.221. Syntactic Pattern D

7.2211. Grammatical Component

Core elements provided by syntactic pattern D are as follows:

subject + locative verb + object #1 + object #2 ± object #3.

Sample Sentences:

Class 1

a. Dóbi aniiniile khumusáála hamuchela (nǒmukoye).
Dobi he-climbed in tree near river (with rope).

b. Dóbi aniiniile khupûnda hamuchela (nǒmukoye).
Dobi he-climbed on donkey near river (with rope).

The subjects are animate and agentive, and the PNP_I is inanimate and optional. Object #1 and #2 are locative nominals. Object #3 is optional PNP_I. The following constraints obtain for object #1:

Class 1: ± animate, directional locative receiver of the action
described by the verb

Constraints which obtain for object #2 are as follows:

Class 1: - animate, locational locative NP indicating the locus of
the action described by the verb

Verbs in this syntactic pattern are those which, in base-verb sentences, were associated with a locative fixed object as the receiver of the action identified by the verb. This same object occurs here and it can now be seen that it is directional, the second locative NP being locational.

Pronominal affiliations

Either object #1 or object #2 may occur in a mixed affiliation of the locS-locNP combination--a combination not occurring with base-verb shapes nor with other extension shapes thus far investigated.

Aniniilekhwô hamuchela (ninakwô).
He climbed it (tree) near it (river) (with it--rope).

Passive affiliations

Either object #1 or object #2 may occur as fronted grammatical subject in the following passive pattern:

$\left\{ \begin{array}{l} \text{Khumusáála} \text{ } \underline{\text{khu}} \\ \underline{\text{Omusáála}} \text{ } \underline{\text{ku}} \end{array} \right\} \text{ niiniilwekhwô } \underline{\text{hamuchela}} \left\{ \begin{array}{l} \text{(naDóbi)} \\ \text{(nômukoye)} \end{array} \right\}.$
 $\left\{ \begin{array}{l} \text{In-tree} \\ \text{Tree} \end{array} \right\} \text{ it-is being climbed in it near river } \left\{ \begin{array}{l} \text{(by Dobi)} \\ \text{(with rope)} \end{array} \right\}.$

The following sketch delineates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Directional}_{1\text{loc}} \text{ Receiver of the Action} \right\} \left\{ \pm \text{animate} \right\} + \#$

2.0 Object #2 →

$\left\{ \text{Locational}_{1\text{loc}} \text{ Locus in the Action} \right\} \left\{ - \text{animate} \right\} + \#$

3.0 Object #3 →

$\left\{ \text{Instrument in the Action} \right\}$

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Directional_{loc} Receiver of Action} || {Agentive Subject}
 {Class 1} + Locative Shape + _____ + object #2 ± object #3 + #

2.1 Object #2 →

{Locational_{loc} Locus in Action} || {Agentive Subject} {Class 1}
 Locative Shape + object #1 + _____ ± object #3 + #

7.2212. Lexical Entries

1. Verbs of Class 1

-niinil- 'climb on,' etc.

-khayil- 'refuse in,' etc.

-hunyil- 'take whiff of in,' etc.

III. Ag. D. 1. [Ag _____ L₂ L₁ (I)]

7.222. Syntactic Pattern E

7.2221. Grammatical Component

Core elements of syntactic pattern E are these: subject +
 locative verb + object #1 + object #2 + object #3.

Sample Sentences:

Class 1

- a. Omukhási abisiile ingokhò mbulimo hamuchela.
 Woman she-hid chicken in grass near river.
- b. Omukhási abisiile isiongo mbulimo hamuchela.
 Woman she-hid waterpot in grass near river.

Class 2

- a. Omukhási achinjiile omwána khumukongo khushiiro.
 Woman she-carried child on back to market.
- b. Omukhási achinjiile amátúuma khumúrwe khushiiro.
 Woman she-carried maize on her head to market.

- c. Omútokâ kuchinjiile abandu mukarî khushiro.
Motorcar it-carried people inside to market.
- d. Omútokâ kuchinjiile amátúuma mukarî khushiro.
Motorcar it-carried maize inside to market.

All subjects are agentive. Subjects of class 1 verbs are obligatorily animate, and of class 2 they may be animate or inanimate. These are verbs of the group which, in their base shapes do not co-occur with instrument PNP, and in the locative extended form they retain this characteristic.

The following constraints obtain for object #1:

Class 1: ± animate, receiver₁ of the action indicated by the verb

Class 2: ± animate, receiver₂ of the action

These constraints obtain for object #2:

Class 1: - animate, directional locative object of the action identified by the verb

Class 2: - animate, locational locative object of the action

For object #3, these constraints obtain:

Class 1: - animate, locational locative object of the action described by the verb

Class 2: - animate, directional locative object of the action identified by the verb

The determination of which of the two locative objects is directional and which locational can not be made syntactically. It is a matter of meaning. Scotton (op. cit., pp. 252) termed it 'world view.' Two types of locatives are interchangeable in their positions.

Pronominal affiliations

All sentences may occur in mixed affiliations of this pattern:

OP-locS-locNP:

Achibisiilemwô hamuchela. - She it (chicken) hid in it (grass)
near it (river).

Passive affiliations

Any of the objects may occur as fronted grammatical subject concurrently with the other two NP's co-occurring as objects in passive affiliations as follows:

With fronted object #1:

- a. Omwána achinjilwe khumukongo kwanyinawê khushiuro.
Child he-was carried on back of his mother to market.

In the case of objects of possession, the possessor NP is included in the object phrase involved and not as NP_{ag}.

- b. Ingokhô yibisiilwe mubulimo hamuchela (nômukhási).
Chicken it-was hidden in grass near river (by woman).

This is the usual pattern when receiver, non-locative objects occur as fronted grammatical subjects and are not a part of expressions of possession.

- c. $\left\{ \begin{array}{l} \text{Khumukongo} \text{ khú} \\ \text{Omukongo} \text{ kú} \end{array} \right\} \text{ chinjiilwekhwô omwána khushiuro (nômukhási).}$
On-back it-was carried on it child to market (by woman).

The following schema indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Receiver of the Action} \right\} \left\{ \pm \text{animate} \right\} + \#$

2.0 Object #2 →

$\left\{ \begin{array}{l} \text{Directional}_{1\text{loc}} \text{ Locus of the Action} \\ \text{Locational}_{1\text{loc}} \text{ Locus of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ - \text{animate} \end{array} \right\} + \#$

3.0 Object #3 →

$\left\{ \begin{array}{l} \text{Locational}_{1\text{loc}} \text{ Locus of the Action} \\ \text{Directional}_{1\text{loc}} \text{ Locus of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ - \text{animate} \end{array} \right\} + \#$

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

$$\left\{ \begin{array}{l} \text{Receiver of the Action} \\ \text{+ Locative Shape + ______ + object \#2 + object \#3 + \#} \end{array} \right\} \parallel \left\{ \begin{array}{l} \text{Agentive Subject} \\ \end{array} \right\} \left\{ \begin{array}{l} \text{Class 1, 2} \end{array} \right\}$$

2.1 Object #2 →

$$\left\{ \begin{array}{l} \text{Directional}_{loc} \text{ Locus of Action} \\ \text{Locational}_{loc} \text{ Locus of Action} \end{array} \right\} \parallel \left\{ \begin{array}{l} \text{Agentive Subject} \end{array} \right\} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\} + \text{Locative Shape + object \#1 + ______ + object \#3 + \#}$$

3.1 Object #3 →

$$\left\{ \begin{array}{l} \text{Locational}_{loc} \text{ Locus of Action} \\ \text{Directional}_{loc} \text{ Locus of Action} \end{array} \right\} \parallel \left\{ \begin{array}{l} \text{Agentive Subject} \end{array} \right\} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\} + \text{Locative Shape + object \#1 + object \#2} \\ + \text{object \#3 + \#}$$

7.2222. Lexical Entries

1. Verbs of Class 1

-bisil- 'hide in,' etc.

III. Ag. E. 1. [Ag ______ (D Ø O) L₂ L₁]

2. Verbs of Class 2

-chɪnjil- 'carry in,' etc.

-yilil- 'take in,' etc.

-leerel- 'bring in, etc.

III. Ag. E. 2. [Ag ______ (D Ø O) L₁ L₂]

7.223. Syntactic Pattern F

7.2231. Grammatical Component

Core elements of syntactic pattern F are these: subject +

locative verb + object #1 + object #2 + object #3 ± object #4.

Sample Sentences:

Class 1

Mulêmbô afuubila omúpîlla mushimwelo hamuchela (nômukhóno).
Mulembo he-throws ball into basket near river (with one hand).

Class 2

- a. Ndiili atsomela lihwâ mwipáka munzû (něbitére).
Ndiili he-inserts thorn in cat in house (with fingers).
- b. Ndiili atsomela lihwâ mwisiîsi munzû (něbitére).
Ndiili he-inserts thorn in wall in house (with fingers)

Class 3

- a. Abandu bámbabila Yésu khumusálaba haYerúsalemu (němisúamáari).
People they-crucified Jesus on cross near Jerusalem (with
nails).
- b. Abandu bámbabila amaséèlo khutsimbáho hamuchela (němisúamáari).
People they-stretch hides on boards near river (with nails).

Class 4

- a. Dóbi aniinila omwána khumusáála hamuchela (nômukoye).
Dobi he-climbs tree near river (with rope) (to get) child.
- b. Dóbi aniinila tsikhwî khumusáála hamuchela (nômukoye).
Dobi he-climbs tree near river (with rope) (to get) child.
- c. Dóbi aniinila omwána khupûnda hamuchela (nômukoye).
Dobi he-climbs on donkey near river (with rope) (to get)
child.
- d. Dóbi aniinila tsikhwî khupûnda hamuchela (nômukoye).
Dobi he-climbs on donkey near river (with rope) (to get)
firewood.

All subjects are animate and agentive. The instrument object (PNP₁) occurs optionally and is inanimate.

The following constraints obtain for object #1:

Class 1: - animate, receiver₁ of the action indicated by the verb

Class 2: - animate, receiver₂ of the action

Class 3: ± animate, receiver₃ of the action

Class 4: ± animate, object of purpose of the action

The following constraints obtain for object #2:

Class 1, 3: - animate, directional locative locus of the action
described by the verb

Class 2, 4: + animate, directional locative locus of the action

For object #3 these constraints obtain:

Class 1, 2, 3, 4: - animate, locational locative locus of the action
identified by the verb

Pronominal affiliations

All sentences occur in these mixed affiliation patterns: OP-
locS-locNP-PSCP:

Amuniiniilekhwô hamuchela (ninakwô).
He (to get) him (child) climbed it (tree) near river (with
it--rope).

Passive affiliations

Any object of the first three (i.e. object #1, object #2, or
object #3) may occur as grammatical subject concurrently with the
remaining two obligatory objects (+ the PNP_I or PNP_{ag}) in the follow-
ing passive affiliations.

- a. Omúpiila kufuubilwa mushimwelo mulwanyi { (nôMulêmbô)
(nômukhono omukhâsi) }
Ball it-is being thrown in basket in yard { (by Mulembo)
(with right hand) }.
- b. { Mushimwelo mú omúpiila kufuubilwamwô } hamuchela { (nôMulêmbô)
(nômukhono omukhâsi) }
{ Eshimwelo shi fuubilwamwô omúpiila }
{ Hamuchela háfuubilwahô omúpiila mushimwelo }
In-basket ball it-is being thrown in it near river
{ (by Mulembo)
(with left hand) }.

This schema delineates the semantic/syntactic subcategorization
rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Receiver}_1 \text{ of the Action} \\ \text{Receiver}_2 \text{ of the Action} \\ \text{Object of Purpose of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ \pm \text{animate} \\ \pm \text{animate} \end{array} \right\} + \#$$

2.0 Object #2 →

$$\left\{ \begin{array}{l} \text{Directional}_{1\text{loc}} \text{ Locus}_1 \text{ of the Action} \\ \text{Directional}_{1\text{loc}} \text{ Locus}_2 \text{ of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ \pm \text{animate} \end{array} \right\} + \#$$

3.0 Object #3 →

$$\left\{ \text{Locational}_{1\text{loc}} \text{ Locus of the Action} \right\} \left\{ - \text{animate} \right\} + \#$$

4.0 Object #4 →

$$\left\{ \text{Instrument of the Action} \right\}$$

General Semantic/Syntactic Subcategorizational Rules

1.1 Object #1 →

$$\left\{ \begin{array}{l} \text{Receiver}_1 \text{ of Action} \\ \text{Receiver}_2 \text{ of Action} \\ \text{Purpose of Action} \end{array} \right\} \parallel \left\{ \text{Agentive Subject} \right\} \left\{ \begin{array}{l} \text{Class 1, 2} \\ \text{Class 3} \\ \text{Class 4} \end{array} \right\} +$$

Locative Shape + _____ + object #2 + object #3

± object #4 + #

2.1 Object #2 →

$$\left\{ \begin{array}{l} \text{Directional}_{1\text{loc}} \text{ Locus}_1 \text{ of Action} \\ \text{Directional}_{1\text{loc}} \text{ Locus}_2 \text{ of Action} \end{array} \right\} \parallel \left\{ \text{Agentive Subject} \right\}$$

$$\left\{ \begin{array}{l} \text{Class 1, 3} \\ \text{Class 2, 4} \end{array} \right\} + \text{Locative Shape} + \text{object \#1} + \text{_____} +$$

object #3 ± object #4 + #

3.1 Object #3 →

$$\left\{ \text{Locational}_{1\text{loc}} \text{ Locus of Action} \right\} \parallel \left\{ \text{Agentive Subject} \right\}$$

$$\left\{ \text{Class 1, 2, 3, 4} \right\} + \text{Locative Shape} + \text{object \#1} +$$

object #2 + _____ ± object #4 + #

7.2232. Lexical Entries

1. Verbs of Class 1

-cheté1- 'strain in,' etc.

III. Ag. F. 1. [Ag _____ O L₂ L₁ (I)]

2. Verbs of Class 2

-tsomé1- 'insert in,' etc.

III. Ag. F. 2. [Ag _____ O* L_{2a/i} L₁ (I)]

3. Verbs of Class 3

-fuubil- 'throw in,' etc.

-bămbil- 'stretch in,' etc.

-mèé1- 'add in,' etc.

-nyòó1- 'find in,' etc.

-lõndel- 'follow in,' etc.

III. Ag. F. 3. [Ag _____ (D Ø O) L₂ L₁ (I)]

4. Verbs of Class 4

-niinil- 'climb in,' etc.

III. Ag. F. 4. [Ag _____ P L_{2a/i} L₁ (I)]

*Note: When a locative noun--either locational or directional--is either animate or inanimate, it will be marked a/i; otherwise, it is inanimate.

7.23. Clauses of Subgroups of Agentive Verbs

7.231. Ergative Verbs in Locative Extended Shape

7.2311. Syntactic Pattern A

7.23111. Grammatical Component

Core elements for syntactic pattern A are these: subject + locative ergative verb + object #1. For convenience of reference

and comparison, agentive non-ergativized clauses will be presented first:

1. Omwámi achaachiile omusê mumusáála (námashíeesi).
Chief he-began council meeting under tree (with greetings).
2. Omukhási ateeshela amápwòni muchiíkòòni (nòmulo omukáli).
Woman she-cooks potatoes in kitchen (with hot fire).

Ergative clauses of syntactic pattern A are as follows:

Sample Sentences:

Class 1

Omusê kucháachiile mumusáála.
Council meeting it-began under tree.

The subject here is inanimate, nominative (N) NP. This type of sentence is possible too with -teeshel- 'cook in,' etc. But -teeshel- is also capable of occurring in an ergative clause with no nominative NP, but with the agentive subject and a locational locative object, for example:

Class 2

Omukhási ateeshela muchiíkòòni. Note by contrast:
Woman she-is cooking in kitchen.

Amápwòni kateeshela muchiíkòòni. as in class 1 above.
Potatoes they-are cooking in kitchen.

In the ergative affiliations then, the subject of class 1 verbs is inanimate, nominative NP. Of class 2 verbs, the subject is the animate, agentive subject. The locational locative object NP is inanimate.

Pronominal affiliations

These sentences may occur in the locS sequential affiliations

Kucháachiilemwô. - It (council meeting) began under it (tree).

Passive affiliations

Ergative locative extended verb shapes do not occur in passive

affiliations in syntactic pattern A.

The following sketch indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{Locational_{loc} Locus of the Action} {- animate} + #

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Locational_{loc} Locus of Action} {Nominative Subject } {Class 1 }
 {Agentive_{erg} Subject } {Class 2 }
 + Locative Ergative Shape + _____ + #

7.23112. Lexical Entries

1. Verbs of Class 1

-chàáchil- 'begin in,' etc.

-teeshel- 'cook in,' etc.

III. Erg. A. 1. [N _____ L₁]

2. Verbs of Class 2

-teeshel- 'cook in,' etc.

III. Erg. A. 2. [Ag _____ L₁]

7.2312. Syntactic Pattern B

7.23121. Grammatical Component

The class 2 verb of syntactic pattern A above (i.e. -teeshel-) also has the capacity to occur as a three-nominal verb in the syntactic pattern B, whose core elements are as follows: subject + locative ergative verb + object #1 ± object #2.

Sample Sentences:

Class 1

Omukhási ateeshela muchííkóóni (nómulilo omukáli).
 Woman she-cooks in kitchen (with hot fire).

The subject is animate and agentive. The locative NP is locational and inanimate, and the optional PNP is the optional instrument phrase. Although it is here obligatory in order to form a sentence different from that of syntactic pattern A, for the sake of identification it is given the usual marks of optionality.

Pronominal affiliations

Pronominal affiliation is of the pattern: locS-PSCP.

Ateeshelamwô (ninakwô). - She cooks in it (kitchen) (with it--
 hot fire).

The following schema indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{Locational_{loc} Locus of the Action} {- animate} + #

2.0 Object #2 →

{Instrument of the Action}

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Locational_{loc} Locus of Action} || {Agentive_{erg} Subject}
 {Class 1} + Locative Ergative Shape + _____ ± object #2
 + #

7.23122. Lexical Entries

1. Verbs of Class 1

-teeshel- 'cook in,' etc.

III. Erg. B. 1. [Ag _____ L₁ (I)]

7.232. Instrumental Verbs in Locative Extended Shape

The one verb which occurs in the instrumental affiliation retains its characteristic multivalence in the locative extended form also, as will be seen by the following syntactic patterns.

7.2321. Syntactic Pattern A

7.23211. Grammatical Component

Core elements provided for in syntactic pattern A are subject + locative instrument verb + object #1 + object #2. As was done with the ergative verbs, the agentive clause will be given first for the sake of comparison:

Omufani asambila $\left\{ \begin{array}{l} \text{obunyáási} \\ \text{omwána} \end{array} \right\}$ hanzû (nömulo).

Boy he-burns $\left\{ \begin{array}{l} \text{grass} \\ \text{child} \end{array} \right\}$ (by house) (with fire).

Sample Sentences:

Class 1

- a. Omulo kúsambila omwána hanzû.
Fire it-burns child by house.
- b. Omulo kúsambila obunyáási hanzû.
Fire it-burns grass by house.

The grammatical subject in these sentences is the fronted instrumental NP--not PNP. Object #2 is an obligatory locational locative NP. Object #1 is the fixed object receiver of the action indicated by the verb. These fixed objects may be either animate or inanimate.

Pronominal affiliations

Sequential affiliations may occur:

Ku $\left\{ \begin{array}{l} \text{bu} \\ \text{mu} \end{array} \right\}$ sambilahô.

It (fire) $\left\{ \begin{array}{l} \text{it (grass)} \\ \text{him (child)} \end{array} \right\}$ burns there.

Passive affiliations

The instrumental affiliation may also occur in a passive affiliation.

{ Omŵána a } sambilwa hanzû (nõmulilo).

{ Child he } is being burned near house (with fire).
 { Grass it }

Hanzû { omŵána a } sambilwahô { omŵána obunyaasi } (nênde omulilo).

By-house { it- } is being burned there { child } (with
 { child he- } { grass } fire).
 { grass it }

The following sketch shows the semantic/syntactic rules to be added to the grammatical component for syntactic pattern A.

Strict Semantic Subcategorization Rules

0.0 Subject of Simple Instrumental Commutation Shapes →

{ Instrumental-Subject Locative Shape } { - animate } + #

1.0 Object #1 →

{ Receiver of the Action } { ± animate } + #

2.0 Object #2 →

{ Locational_{loc} Locus of the Action } { - animate } + #

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

{ Receiver of the Action } || { Instrumental } { Class 1 } +
 Locative Shape + _____ + Object #2 + #

2.0 Object #2 →

{ Locational_{loc} Locus of Action } || { Instrumental } { Class 1 } +
 Locative Shape + Object #1 + _____ + #

7.23212. Lexical Entries

1. Verbs of Class 1

-sămbil- 'burn at,' etc.

III. Instr. A 1. [I _____ (D \times O) L₁]

7.2322. Syntactic Pattern B

7.23221. Grammatical Component

Core elements are subject + locative instrument verb + object

#1 + object #2 \pm object #3. Again for comparison the agentive clause will be given first:

Omufani asambila amakhono hanzu (nomulilo).
Boy he-burns his hands by house (with fire).

Sample Sentence:

Class 1

Omulilo kusambila omufani amakhono hanzu.
Fire it-burns boy's hands by house.

With class 1 verbs, fixed object #1 is the animate possessor of the fixed object #2, which is obligatorily a part of the body and, therefore, inanimate. Thus it will be observed that class 1 verb is associated with NP's of inalienable possession 2. In the agentive referent clause the animate possessor is the grammatical subject, but in the instrumental affiliation this animate possessor NP occurs as object #1 and the 'possessed' body part, which was object #1 in the agentive clause, now occurs as object #2. Whereas in the agentive clause the IP₁ combination occurs (i.e. possessor subject + V + possessed object #1), in the instrumental affiliations the IP₂ combination (i.e. possessor object #1 + possessed object #2) occurs simply by a shifting of positions of certain NP's. Object #3 is locational locNP.

Pronominal affiliations.

Mixed pronominal affiliations may occur of the pattern OP-NP-locNP:

Ku $\left\{ \begin{array}{l} \text{mu} \\ \text{ka} \end{array} \right\}$ sambilahô $\left\{ \begin{array}{l} \text{amakhóno} \\ \text{omusiani} \end{array} \right\}$ hanzû.

It (fire) $\left\{ \begin{array}{l} \text{his} \\ \text{them} \end{array} \right\}$ (hands) burns near it (house) $\left\{ \begin{array}{l} \text{hands} \\ \text{boy's} \end{array} \right\}$.

Passive affiliations

The same combinations may occur in the passive affiliations as in other clauses in agentive passive affiliations in which IP object NP's are involved.

The following schema delineates the semantic/syntactic rules to be added to the grammatical component for syntactic pattern B of the instrumental affiliation.

Strict Semantic Subcategorization Rules

0.0 Subject of Simple Instrumental Commutation Shapes →

$\left\{ \text{Instrumental-Subject Locative Shape} \right\} \left\{ - \text{animate} \right\} + \#$

1.0 Object #1 →

$\left\{ \text{Possessor of Object \#2 of the Action} \right\} \left\{ + \text{animate} \right\} + \#$

2.0 Object #2 →

$\left\{ \text{Receiver}_{\text{psd}} \text{ of the Action} \right\} \left\{ - \text{animate} \right\} + \#$

3.0 Object #3 →

$\left\{ \text{Locational}_{\text{loc}} \text{ Locus of the Action} \right\} \left\{ - \text{animate} \right\} + \#$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$\left\{ \text{Possessor of Object \#2 of Action} \right\} \parallel \left\{ \begin{array}{l} \text{Instrumental} \\ \text{Subject} \end{array} \right\} \left\{ \text{Class 1} \right\}$
+ Locative Shape + _____ + object #2 + object #3 + #

2.0 Object #2 →

$\left\{ \text{Receiver}_{\text{psd}} \text{ of Action} \right\} \parallel \left\{ \begin{array}{l} \text{Instrumental} \\ \text{Subject} \end{array} \right\} \left\{ \text{Class 1} \right\} + \text{Locative}$
Shape + Object #1 + _____ + Object #3 + #

7.23222. Lexical Entries

1. Verbs of Class 1

-sămbil- 'burn at,' etc.

III. Instr. B. 1. [I _____ G O L₁]

7.3. Entailing Verbs in Locative Extended Shape7.31. Syntactic Pattern A

7.311. Grammatical Component

Syntactic pattern A provides these core elements: subject + locative verb + object #1.

Sample Sentences:

Class 1

- a. Omundu áraatsila munzû.
Man he-is bleeding in house.
- b. Isíongo yiraatsila munzû.
Waterpot it-is leaking in house.

Class 2

Liloba liátishila mushimíyu.
Ground it-cracks in dry season.

Subjects of class 1 verbs may be either animate or inanimate and will be termed 'entailing subjects.' Subjects of class 2 verbs may be only inanimate and will also be termed 'entailing subjects.' Locative NP's of both classes are locational and inanimate, and both are obligatory.

Pronominal affiliations

These sentences may occur in the locS sequential affiliations:

Araatsilamwô. - He bleeds in it (house).

Clausal affiliations

These verbs of syntactic pattern A may not occur in what (in this study) has been termed 'entailing affiliations.' (See p. 53)

The following schema delineates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{Locational_{loc} Locus of the Action} {- animate} + #

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Locational_{loc} Locus of Action} || {Entailing Subject} {Class 1}
+ Locative Shape + object #1 + #

7.312. Lexical Entries

1. Verbs of Class 1

-raátsil- 'bleed in,' etc.

III. Ent. A. 1. [L₂ _____ L₁]

Note: Until there is proof that NP₁ is a noun other than directional --as was shown on page 229--it will continue to be termed such.

2. Verbs of Class 2

-atishíl- 'crack in,' etc.

III. Ent. A. 2. [L₁ _____ L₁]

7.32. Syntactic Pattern B

7.321. Grammatical Component

Core elements in syntactic pattern B are these: subject + locative verb + object #1 + object #2.

Sample Sentences:

Class 1

- a. Omundu áraatsila amatsáyi munzû.
Man he-is bleeding blood in house.

- b. Isiongo yiraatsila amătsi munzû.
Waterpot it-leaks water in house.

Class 2

Liloba liătishila tsinzáfwa mushimíyu.
Ground it-cracks cracks in dry season.

The subjects for class 1 verbs may be animate or inanimate, and for class 2 they are obligatorily inanimate. Both will be termed 'entailing subjects.'

The following constraints obtain for object #1:

Class 1: - animate, 'doer' of the action identified by the verb,
a co-ordinate object

Class 2: - animate, co-ordinate object of the process indicated
by the verb

These constraints obtain for object #2:

Class 1: - animate, locational locative locus of the action

Class 2: - animate, location in time or space locative in the
action indicated by the verb

Pronominal affiliations

These sentences are capable of one type of pronominal affiliation, the mixed locS-NP type.

Araatsilamwô amatsáyi. - He bleeds in it (house) blood.

Entailing affiliations

Either object may occur as fronted grammatical subject concurrently with the other object occurring in object position to the right of the verb. The verb radical does not change in shape by this arrangement, but the concordial SP does.

Class 1

- a. Amatsáyi karaatsila khumundu munzû.
Blood it-is flowing from man in house.
- b. Munzû muraatsilamwô amatsáyi khumundu.
In-house it is flowing in it blood from man.

For class 2 verbs the behavior is the same. It is now clear that object #1 is the doer of the action or process identified by the verb. The subject of the referent sentence in its position to the right of the verb occurs in the shape of a directional locative NP with class 1 verbs and as a second locational locative with class 2 verbs. Also, object #1 of class 1 verbs is a co-ordinate NP, performing a mixed case function of an actor-co-ordinate (Act_C) with class 1 and of a process-co-ordinate (Pc_C) of class 2 verbs, as they will be termed here.

The following sketch indicates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Simple Entailing Verb Shapes →

Entailing Subject Base-Verb Shape
(Class 1, 2)

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Co-ordinate Doer of the Action} \\ \text{Co-ordinate Result of the Process} \end{array} \right\} \left\{ \begin{array}{l} \pm \text{ animate} \\ - \text{ animate} \end{array} \right\} + \#$$

2.0 Object #2 →

$$\left\{ \text{Locational}_{1\text{oc}} \text{ Locus}_1 \text{ of the Action} \right\} \left\{ - \text{ animate} \right\} + \#$$

1.1 Subject of Class 1 →

$$\left\{ \text{Directional}_{1\text{oc}} \text{ Locus of the Action} \right\} \left\{ \pm \text{ animate} \right\} + \#$$

2.1 Subject of Class 2 →

$$\left\{ \text{Locational}_{1\text{oc}} \text{ Locus}_2 \text{ of the Action} \right\} \left\{ - \text{ animate} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.2 Object #1 →

$$\left\{ \begin{array}{l} \text{Co-ordinate Doer of Action} \\ \text{Co-ordinate Result of Process} \end{array} \right\} || \left\{ \text{Entailing Subject} \right\} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\}$$

+ Locative Shape + _____ + object #2 + #

1.3 Object #2 →

$$\left\{ \text{Locational}_{\text{loc}} \text{ Locus of Action} \right\} || \left\{ \text{Entailing Subject} \right\}$$

$$\left\{ \text{Class 1, 2} \right\} + \text{Locative Shape} + \text{object \#1} + \text{object \#2} + \#$$

7.322. Lexical Entries

1. Verbs of Class 1

-räätsil- 'bleed/flow in,' etc.

III. Ent. B. 1. [L₂ _____ Act_C L₁]

2. Verbs of Class 2

-atishil- 'crack in,' etc.

III. Ent. B. 2. [L₁ _____ Pc_C L₁]

7.4. Stative Verbs in the Locative Extended Shape

The verb -búl- 'not be/not have' does not occur in the locative extended form.

7.41. Syntactic Pattern A

7.411. Grammatical Component

The core elements in syntactic pattern A are these: subject + locative verb + object #1 + object #2.

Sample Sentences:

Class 1

Omwána akonela tsindóòlo munzû.
Child he-sleeps sleep in house.

Verbs in this class have the capacity to be associated with one nominal only as base verbs and as two-nominal verbs in the locative extended form of descriptive verbs and have been treated as such on pp. 189-192. As stative verbs in the locative extended shape they are associated with three nominals obligatorily, the first being the process-stative subject (Pc_{st}), the second a co-ordinate-stative object (C_{st}) in the process, and the third a locational locative NP.

These constraints obtain for object #1:

Class 1: - animate, co-ordinate-stative receiver in the process identified by the verb

These constraints obtain for object #2:

Class 1: - animate, locational locative locus in the process indicated by the verb

Pronominal affiliations

Object #1 does not occur in pronominal form, but the two objects may co-occur in the locS-NP mixed affiliation:

Akonelamwô tsindóòlo. - He sleeps in it (house) sleep.

Clausal affiliations

Object #1 may not occur as fronted grammatical subject in any clausal affiliation, but object #2 (the locational locative NP) may occur as a fronted NP both as grammatical subject or as an adverb of place in the following patterns:

Munzû { mukonelamwô omwána tsindóòlo }
 { omwána akonelamwô tsindóòlo }

In-house { it-is sleeping in it child sleep }
 { child he-is sleeping in it sleep }

The verb root does not change, but the fronted locative NP co-occurs, as usual, with a concordial locative verbal suffix. This

behavior is the same as that of descriptive verbs described on p. 190 and will, therefore, be termed the 'locative affiliation,' as it was on that page. The two will be considered the same type of affiliation.

The following sketch delineates additional semantic/syntactic subcategorization rules to be included in the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Simple Locative Shapes →

{Stative-Subject Locative Shape} {+ animate} + #

1.0 Object #1 →

{Co-ordinate_{st} Receiver in the Process} {- animate} + #

2.0 Object #2 →

{Locational_{loc} Locus of the Process} {- animate} + #

General Semantic/Syntactic Subcategorization Rules

1.1 Object #1 →

{Co-ordinate_{st} Receiver in Process} || {Process_{st} Subject}
 {Class 1} + Locative Shape + _____ + object #2 + #

2.1 Object #2 →

{Locational_{loc} Locus of Process} || {Process_{st} Subject} {Class 1}
 + Locative Shape + object #1 + _____ + #

7.412. Lexical Entries

1. Verbs of Class 1

-koné1- 'sleep in,' etc.

-lwalil- 'be/become ill in,' etc.

III. St. A. 1. [Pc_{st} _____ C_{st} L₁]

7.5. Conclusion

All verbs except -búl- 'not be/not have' and -h- 'give' may

occur in the -il-/-el- locative extended form. A locational locNP co-occurs obligatorily with the locative extended shape of the verb. If a verb is directional, it co-occurs with one locational and one directional locNP.

Benefactive objects do not co-occur with the obligatory locational locNP associated with -il-/-el- extended verb shapes-- although an animate fixed object may. If the instrument NP does co-occur, it must occur in the shape of PNP_I . If a fixed object co-occurs obligatorily with a base verb, it remains when the verb occurs in the locative extended shape, or in some cases the verb may shift to an entirely different verb classification.

Since, theoretically, an unlimited sequence of locatives may co-occur in a sentence, sample referent sentences were limited to no more than two locative NP's in the case of a directional use of the verb (one a directional locative NP and one locational NP), and only one locNP--a locational locative NP--in the case of a locational use.

Syntactic patterns of base verbs are not constant; that is, there are some conditions under which verbs in the -il-/-el- extended shape require re-classification, occurring in syntactic patterns other than those in which they may occur with base verbs and modified in number of objects, i.e. they may be associated with more NP's or with fewer.

All pronominal shapes of locative NP's are locS if they are objects.

No new case functions were identified, but there are some modifications of existing case functions, for example $(D \text{ } \text{ } O)_{loc}$.

By the co-occurrence of the locative extended verb shape and

the locational locNP certain changes in syntactic behavior within the various clause types occur:

7.51. Descriptive Clauses

-sɨnjilil- 'stand up in,' etc., is the exceptional verb. See pp. 87-90 and 190 for descriptions of its behavior.

In the other descriptive clauses, the following constraints obtain:

Pronominal affiliations

In syntactic patterns A₁ and A₂ the sequential affiliation locS occurs, and in syntactic pattern B the mixed affiliation of the locS-locNP type occurs.

Clausal affiliations

In syntactic pattern A₁ a passive affiliation pattern of S → locNP + passive verb ± PNP_{subj.} for -sɨnjilil- may occur, but not with other verbs in this group. Only one verb -chòonyel- 'become tired in,' etc., occurs in the passive affiliation in the pattern of A₁ above. Some other verbs occur in the locative affiliation.

In syntactic pattern B these constraints obtain: Representations of both locNP's concurrently are obligatory. Directional locNP occurs as fronted grammatical subject without the locative prefix, the verb root does not change in shape, and the subject of the referent sentence occurs as NP only in a position to the right of the verb. Locational locNP may occur as fronted grammatical subject as locNP. Concordial locative verbal suffix is obligatory.

7.52. Agentive Clauses

A re-grouping into various syntactic patterns occurs with agentive verbs. The verb -h- 'give' does not occur in this extended

form. The fixed OP-type objects may remain, occurring sometimes in mixed, sometimes in sequential affiliations. Because of the additional locative object(s) the locS pronominal form always is one constituent of any pronominal affiliations.

Base verbs associated with two or three NP's may occur with the additional locative object NP, but base verbs associated with \emptyset to 3 objects (i.e. with four NP's) commonly drop one or two object NP's. In fact, there is a reluctance to use a verb in a sentence with more than three NP's, although this is sometimes so used.

All verbs occurring in this extended shape may occur with only the locational locative NP, which in this extension is obligatory. Some verbs may be directional. When they are, two locNP's are obligatory--a directional and a locational. For this reason the agentive verbs were divided into two general classes: Locational verbs and directional verbs, locational verbs occurring with only one locNP (the locational locNP), and directional verbs with two (the locational locative NP and the directional). This division required more syntactic patterns and a splintering of verb classifications. Agentive clauses may be summarized as follows:

Locational verbs occur in three agentive-type syntactic patterns, all capable of occurring in mixed pronominal affiliations, and in passive affiliations of various patterns depending upon kinds and how many NP's are involved.

Syntactic pattern A includes the obligatorily only two-nominal verbs, which now occur as obligatorily three-nominal, the locNP object being one. Optional PNP_1 does not co-occur with these verbs.

Syntactic pattern B is obligatorily three-nominal and

optionally four-nominal, the fourth NP being the optional PNP_I .

Syntactic pattern C is obligatorily four-nominal, and optionally five-nominal, the fifth being the optional PNP_I . This type of pattern is not common.

Directional verbs occur in syntactic patterns D, E, F. With these, two locNP's are obligatory--one directional and the other locational.

Mixed pronominal affiliations of various types occur with all syntactic patterns, such as locS-locNP-PSCP; OP-locS-locNP; OP-locS-locNP-PSCP.

All syntactic patterns also occur in passive affiliations of various patterns, depending upon the number and kinds of NP's occurring in them. PNP_I still may not occur as grammatical subject, but all other NP's may. The PNP_{ag} and PNP_I may still occur optionally, but not concurrently, in a position to the right of object NP's.

7.53. Entailing Clauses

In the locative extended shape, entailing verbs occur in two syntactic patterns, syntactic pattern A and B. Pattern A: NP_1 + locative verb + locNP. Pattern B: NP_1 + locative verb + NP_2 + locNP.

Pronominal affiliations

In pattern A the locS sequential affiliation occurs; in pattern B the locS-NP mixed affiliation occurs.

Clausal affiliations

No clausal affiliation occurs with syntactic pattern A, but with syntactic pattern B these constraints obtain for clausal affiliations:

Fronting of either object NP may occur, but when it does, the remaining NP occurs obligatorily. The verb radical does not change. With the fronting of the locNP, a concordial locative verbal suffix co-occurs, as well as a concordial SP when the locNP is the grammatical subject. The subject of the referent sentence occurs in this affiliation as a locNP in a position to the right of the verb. This position is the same as the referent-sentence position of the fronted NP.

Also in syntactic pattern B object #1 of class 1 verbs is a co-ordinate object and the 'doer' of the action indicated by the verb. With class 2 verbs, it is the co-ordinate result of the process identified by the verb. Object #2 of both classes of verbs is the locational locative NP.

Only two verbs occur in this extended form: -ràátsil- 'bleed/flow in,' etc., and -atishíl- 'crack in,' etc.

7.54. Stative Clauses

The verb -búl- 'not be/not have' does not occur in the locative extended shape. Only one syntactic pattern occurs and only one class of verbs in that pattern. The pattern is as follows:

S → NP₁ + locative verb + (co-ordinate) object #1 +
(locative) object #2

Subjects: + animate, stative-process

Pronominal affiliations

Only the mixed affiliation locS-NP occurs.

Clausal affiliations

Only the locNP may occur as fronted NP, and in this position it may occur as grammatical subject with a corresponding SP in

concordial agreement or as an adverb of place with the subject of the referent sentence remaining. But in either case the corresponding concordial locative verbal suffix is obligatory. There is no change in VR. This type of behavior will be termed the 'locative affiliation.'

7.6 Summary of Facts of the Locative Extension

Most verbs occur in the locative extended form. No benefactive object may co-occur, and if the instrumental phrase should co-occur, it does so as PNP_I.

A. Kinds of verbs

1. Nineteen descriptive verbs (some of them multivalent and some polysemous) occur and are obligatorily two-nominal.
2. Two-nominal agentive base verbs which occur in this extension occur as obligatorily three-nominal. The two verbs associated with locative fixed objects (i.e. -niinil- 'climb in/on, etc. by means of' and -hunvil- 'smell of in/at,' etc.) occur in this extended form requiring the second (a locational) locative NP. The verb -khayil- 'refuse' occurs with its fixed object in the shape of a directional locative and requires an additional locational locative NP. The verb -ratsil- 'kick in,' etc. assumes an increased multivalence in this form. Forty-nine agentive verbs occur in this extended shape, among them the ergative (i.e. -chaa'chil- 'begin in,' etc. and -teeshe1- 'cook in,' etc.) and the instrumental (i.e. -sambil- 'burn in,' etc.) verbs in their affiliations.
3. Both entailing verbs, -raatsil- 'bleed/leak in,' etc., and -atishil- 'crack in,' etc., occur.
4. Two stative verbs, -lwalil- 'be/become ill in,' etc., and -konel- 'sleep in,' etc., also occur.

B. Syntactic patterns

1. Descriptive verbs occur in one syntactic pattern with the usual variations and a second three-nominal pattern with two locNP's, as follows:

A₁ (imperativizing):

S NP_{act} + loc V + locNP_{L1}

A₂ (non-imperativizing):

S NP_{pc} + loc V + locNP_{L1}

B

S NP_{act} + loc V + loc₂NP + loc₁NP

2. Agentive verbs were divided into two general classifications: locational, in which all verbs occurring in this shape may occur, and directional. Each classification occurs in three syntactic patterns:

Locational:

a. S NP_{ag} + loc V + NP_{obj.fx.} + locNP

b. S NP_{ag} + loc V + NP_{obj.fx. 1} + locNP ± PNP_I

c. S NP_{ag} + loc V + NP_{obj.fx. 1} + NP_{obj.fx. 2} + locNP
± PNP_I

Directional:

d. S NP_{ag} + loc V + loc₂NP + loc₁NP ± PNP_I

e. S NP_{ag} + loc V + NP_{obj.fx.} + loc₁NP + loc₂NP/loc₂NP
+ loc₁NP

f. S NP_{ag} + loc V + NP_{obj.fx.} + loc₂NP + loc₁NP ± PNP_I

Subgroups of agentive verbs occur in syntactic patterns as follows:

- a. Ergative verbs (two syntactic patterns):

- (1) S NP_{nom} + loc V + loc₁NP
 S NP_{ag} + loc V loc₁NP
- (2) S NP_{ag} - loc V + loc₁NP ± PNP_I

b. Instrumental verbs (two syntactic patterns):

- (1) S NP_I + loc V + NP_{obj.fx.} + loc₁NP
 (2) S NP_I + loc V + NP_{gen} + NP_O + loc₁NP

3. Entailing verbs occur in two syntactic patterns:

- a. S NP_{L2} + loc V + loc₁NP/NP_{pc} + loc V + loc₁NP
 b. S NP_{L2} + loc V + NP_{obj.fx.} + loc₁NP/NP_{L1} + loc V
 + NP_{obj.fx.} + loc₁NP

4. Of the stative verbs, -bulil- 'not be/not have' does not occur, but -koné1- 'sleep in,' etc., and -lwalil- 'be/beome ill in,' etc., do in the following syntactic pattern:

S NP_{pc.st} + loc V + NP_{obj.fx.} + loc₁NP

The NP_{obj.fx.} is a co-ordinate-type object, and the locative objects are of the type L₁ st.

C. Case functions

No new case functions were identified. There were, however, some modifications. For example, one locational licNP occurs obligatorily in these sentences.

CHAPTER 8
THE RECIPROCAL EXTENSION

8.0. Introduction

In English, certain verbs occur in sets of sentences which can be formulaically described like this:

- a. X hits Y,
- b. and Y hits X.
- c. Therefore, X and Y hit each other.

Sentence c represents the reciprocal concept and the pronominal realization 'each other,' a 'reciprocal pronoun.'

In Shisa, the same concept obtains, but it is realized by an extended form of the verb:

- a. X ákhupa Ŷ, - X he-hits Y,
- b. ne Ŷ akhupa X. - and Y he-hits X.
- c. Khô X nende Y bakhupanâ. - Therefore, X and Y they-hit each other.

In these sentences X and Y are nouns of the same noun class (i.e. Class 1) in this instance and may interchange positions without altering the syntactic pattern or the verb shape. Either NP may occur as grammatical subject or as object of the verb without any change in the verb root in sentences a and b. Or both may occur concurrently (as in sentence c) as a compound grammatical subject, in which case the SP must be plural and in concordial agreement with the subject NP's,¹ and the verbal extension -an- co-occurs. This -an- extension of such verbs will here be considered to possess the semantic equivalence of the English reciprocal

pronoun 'each other,' and verbs behaving in such a manner will be termed 'reciprocal extended verbs,' or verbs in the 'reciprocal extension.'

In this chapter, it will be necessary to ascertain the different syntactic patterns: How many, if any, other object NP's co-occur and if so, what kinds. It will also be necessary to determine whether such objects can occur in transposed forms and whether the same multivalence and/or polysemy of some base verbs obtains here, or whether additional multivalence is possible, and so on.

8.1. Descriptive Verbs in the Reciprocal Extended Shape

Descriptive verbs are zero in the reciprocal extended shape.

8.2. Agentive Verbs in the Reciprocal Extended Shape

Some points to ascertain in the agentive-clause section is whether the fixed object(s) of the base verbs remain or whether they are subsumed in the reciprocal object-- -an-, whether any new objects occur or whether there is a re-arrangement of the fixed objects; whether any objects are of the OP/locS type, and whether or not the verb occurs in the passive affiliations. The following syntactic patterns should indicate such facts.

8.21. Syntactic Pattern A

8.211. Grammatical Component

These are the core elements provided by syntactic pattern A:
plural subject + reciprocal verb.

Sample Sentences:

Class 1

Abasiáni balĩndana. - Boys they-wait for each other.

Class 2

a. Abandu bálõndana. - People they-follow each other (in a line).

b. Emítokâ chilõndana. - Motorcars they-follow each other.

No object NP occurs. The plural grammatical subject of class 1 verbs is obligatorily animate, but of class 2 verbs it may be either animate or inanimate. Verbs are those which in their base forms are associated with only one object, and it is obligatory. Since here the reciprocal extension is considered the object of the verb, these verbs remain two-nominal,² i.e. subject NP and the reciprocal object, which in this analysis will be considered to be a pronominal object form and, therefore, a substitute for a nominal. The minimal reciprocal verb, then, in the simple present tense in a declarative sentence is composed of SP + VR + RecExt + Ts, the RecExt being regarded in this analysis as object #1.

The following schema shows the semantic/syntactic subcategorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Simple Reciprocal Shapes →

$$\left\{ \begin{array}{l} \text{Agentive-Subject}_1 \text{ Reciprocal Shape} \\ \text{(Class 1)} \\ \text{Agentive-Subject}_2 \text{ Reciprocal Shape} \\ \text{(Class 2)} \end{array} \right\} \left\{ \begin{array}{l} \{ + \text{animate} \} \\ \{ + \text{plural} \} \\ \{ \pm \text{animate} \} \\ \{ + \text{plural} \} \end{array} \right\} + \#$$

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Reciprocal Receiver}_1 \text{ of the Action} \\ \text{Reciprocal Receiver}_2 \text{ of the Action} \end{array} \right\} \left\{ \begin{array}{l} \{ + \text{animate} \} \\ \{ + \text{plural} \} \\ \{ \pm \text{animate} \} \\ \{ + \text{plural} \} \end{array} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

{Pronominal Reciprocal Receiver of Action} {Agentive_{p1} Subject}
 {Class 1}
 {Class 2} + Reciprocal Shape + #

8.212. Lexical Entries

Since the reciprocal extension is considered the representation of the reciprocal pronoun, the case function it represents (i.e. 'reciprocal'---R) will be entered in the case frame on the underlined verb space at the end, thus: R.

1. Verbs of Class 1

- bisan- 'hide each other'
- chĩngan- 'carry each other'
- konán- 'sleep with each other (sexually)'
- yilan- 'take each other'
- lĩndan- 'wait for each other'

IV. Ag. A. 1. [Ag R (L)]

2. Verbs of Class 2

- lõndan- 'follow each other (one behind the other)'

IV. Ag. A. 2. [Ag R (L)]8.22. Syntactic Pattern B

8.221. Grammatical Component

Core elements provided by syntactic pattern B are subject + reciprocal verb + object #2.

Sample Sentence:

Class 1

Abobófu banyoolana (nênde tsisáála).
 Blind people they-find each other (with sticks).

At a glance, one can see that object #2 is the optional, inanimate

instrumental object, object #1 being represented by the reciprocal extension. It may also be noted that the reciprocal object is the pronominal representation of the nominal subject, for in reciprocal extension clauses the subject and object #1 are the same persons or things performing different syntactic functions--those of subject and object, the latter occurring in pronominal shape (-an-) and the former in either nominal (NP) and pronominal (SP) or in pronominal only (SP).

Only a few of the agentive base verbs occur in syntactic pattern B of agentive reciprocal verbs; most of them occur in other patterns. None of these NP's or verbs occur in sequential or clausal affiliations, except the SP sequential affiliation common to all.

The following sketch delineates the semantic/syntactic sub-categorization rules to be added to the grammatical component for syntactic pattern B of reciprocal extended verbs.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

{Reciprocal Receiver of Action} {+ animate
+ plural} + #

2.0 Object #2 →

{Instrument of the Action} {- animate
± plural} + #

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

{Reciprocal Receiver of Action} ||| {Agentive_{p1} Subject} {Class 1}
+ Reciprocal Shape ± Object #2 + #

2.0 Object #2 →

{Instrument of Action} ||| {Agentive_{p1} Subject} {Class 1}
+ Reciprocal Shape ± _____ + #

8.222. Lexical Entries

1. Verbs of Class 1

- nyóólan- 'find each other'
- sinyán- 'annoy each other'
- khaaban- 'seek each other'
- tsomán- 'stick in each other'
- ratsán- 'kick each other'
- hunyan- 'take whiff of each other'
- bohan- 'tie each other'
- reman- 'chop/slash each other'
- ninán- 'scold each other'
- manyán- 'know each other'
- khayán- 'refuse each other'
- hulilán- 'hear each other'
- nyalan- 'be equal for each other'
- boolan- 'talk about each other'
- enyán- 'want each other'
- lolán- 'see each other'
- onoonán- 'spoil each other'
- fwalan- 'dress each other'
- hengan- 'look at each other'
- khupan- 'strike each other'
- sámban- 'burn each other'
- sáában- 'wash each other'
- lõndan- 'follow each other'
- rekan- 'set (trap) for each other'

8.23. Syntactic Pattern C

8.231. Grammatical Component

Core elements provided by syntactic pattern C are subject + reciprocal verb + object #2 ± object #3.

Sample Sentences:

Class 1

Abaána balolana ebilenje (nênde tsimoni etsihukâ).
Children they-see each other's feet (with amazed eyes).

Class 2

Abééchi bareebana amaréébo (nende omunwa).
Pupils they-ask each other questions (orally--with mouth).

Class 3

Tsimbwâ tsihunyana khumishîra (nende amóólu).
Dogs they-smell each other's tails (with noses).

Class 4

- a. Abachéni bameetana ebiliibwâ (nende amakhóno).
Guests they add each other food (with hands).
- b. Abachéni bameetana tsiisîndu (nende amakhóno).
Guests they add each other quail (with hands).

The subjects are all animate and plural. Object #1 is represented by the reciprocal extension shape -an- 'each other.' Object #2 is represented by a NP. With class 1 verbs, object #2 is a body part--also with class 3 verbs--a person's voice, or name. This object preceded by the animate reciprocal pronoun representation -an- forms a pronominal possessor of object #2, an object of inalienable possession. The difference between class 1 verbs and those of class 3 is that class 3 verbs require a locNP as object #2.

With class 2 verbs, object #2 is an inanimate co-ordinate object, the reciprocal shape representing animate object #1. Class 4 verbs have the capacity to be associated with animate or

inanimate objects, and the reciprocal object here seems to be a benefactive object. See below for further explanation. Object #3 is optional instrument object.

Pronominal affiliations

PNP_I may occur in sequential affiliations as PSCP_I. Object #2 may occur as OP (or as locS in class 3) in sequential affiliations or with PNP_I/PSCP_I in mixed/sequential affiliations.

Class 1

Babilolana ninatsiô. - They (children) see each other's (feet) with them (eyes).

Class 3

Tsihunyanakhwô ninakô. - They (dogs) take sniff of each other's (tails) with them (noses).

Class 4

Babimeetana ninakô. - They (guests) add them for each other them (hands).

The reciprocal pronominal extension object -an- fulfills certain criteria for benefactive object: It is animate, precedes the fixed object #2, which is the receiver of the action and which may be either animate or inanimate. The benefactive reciprocal object, like others of its kind, does not occur as OP or locS, nor as fronted grammatical subject in the passive affiliations. However, even though these factors are absent (apparently because of the shape of this object and because of the fact that it is an integral part of the verb itself), this type of object will be termed the 'reciprocal-benefactive' object.

Clausal affiliations

No clausal affiliations occur with any of these verbs, a feature common to reciprocal extended verb forms.

The following schema shows the semantic/syntactic subcategorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Reciprocal Possessor of Object \#2} \\ \text{Reciprocal Receiver of the Action} \\ \text{Benefactive Receiver of the Action} \end{array} \right\} \{ + \text{animate} \} + \#$$

2.0 Object #2 →

$$\left\{ \begin{array}{l} \text{Receiver}_{\text{psd}} \text{ of the Action} \\ \text{Co-ordinate Receiver of the Action} \\ \text{Receiver of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ \pm \text{animate} \end{array} \right\} + \#$$

3.0 Object #3 →

Instrument of the Action

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Reciprocal Possessor of Object \#2} \\ \text{Reciprocal Receiver of Action} \\ \text{Benefactive Receiver of Action} \end{array} \right\} \parallel \{ \text{Agentive Subject} \}$$

$$\left\{ \begin{array}{l} \text{Class 1, 3} \\ \text{Class 2} \\ \text{Class 4} \end{array} \right\} + \text{Reciprocal Shape} + \text{object \#2} \pm \text{object \#3} + \#$$

2.0 Object #2 →

$$\left\{ \begin{array}{l} \text{Receiver}_{\text{psd}} \text{ of Action} \\ \text{Co-ordinate Receiver of Action} \\ \text{Loc Receiver}_{\text{psd}} \text{ of Action} \\ \text{Receiver of Action} \end{array} \right\} \parallel \{ \text{Agentive Subject} \} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \\ \text{Class 3} \\ \text{Class 4} \end{array} \right\}$$

$$+ \text{Reciprocal Shape} + \text{_____} \pm \text{object \#3} + \#$$

8.232. Lexical Entries

1. Verbs of Class 1

- khupan- 'strike each other's'
- khuulan- 'pull each other's'
- funakán- 'break each other's'
- fumban- 'fold each other's'
- malán- 'finish each other's'
- sáaban- 'wash each other's'
- hengan- 'look at each other's'
- manyán- 'know each other's'
- sámban- 'burn each other's'
- tsomán- 'insert in each other's'
- lolán- 'see each other's'
- bohan- 'tie each other's'
- khaaban- 'seek each other's'
- reman- 'chop each other's'
- hulilán- 'hear each other's'
- ratsán- 'kick each other's'
- reéban- 'ask each other's'
- onoonán- 'spoil each other's'

IV. Ag. C. 1. [Ag R_C O (I) (L)]

2. Verbs of Class 2

- reéban- 'ask each other'
- fwalan- 'dress each other'
- ratsán- 'kick each other'
- khupan- 'strike each other'
- reman- 'slash each other'

IV. Ag. C. 2. [Ag R C (I) (L)]

4.0 Object #4 →

{Instrument Object of the Action}

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

{Reciprocal Possessor of Object #2} || {Agentive Subject}
 {Class 1} + Reciprocal Shape + object #2 + object #3
 ± object #4 + #

2.0 Object #2 →

{Receiver_{psd} of Action} || {Agentive Subject} {Class 1} +
 Reciprocal Shape + _____ + object #3 ± object #4 + #

3.0 Object #3 →

{Co-ordinate Receiver of Action} || {Agentive Subject}
 {Class 1} + Reciprocal Shape + object #2 + _____ ±
 object #4 + #

8.242. Lexical Entries

1. Verbs of Class 1

-khupan- 'strike each other's'

-reman- 'slash each other's'

-ratsán- 'kick each other's'

IV. Ag. D. 1. [Ag ______{RG} O C (I) (L)]

8.3. Conclusion

Only agentive verbs occur in the reciprocal extended form, and these occur in four syntactic patterns:

A: Subject + reciprocal verb

B: Subject + reciprocal verb ± PNP_I

C: Subject + reciprocal verb + object #2 ± PNP_I

D: Subject + reciprocal verb + object #2 + object #3 ± PNP_I

The subject of this extended form is plural. The object introduced by the reciprocal verbal extension -an- is here given the 'umbrella' term 'reciprocal object.' It is object #1 and is capable of a variety of semantic interpretations. However, these interpretations are conditioned by the number, kinds, and syntactic behavior of the other object NP's with which it may be associated in a syntactic pattern.

In syntactic pattern A, object #1 is the reciprocal object of the verb representing the pronominal object equivalent of English 'each other.' It is the fixed object in this pattern. With class 1 verbs, the subject is obligatorily animate and, because the subject and object are the same individuals (as is always true of reciprocal verbs), the object is also obligatorily animate. With class 2 verbs, the subject may be either animate or inanimate and the -an- object also.

In syntactic pattern B, object #1 is reciprocal fixed object, and object #2 is optional PNP_I.

In syntactic pattern C, all object #1's are animate, but their semantic/syntactic role in the sentence is determined by the kinds of NP's object #2 is. For example, if object #2 is an object of inalienable possession, reciprocal object #1 is the possessor object. If object #2 is a co-ordinate object, it is the fixed object of the verb. But if object #2 may be either animate or inanimate and is neither a co-ordinate object nor an IP object, reciprocal object #1 is here considered to be the benefactive object.

In syntactic pattern D, reciprocal object is in the role of possessor of IP₂ object #2 (the possessed), and object #3 occurs as co-ordinate object.

In the reciprocal extended form, some verbs manifest multivalence in new areas, particularly in association with IP-type objects, with which several more verbs are associated.

8.31. Summary of Facts of the Reciprocal Extension

All subjects and reciprocal extension-shape objects are plural.

A. Kinds of verbs

Only agentive verbs occur in the reciprocal extended shape.

B. Syntactic patterns (four types)

1. S NP_{ag} + rec V
2. S NP_{ag} + rec V ± PNP_I
3. S NP_{ag} + rec V + NP + PNP_I (IP₂)
4. S NP_{ag} + rec V + NP_{obj.fx.} + NP_{obj.fx.} ± PNP_I (IP₂ + C)

C. Case functions

The reciprocal (R) case function was identified, being represented by the reciprocal shape -an- as object # 1. Depending upon the kinds and combinations of following NP's (if and when they co-occur), this reciprocal extension shape was variously identified as (1) reciprocal pronoun object of the verb ('each other'), (2) genitive possessor object in combinations forming objects of inalienable possession, (3) benefactive object, or (4) objects of inalienable possession plus co-ordinate object.

When object # 2 occurs, it does so as one of the objects of inalienable possession (i.e. if it represents a body part or inalienable part of a living object--or an inanimate object in personification); it may represent a co-ordinate object; or it may represent the animate or inanimate fixed object (i.e. D or O) in combination with the benefactive aspect of the reciprocal extension shape.

CHAPTER 9

THE BACK-AND-FORTH EXTENSION

9.0. Introduction

In the extension shape -an- three verbs occur, for example:

- a. Omwána yeelukhanânga.
Child he-is running back and forth.
- b. Abaána beelukhanânga.
Children they-are running back and forth.

The subject, unlike that of a reciprocal verb, may be either singular or plural. The semantic interpretation does not indicate the occurrence of an object (except for a recent extension of meaning to be discussed later) associated with these verbs. However, semantically a 'back-and-forth' action is indicated. These facts, therefore, support the notion that these verbs occur in an extended shape homophonous with that of the reciprocal extended shape and the comitative shape, but that syntactically and semantically they represent another type of extension which will here be termed the 'back-and-forth' extension and will be given this extension symbol: V.

9.1. Descriptive Verbs in the Back-and-Forth Extended Shape9.11. Syntactic Pattern A

9.111. Grammatical Component

Syntactic pattern A provides these core elements: subject + back-and-forth verb. Actually, this type of clause is descriptive, but in order to distinguish the two, this one will be termed the

'back-and-forth descriptive' clause (B-F Des.).

Sample Sentences:

Class 1

- a. Om̀wána yeelukhanânga.
Child he-is running back and forth.
- b. Abaána beelukhanânga.
Children they-are running back and forth.

The subject is animate, may be singular or plural, and is an actor subject, for this verb imperativizes:

Yilukhána! - Run back and forth! (singular)

Yilukháne! - Run back and forth! (plural)

Affiliations

In this extended form as a descriptive verb, no pronominal or clausal affiliations occur, except SP sequential affiliation.

The base verb -rats- 'kick' is agentive, but it occurs in a new area of multivalence in this extended shape in a descriptive syntactic pattern: subject + back-and-forth verb:

- a. Om̀wána aratsanânga.
Baby he-is waving his arms and legs back and forth.
- b. Abaána baratsanânga.
Babies they-are waving their arms and legs back and forth.

The following schema describes the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Simple Back-and-Forth Shapes →

$$\left\{ \begin{array}{l} \text{Actor-Subject Back-and-Forth Shape} \\ \text{(Class 1)} \end{array} \right\} \left\{ \begin{array}{l} + \text{animate} \\ \pm \text{plural} \end{array} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

0.0 Actor Subject →

$$\left\{ \text{Actor Subject} \right\} \left\{ \text{Class 1} \right\} + \text{Simple Back-and-Forth Shape} + \#$$

9.112. Lexical Entries

1. Verbs of Class 1

-ilukhán- 'run back and forth'

-ratsán- 'wave arms and legs back and forth'

V. B-F Des. A. 1. [Act _____ (L)]

9.2. Agentive Verbs in Back-and-Forth Extended Shape9.21. Syntactic Pattern A

9.211. Grammatical Component

Core elements for syntactic pattern A are subject + back-and-forth verb + object #1.

Sample Sentence:

Class 1

Abaána beelukhana tsimbilo.
Children they-run relay race.

Only the multivalent agentive base verb -ilukh- 'run' occurs in this extended form, and it occurs in an expanded semantic interpretation of -ilukhán-. This interpretation has come about with the racing competitions among the schools. Originally tsimbilo meant 'fast,' but now its meaning has been extended to include the meaning of a 'race,' and as such, the verb occurs in the agentive syntactic pattern: Subject + verb + object #1.

The subject is both obligatorily animate and obligatorily plural. The verb in this extended form, together with tsimbilo 'fast/race' indicates running a relay type of race. (The object with the base-verb form indicates an ordinary race.)

Pronominal affiliations

The object may occur as OP in the sequential affiliation.

Batsiilukhána. - They it (relay race) run.

Clausal affiliations.

It may occur as a fronted grammatical subject in the passive affiliations, with the agentive NP occurring optionally as PNP_{ag} in a position to the right of the passive verb:

Tsimbilo tsiilukhanwa (nênde abáána).
Relay race it is being run (by children).

This object will be termed a co-ordinate object.

No ergative or instrumental verbs occur in the back-and-forth extended shape.

The following sketch delineates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Simple Back-and-Forth Shapes →

$$\left\{ \begin{array}{l} \text{Agentive-Subject Back-and-Forth Shape} \\ \text{(Class 1)} \end{array} \right\} \left\{ \begin{array}{l} + \text{ animate} \\ + \text{ plural} \end{array} \right\} + \#$$

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Co-ordinate Receiver of Action} \\ + \text{ Simple Back-and-Forth Shape} + \text{ ______ } + \# \end{array} \right\} \parallel \left\{ \begin{array}{l} \text{Agentive Subject} \\ \text{Class 1} \end{array} \right\}$$

9.212. Lexical Entries

1. Verbs of Class 1

-ilukhán- 'run in relay'

V. Ag. A. 1. [Ag _____ C (L)]

9.3. Entailing Verbs in Back-and-Forth Extended Shape

9.31. Syntactic Pattern A

9.311. Grammatical Component

Core elements for syntactic pattern A are these: subject + back-and-forth verb.

Sample Sentences:

Class 1

- a. Isíongo yatikhána.
Waterpot it-is cracking back and forth.
- b. Tsisíongo tsiatikhána.
Waterpots they-are cracking back and forth.

Subjects are obligatorily inanimate and may be singular or plural. There are no objects and, therefore, no affiliation except the SP sequential affiliation: Yatikhána. - It is cracking back and forth. The L₁ subject will be termed an 'entailing' subject.

The following sketch indicates the semantic-syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

0.0 Simple Back-and-Forth Shapes →

$$\left\{ \begin{array}{l} \text{Entailing-Subject Back-and-Forth Shape} \\ \text{(Class 1)} \end{array} \right\} \left\{ - \text{animate} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Subject →

$$\left\{ \text{Entailing Subject} \right\} \left\{ \text{Class 1} \right\} + \text{Back-and-Forth Shape} + \#$$

9.312. Lexical Entries

1. Verbs of Class 1

-atikhán- 'crack back and forth'

V. Erg. A. 1. [(L₁ _____ (L))]

9.32. Syntactic Pattern B

9.321. Grammatical Component

Core elements for syntactic pattern B are subject + back-and-forth verb + object #1.

Sample Sentences:

Class 1

- a. Isíongo yatikhana tsinzáfwa.
Waterpot it-cracks back and forth all over cracks.
- b. Tsisíongo tsiatikhana tsinzáfwa.
Waterpots they-crack back and forth all over cracks.

Class 2

- a. Isíongo yatikhana mubitónye.
Waterpot it breaks into pieces.
- b. Tsisíongo tsiatikhana mubitónye.
Waterpots they-break into pieces.

The subject is obligatorily inanimate and may be singular or plural. Object #1 may be in a locative shape NP or in an ordinary NP shape, but it is obligatory and obligatorily plural. The association of the back-and-forth verb form with an ordinary NP shape indicates semantically 'to crack.' The association of the back-and-forth shape of the verb with the locative NP shape indicates, semantically, 'to break into pieces.'

affiliations.

Next to be determined is whether the syntactic behavior of both classes of verbs is the same with the two types of NP's with which it can be associated. Object #1 of class 1 verbs occurs neither in a sequential (except SP sequential) nor in a clausal affiliations but locative object #1 of class 2 verbs may occur as locS in a sequential affiliation:

$$\left\{ \begin{array}{c} Y \\ Tsi \end{array} \right\} \text{atikhanamwô.} - \left\{ \begin{array}{c} It \\ They \end{array} \right\} \text{break into them (pieces).}$$

Object #1 of class 1 verbs will be termed a co-ordinate object, but of class 2 verbs it will be termed the 'object of result' (Rt). Thus it was observed that -atikh- in the back-and-forth extended form (i.e. -atikhán-) is multivalent in its syntactic behavior.

Semantic/syntactic subcategorization rules to be added to the grammatical component are delineated by the following sketch.

Strict Semantic Subcategorization Rules

0.0 Simple Back-and-Forth Shapes →

$$* \left\{ \text{Locative}_1\text{-Subject of Back-and-Forth Shape} \right\} \left\{ \begin{array}{l} - \text{animate} \\ \pm \text{plural} \end{array} \right\} + \#$$

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Co-ordinate Receiver of the Action} \\ \text{Result of the Action} \end{array} \right\} \left\{ \begin{array}{l} - \text{animate} \\ + \text{plural} \end{array} \right\} + \#$$
General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \begin{array}{l} \text{Co-ordinate Receiver of Action} \\ \text{Result of Action} \end{array} \right\} \parallel \left\{ \text{Locative}_1 \text{ Subject} \right\} \left\{ \begin{array}{l} \text{Class 1} \\ \text{Class 2} \end{array} \right\}$$

+ Simple Back-and-Forth Shape + _____ + #

*Note: Although the entailing affiliation does not occur with verbs in this shape, the subject of these verbs will still be regarded as performing the case function of locational locative since it is still the locational locus of the action indicated by the verb.

9.322. Lexical Entries

1. Verbs of Class 1

-atikhán- 'crack back and forth all over'V. Ent. B 1. [L₁ _____ C (L)]

2. Verbs of Class 2

-atikhán- 'break (into pieces)'V. Ent. B 2. [L₁ _____ Rt (L)]9.4. Stative verbs are zero in this extended shape.9.5. Conclusion

Very few verbs occur in the back-and-forth shape of extended verbs. Some verbs in this extended shape do not remain in the same

classifications as in the base-verb forms. For example, the agentive verb -rats- 'kick' may now occur as a descriptive verb in a descriptive syntactic pattern of subject + back-and-forth verb. The verb -ilukhan- 'run back and forth/run a relay' retains its base-verb syntactic multivalence, the difference between the two forms being semantic.

No ergative or instrumental verbs occur in this extended form, nor do any stative verbs occur in it. But one entailing verb -atikhan- 'crack back and forth/break into pieces' may occur with a new type of multivalence in that, in addition to association with an optional co-ordinate object, it may now be associated with a locative object of result, which can occur as locS in a sequential affiliations.

The entailing affiliations does not occur with -atikhan-, nor does any other clausal affiliation.

9.6. Summary of Facts of the Back-and-Forth Extension

The subject of this extension may be singular or plural. Semantically, a back-and-forth action of the verb is indicated.

A. Kinds of verbs

1. One multivalent verb, i.e. -ilukh- 'run,' occurring as descriptive or agentive base verb, occurs also in the back-and-forth extension shape: -ilukhan- 'run back and forth,' and one verb originally classified as an agentive base verb now occurs with the semantic interpretation of 'waving (arms and legs) back and forth.' This second verb with this added multivalence (and possible polysemy) is -ratsan-.
2. One multivalent verb occurs in agentive clauses: -ilukhan- 'run relay race.'
3. One entailing verb (-atikhan- 'crack back and forth all over/

break into pieces') occurs in this extended form, the semantic interpretation being 'crack all over' if object #1 is an ordinary NP, and 'break in pieces' if object #1 is in the shape of locNP.

B. Syntactic patterns

1. Descriptive verbs occur in one syntactic pattern in this extension:

S NP_{act} + back-and-forth V

2. The agentive verbs occur in this syntactic pattern:

S NP_{ag} + back-and-forth V + NP_{obj.fx.}

3. The entailing verb occurs in two syntactic patterns:

a. S NP_{L1} + back-and-forth V

b. S NP + back-and-forth V + NP_{obj.fx.} (of locative or of regular noun shape--a co-ordinate object or and object of result, respectively.)

C. Case functions

One new case function was identified: The object of 'result' (Rt).

CHAPTER 10

THE COMITATIVE EXTENSION

10.0. Introduction

Three verbs (-yíl- 'take,' -leer- 'bring,' and -its- 'come') occur in an -an- extended shape: -yilan-, -leeran-, and -itsán- with the semantic interpretations of 'take along' (i.e. when you go for another reason), 'bring along' (i.e. when you come for another reason), respectively. When these forms occur, it is understood that the principal purpose of the subject is to 'go' or 'come' for some reason other than that of going, or coming, along with someone or something. Often this main purpose is expressed in a dependent clause:

Niwitsa okhúngoonya, oleranê omukaâte.

When you come to visit me, bring along some bread.

If the main purpose is not overtly expressed, as often happens, the use of this verb form in association with subject and object NP's indicates another activity, which is the principal purpose of any action, and that the expressed action is concomitant with it. It will, therefore, be termed the 'comitative' extension.

Only the independent clauses, in which the comitative extended form of the verb occurs, will be analyzed here. It will be noted that -leer- and -yíl- are agentive base verbs, and -its- is descriptive.

10.1. Descriptive Verbs in the Comitative Extended Shape10.11. Syntactic Pattern A

10.111. Grammatical Component

Core elements of syntactic pattern A are subject + comitative verb + object #1.

Sample Sentences:

Class 1

- a. Omukhási yeetsana nênde omwána.
Woman she-comes along with/brings along child.
- b. Abakhási beetsana nênde abaána.
Women they-come along with/bring along children.
- c. Omukhási yeetsana nênde eshimwelo.
Woman she-comes along with/brings along basket.
- d. Abakhási beetsana nênde ebimwelo.
Women they-come along with/bring along baskets.

The subject is obligatorily animate but may be either singular or plural. The object may be animate or inanimate and either singular or plural.

The object of this verb form is obligatorily of the shape PNP, the preposition being na or nende 'with' preceding NP's.

Pronominal affiliation

This object prepositional phrase may occur in the shape of a prepositional sequential affiliation phrase (PSCP), the preposition being nina- and its pronominal object being an absolute pronoun:

Yeetsana ninabô. - She is coming along with/bringing them along.

Clausal affiliation

The form of the verb of this class is not associated with these NP's in any clausal affiliation, but the verb imperativizes:

Yitsana ninabô. - Come along with them/bring them along.

The subject, then, will still be termed 'actor' subject.

The object is represented in syntactic pattern A by PNP when nominal forms occur. This object will be termed 'comitative object a' (CMA).

The following sketch shows the semantic/syntactic subcategorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \text{Comitative Receiver}_2 \text{ of the Action} \right\} \left\{ \begin{array}{l} \pm \text{ animate} \\ \pm \text{ plural} \end{array} \right\} + \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \text{Comitative Receiver}_2 \text{ of Action} \right\} \parallel \left\{ \text{Actor Subject} \right\} \left\{ \text{Class 1} \right\}$$

+ Simple Comitative Shape + _____ + #

10.112. Lexical Entries

1. Verbs of Class 1

-itsán- 'come along with/bring along'

VI. Des. A. 1. [Act _____ CMa (L)]

10.2. Agentive Verbs in the Comitative Extended Shape

10.21. Syntactic Pattern A

10.211. Grammatical Component

Core elements provided by syntactic pattern A are subject + comitative verb + object #1.

Sample Sentences:

Class 1

- a. Omukhási ayilana ingokhô.
Woman she-takes along chicken.
- b. Abakhási bayilana tsingokhô.
Women they-take along chickens.
- c. Omukhási ayilana lihôndo.
Woman she-takes along squash.
- d. Abakhási bayilana amahôndo.
Women they-take along squashes.

The subject is obligatorily animate and may be either singular or plural. The object may be animate or inanimate and either singular or plural.

The application of further criteria yielded these results.

Pronominal affiliation

The object may occur in the sequential affiliation as OP:

Atsiyilanâ. - She them (chickens) takes along.

Clausal affiliation

The object may occur as fronted grammatical subject in the passive affiliation with the subject of the referent sentence occurring obligatorily as PNP:

Ingokhô yilanwa nênde omukhâsi.
Chicken it-is being taken along by woman.

In these independent clauses, these verbs, in association with their subject and object NP's, behave syntactically in the same way as agentive verbs in their base forms (except for the obligatory PNP in the passive affiliation). the principal difference here being in the semantic interpretation and in the ability of these verbs to occur in these independent clauses concurrently with dependent clauses in which the principal purpose of the action of the subject is expressed. The subject of the referent sentence would seem, in the passive sentence, to be playing the role of a modified agentive prepositional phrase and will here be considered to be a PNP_{ag}, and the object will here be termed the 'comitative' object b (CMB):

The following schema delineates the semantic/syntactic sub-categorization rules to be added to the grammatical component.

Strict Semantic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \text{Comitative Receiver}_1 \text{ of the Action} \right\} \left\{ \begin{array}{l} \pm \text{ animate} \\ \pm \text{ plural} \end{array} \right\}_+ \#$$

General Semantic/Syntactic Subcategorization Rules

1.0 Object #1 →

$$\left\{ \text{Comitative Receiver}_1 \text{ of Action} \right\} \parallel \left\{ \text{Agentive Subject} \right\} \left\{ \text{Class 1} \right\}$$

+ Simple Comitative Shape + _____ + #

10.212. Lexical Entries

1. Verbs of Class 1

-yilan- 'take along with'-leeran- 'bring along with'

VI. Ag. B. 1. [Ag _____ CMB (L)]

10.3. The Verb -h-

One verb, -h- 'give,' which so far has occurred only in the base form, also occurs in the shape of -haan- 'give/offer/provide.' In its base shape, it is obligatorily a three-nominal verb with an optional PNP₁: subject + verb + object #1 (benefactive) + object #2 (receiver of action) ± object #3 (instrumental). In the shape of -haan- it is two-nominal, obligatorily, with an optional instrumental object. Its meaning and syntactic behavior place it neither in the reciprocal, back-and-forth, nor comitative category. It behaves syntactically as an obligatorily two-nominal agentive verb with an optional third NP:

Omundu ahaana amapeesa (nende amakhono amasiro).
 Man he-gives money (generously--with heavy hands).

It occurs in sequential affiliation with OP:

Akahaana (ninakô).
 He it (money) gives (with them--heavy hands).

It occurs also in the passive clausal affiliation:

Amapeesa kahaanwa (nende omundu/nende amakhono amasiro).
 Money it-is given (by man/with heavy hands--generously).

No benefactive object can occur with this shape. Since the syntactic behavior is the same as that of agentive verbs, -haan- will be considered an agentive base verb with a different semantic interpretation from that of -h-.

10.4. Conclusion

Three verbs occur in the comitative extended shape; two of them are of the semantic oppositions -yilan- 'take along' and -leeran- 'bring along'; the other one is -itsán- 'come along with/bring along.' The action performed by the subject of the verb is secondary to the principal, purposeful action, hence the term 'comitative.'

Comitative verbs occur in two syntactic patterns. In syntactic pattern A the constituents are subject + verb + object. This object may occur as OP in sequential affiliation or as fronted grammatical subject in the passive affiliation, with the subject of the referent sentence occurring obligatorily as PNP_{ag} in a position to the right of the verb. With the exception of the modified agentive PNP (i.e. now obligatory) in the passive affiliation, the syntactic behavior is the same as agentive base verbs. The syntactic difference consists in the capacity of clauses with such verbs to co-occur with yet another clause indicating a primary purpose of action. The semantic interpretation of these verbs occurring in the comitative extended shape is not the same as that of their base shapes. Therefore, the term 'comitative' will be applied to them.

Syntactic pattern A of descriptive verbs differs from A of agentive verbs in the types of object with which they are associated and, consequently, in their syntactic behavior: Syntactic pattern A

of descriptive verbs contains PSAP-type object, and no clausal affiliations occur.

The verb -haan- 'give/provide' appears to be an extended -an- shape verb, a base verb of the obligatorily two- and optionally three-nominal class of agentive verbs.

10.5. Summary of Facts of the Comitative Extension

Three verbs (-yilan- 'take along,' -leeran- 'bring along,' and -itsán- 'come along (with)') occur in the comitative extension shape which, as considered in this study, is homophonous with the reciprocal and back-and-forth shape, the characterizing features of this extension being semantic, that of 'bringing or taking along' as one comes, or goes, somewhere for another purpose, plus its ability to co-occur in an independent clause in connection with a dependent clause expressing the main purpose of the 'going' or 'coming.'

A. Kinds of verbs

1. One descriptive verb (-itsán- 'bring along/come with') occurs.
2. Two agentive verbs (-yilan- 'take along' and -leeran- 'bring along' occur.
3. The verb -haan- 'provide/offer' occurs in this shape but seems to have the meaning and syntactic behavior of a base verb.

B. Syntactic patterns

1. The descriptive verb occurs in one syntactic pattern:

S NP_{act} + com V + PNP

2. The agentive verbs occur also in only one syntactic pattern:

S NP_{ag} + com V + NP_{obj.fx}.

C. Case functions

Two new types of one case function were identified: Comitative a and b (C_{Ma}, C_{Mb}). C_{Ma} represents the semantic/syntactic

role of the PNP object of -itsán- 'come along with', and Gmb represents the case function of the NP objects of the verbs -yilan- 'take along' and -leeran- 'bring along,' the two agentive verbs. No other case functions were identified.

CHAPTER 11

CONCLUSIONS

11.0. Introduction

In this analysis, the attempt has been made to show (1) that there is a set of case functions operative in the Shisa language, (2) that these functions can be discovered by means of observing surface syntactic behavior (as opposed to deep-structure analysis), plus the employment of certain semantic features, such as animacy, inanimacy, number, meaning, and so on. An attempt was also made (3) to establish a code for indicating the grammatical context for lexical entries of verbs and their extensions.

11.1. Levels of Classification

Verbs in their base forms were observed at first through six levels of classification:

1. They were first classified as uni-nominal and/or multinominal verbs, according to the number of nominals with which they were capable of being associated within syntactic patterns (the optional locNP being excepted).
2. They were then classified according to the minimum and maximum number of nominals with which they have the capacity to be associated (pp. 33-34).
3. Next they were classified according to their separate abilities to occur in affiliations of various types: (1) Pronominal: sequential and mixed; and (2) clausal.

4. The foregoing three classifications led to a fourth, that of four distinct types of contrastive clauses in which verbs in their base forms may occur: (1) Descriptive, (2) Agentive--with two subgroups (a) ergative and (b) instrumental, (3) Entailing, and (4) Stative.
5. The fifth classification was according to the range of syntactic patterns in which each verb may participate.
6. The sixth level was semantic, with such features as animacy or inanimacy, number, and meaning of NP's with which the verbs were capable of occurring--and occasionally movement, liquid, and so on--providing bases for more delicate classifications.

Each of these six classifications produced a grouping of ever greater refinement, but a further level of delicacy was necessary to make the lexical entries adequately descriptive. The description of the semantic/syntactic roles of NP's in association with verbs within clauses was needed. The answer was found in a seventh level of classification:

7. By further classifying NP's according to their case functions (i.e. their semantic/syntactic roles) within clauses, was found an adequate context of the grammatical component for the lexical entries.

Once the verbs were classified according to the types of clauses in which they could occur, it was not necessary to include the first three levels of description in the remainder of this study--although terms of those levels were often used. All subsequent classifications were based on that of the four clause types and two subtypes in which verbs may occur.

Some clause types, particularly the agentive, were found to have several syntactic pattern variations, others only a few. For example, there were three agentive-clause syntactic patterns with three verbs in subgroups, capable of occurring in five syntactic patterns. On the other hand, descriptive verbs occur in only one syntactic pattern with two variations. The other verbs fall in between these two extremes in their ability to occur in various syntactic patterns.

Determining case functions of NP's was accomplished by testing to see if NP's in their relationships with the verbs could occur in pronominal and/or clausal affiliations, by interchanging positions of NP's for varying behavior patterns, and by the ability of the verb to be associated with animate or inanimate subjects or objects, or with singular and/or plural subjects and objects, by meaning, and a few other semantic features.

11.2. Verbs Occurring in Verbal Extensions

After the base verbs observed in their various behavior patterns in the four contrastive clause types (i.e. Descriptive, Agentive, Entailing, and Stative), their behavior in six extended forms was investigated: Benefactive, instrumental, locative, reciprocal, back-and-forth, and comitative--in that order.

In the benefactive and instrumental extensions, most verbs remained in rather consistent groupings, so much so that it seemed they could be placed in clusters, all those within a cluster being characterized by the same behavior and thus capable of being given cluster symbolizations, which situation would greatly simplify lexical entries--perhaps something similar to Whiteley's 'case complexes' (March, 1972). However, occurrences in the locative extension (in which all but two verbs occurred, -h- 'give' and

-búl- 'not be/not have') brought about a splintering of these groupings. Further divisions occurred in the last three extensions until only parts of two of the original clusters remained, and of these clusters a mere two, three, or four verbs remained to a cluster. By far the greater majority fell finally into individual classifications. Perhaps if thousands of verbs were tested, there might conceivably be more to a cluster.

Nevertheless, some broad, general classifications were possible. These classifications were as follows:

1. Descriptive verbs only, termed here 'pure' descriptive verbs
2. Agentive verbs only (termed 'pure' agentive verbs)--plus the instrument subgroup -samb- 'burn'
3. Entailing verbs only (i.e. 'pure' entailing verbs)
4. Stative verbs only ('pure') statives)

Such verbs never crossed the classification lines, i.e. throughout the testing for behavior as base verbs, and in the extended forms, some agentive verbs remained agentive throughout, one stative verb remained stative, and so on, thus remaining in their original verb-type classification. Other verbs occurred in more than one type of clause in the following combinations:

1. Descriptive-Agentive

-huny- 'smell/take whiff of'

-hulil- 'hear'

Subgroup 1--Ergative: -chaak- 'begin'

-lol- 'see'

-teekh- 'cook'

-saab- 'wash'

-reeb- 'ask/question'

-soom- 'read'

-ilukh- 'run'

-bool- 'say/speak'

-onoon- 'spoil/sin'

-hom- 'smear (mud)'

2. Agentive-Back-and-Forth

-rats- 'kick'

3. Descriptive-Comitative

-its- 'come'

4. Agentive-Comitative

-leer- 'bring'

-yil- 'take (to a place)'

5. Descriptive-Agentive-Stative

-kon- 'sleep/lie down/sleep with (sexually)'

6. Descriptive-Stative

-lwal- 'be/become ill'

7. Descriptive-Agentive--Back-and-Forth

-ilukh- 'run'

11.3. Summary of Case Functions

The following case functions for all base and extended verb sentences were identified:

Actor (Act), process (Pc), agentive (Ag), dative (D), objective (O), optional locative (L)--occurring in parentheses always, and obligatory locatives: locational (L_1) and directional (L_2), also locative fixed object (L), instrumental (I)--in both PNP and NP shapes--genitive (G) possessor of possessed (O) objects of inalienable possession (i.e. IP_1 and IP_2), benefactive (B), purpose (P), material used (M), nominative (N), stative (St), co-ordinate (C), reciprocal (R), result (Rt), comitative a (CMA), and comitative b (CMB).

Some functions seem to be compound case functions, i.e. they appear to occur in a combination of two case functions as one, for example, stative-locative (Lst), stative-process (Pc.st), stative-dative (Dst), stative-objective (Ost), reciprocal-genitive (R_G), and reciprocal-benefactive (R_B), also stative-co-ordinate (Cst).

11.4. Lexical Entries

At the beginning of this study (when it had been decided to seek a means of making adequate lexical entries for verbs and verbal extensions of the Shisa dialet), this stance was adopted: Lexical entries should provide the grammatical context of an item.

For verbs the Standard English dictionaries employ the terms 'transitive' (v.t.) and 'intransitive' (v.i.) but make no further use of them. That is, they give no sentences or other examples to illustrate these facts, and the user of a 'foreign' language is forced to rely upon his English intuitions to discover the nature of the foreign language with which he is working.

Some bilingual dictionaries of standard languages (e.g., English-German) list a verb as v.a. (i.e. transitive) or v.n. (i.e. intransitive), and if the verb is irregular, an ir. precedes and v.a. or v.n. followed by meanings and then idiomatic expressions. Where it obtains, a list of compounds with their meanings is given.

In some Standard Swahili-English dictionaries (Johnson's, 1969, is considered the best at present) only the fact that an entry is a verb (v.) is indicated with no indication as to whether it is transitive or intransitive, irregular, or whether--if it is transitive--an object may or may not be the OP-, locS-, or some other type. Also, although extended forms of verbs are often included in a verb entry,

this is not always the case. They do not show whether the absence of a particular extended form means that it does not occur in the language, whether the verb has been inadequately researched, or whether it is so seldom used that it is not considered important enough to enter.

If lexical entries should provide the grammatical context of an item, present grammars are woefully lacking in this respect, and it was imperative to find a new and adequate means of making proper verbal entries. This fact was the reason for this study.

Through several levels of classification, a basis was established for classifying verbs into four types of clauses in which they may occur: Descriptive, Agentive--with subgroups ergative and instrumental--Entailing, and Stative. It was also determined in what specific types of syntactic patterns these verbs could occur and which semantic features, such as animacy, inanimacy, plurality, and so on were necessary to a further classification. Then they were classified according to the case function(s) (in which Fillmore, 1968, was loosely followed) which they might perform. Thus, it is believed that an adequate grammatical context for verb lexical entries has been found. A description of the type of verb entry recommended by this analysis follows.

When a base verb is entered in the dictionary, it introduces a verbal hierarchy, consisting of the base verb with its clause type(s) or classification(s); the type(s) of syntactic pattern(s) in which it can occur; its classification according to the semantic features of animacy, inanimacy, meaning, and so on with which it may be associated in its relationships to nominals with which it co-occurs in clauses; and the case functions which the various NP's perform within given syntactic patterns. Case function descriptions were given in what was termed by Fillmore (1968) 'case frames.'

In addition to case frames, other symbols were used to represent the grammatical element treated of. For example, Roman numerals were used to represent the particular extended form in which a verb may occur; capital letters represented syntactic patterns; Arabic numerals represented the semantic features of animacy, and so on; and the abbreviations of the various types of clauses were employed to indicate the type(s) of clause(s) in which a verb might occur: Des./Ag./Erg./Instr./Ent./St. Each verb together with its extension(s) and their sets of grammatical symbols and case frames form a part of the verbal hierarchy.

In Appendix IV is a listing of the suggested lexical entries to be made for each verb investigated in this study. (See pp. 327-352)

11.5. Final Conclusions

The seven levels of description of the verbs observed for this analysis have proven to be adequate for the rules of the grammatical component and for the grammatical context of the lexical entries. Perhaps if thousands, or even hundreds, of verbs were observed, a grouping of clusters of verbs, each cluster being grouped under one 'umbrella title', might be found possible, but not with this small sampling.

With this descriptive approach, it will be necessary to rewrite the grammars and revise the word lists gathered for dictionaries, but these items have long needed revising.

It has been shown that the category of case is operative in the Shisa dialect, that there is a set of case functions in the language, and that an adequate description of Shisa must include a description of these functions.

It has also been shown that semantic features, such as animacy, meaning, and number are also necessary to an adequate description.

More research needs to be done on the other verbal extensions of Shisa, but that would have been too extensive for this study. However, the method employed in this analysis could be used for any further research into the syntactic behavior of other types of Shisa sentences, or of more of the same types.

ABBREVIATIONS

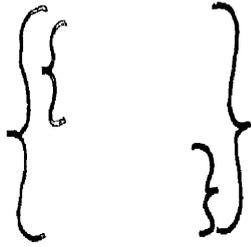
| | |
|--|--|
| (a) = animate | Pc = process |
| (a/i) = animate/inanimate | PNP = prepositional noun phrase |
| Abs Pron = absolute pronoun | PNP _{ag} = agentive prepositional noun phrase |
| adj = adjective | PNP _I = prepositional instrument noun phrase |
| adv = adverb | poss = possessive |
| Ag/ag = agentive | ppf = pre-prefix |
| BVR = base-verb root/radical | PP _I = instrumental prepositional phrase |
| CC = noun-class concord | PPrP _I = instrumental prepositional pronoun phrase |
| Cl. = clause/class | PS = passive sentence |
| cls = class | ps/pass = passive |
| dem = demonstrative | PSAP = prepositional sequential affiliation phrase |
| Des = descriptive | PSAP _I = instrumental prepositional sequential affiliation phrase |
| Ent = entailing | psd = possessed (object) |
| Erg/erg = ergative | psr = possessor |
| Ext = extension | S = sentence |
| ExtS = extension suffix | SA(P) = sequential affiliation (phrase) |
| (i) = inanimate | SP = subject prefix |
| Instr/I = instrumental | St/st = stative |
| inten = intensifier | TP = tense prefix |
| IP = inalienable possession | TS = tense sign |
| loc = locative | V = verb |
| locNP = locative noun phrase | VR = verb root/radical |
| locS = locative suffix | |
| NP = .noun/noun phrase | |
| NP _I = instrumental noun phrase | |
| Nom = nominative | |
| OP = object prefix | |

| | |
|--|---|
| Act = actor | L ₁ = locational locative |
| Act _C = actor-coordinate | L ₂ = directional locative |
| Ag = agentive | L _{st} = stative-locative |
| B = benefactive | M = material used |
| C = co-ordinate | N = nominative |
| C _{Ma} = comitative <u>a</u> | O = inanimate (objective) object |
| C _{Mb} = comitative <u>b</u> | O _P = 'possessed' body part, etc. of inalienable possession |
| C _{st} = stative co-ordinate | O _{st} = stative-objective |
| D = animate (dative) object | P = purpose |
| D _{st} = stative-dative object | P _c = process (subject) |
| G = genitive | P _c _C = process-coordinate |
| G _{st} = stative-genitive (i.e. of verb <u>-būl-</u> 'not have') | R = reciprocal |
| I = instrumental | R _B = reciprocal-benefactive |

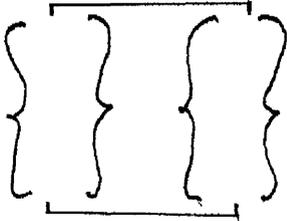
CONVENTIONS

I. For Grammatical Component and Lexical Items

| | |
|--------------|---|
| ┌──────────┐ | Matching pairs. Used where ambiguity might be possible. |
| (X) | Either may occur, one must, but not both. |
| () | Optionality |
| + | Obligatoriness |
| ± or () | Optionality |
| / | Alternative or 'and' ('and'/'or') |
| → | Indicates one form is 'to be rewritten as' possessor of the feature in question. |
| * | Indicates 'unacceptable' before Shisa words or sentences. Indicates an explanatory note follows below. |
| | Indicates a paradigmatic choice: |
| { } | One member in the brackets must be chosen. Also, its choice is correlated with the choice of the element in the same position in an identical set of brackets which is a part of the same rule. |
| | Indicates that the environment in which the process takes place is that set of grammatical features which follows. |
| + _____ | Indicates the position of the syntactic pattern of the item to be rewritten. |
| ≠ | Indicates item on left of symbol becomes item on the right. |
| # | At the end of a rule indicates the end of a sentence, at least as far as the appearance of other objects/subjects is concerned. Also indicates the term 'number.' |
| ()+() | Indicates that either one, or both, may occur, but one must occur. |
| ↙ or ↘ | Indicates that the clause at the top where the upper part of arrow begins can occur in the commuted clause to which the lower arrow(s) is/are pointing. |



Internal set of brackets within a set of larger brackets indicates that the items enclosed in the left-facing brackets pertain to items on the left, outside the larger bracket. Those items enclosed in brackets pointing to the right pertain to items on the right outside the larger bracket, which item(s) may also be enclosed in brackets.



Where there is danger of ambiguity, the horizontal square brackets are used to indicate that top items co-occur, and bottom items co-occur, likewise the center items if these occur.

II. For Phonology

//

Frame for phoneme

[]

Frame for allophone and case frame

/--/

Element under consideration

Note: Some of these conventions were used by Scotton (1967).

Notes on Chapters

Chapter 1

1-3: A base-verb root (BVR) can be identified according to the following criteria: All verb roots are either minimal or extended. If a verb cannot be contracted, i.e. if no prefixes or suffixes can be subtracted from it, it is a minimal root; if it can be, it is an extended form. It is possible to suffix certain particles to Shisa minimal verb roots, whereby the meaning, and often the syntactic behavior, of the verb is altered or 'extended.' Such verb forms are termed extended verb roots, and the suffixes are themselves termed extensions or extension suffixes (ExtS). Unextended verb forms are, in this analysis, termed base-verb roots. A synonym for 'verb root' in this study is 'verb radical.'

A base-verb root has a characteristic shape, meaning, and syntactical function, all of which are usually modified with the addition of an extension. Resultant differences in shape, meaning, and/or syntactic behavior must, therefore, be attributed to the functions of the extension.

The surface shape of some roots is identical with that of an extended shape but cannot be contracted. Neither do these roots have the additional meaning commonly associated with such shapes. For example, -osí- 'wash' is in a shape identical with the causative shape, but the meaning is not 'cause to wash.' These same roots can be extended and are associated with the semantic interpretations characteristic of such extensions. For example, -osí- occurs in the benefactive (i.e.

-osilí-), instrumental, and locative extensions, all three of which are isomorphic: -osilí- 'wash for/with/in/etc.,' respectively. Such roots are also classed as base-verb roots.

The shape of another type of root is identical both in shape and meaning with an extended root, but this type of root cannot be contracted. For example, -rĭmbulul- 'unravel/unbraid' occurs in the reversive extended shape and has the characteristic meaning of the reversive extended form, but it cannot be contracted. It may, however, occur in other extension shapes: -rĭmbulusí- 'cause to unravel'--the causative extended form of -rĭmbulul-; or -rĭmbulukh- 'come unraveled'--the neuter shape of -rĭmbulul-. Such roots will also be termed 'base-verb roots.'

A third type occurs with both a base and an extended shape, but the meaning is the same for both. For example, -rék- 'set (as a trap)' is a base shape, and -rechí- is the causative. The meanings are the same, but the two are not always employed as alternates. Both are used for the idiom -rék-/ -rechí- -amarwí- 'set ears' (i.e. listen); -rek- omubéro 'set trap' can be said, but not *-rechí- omubéro (the causative shape). Other extensions with their characteristic meanings may be added to -rék-, but not to -rechí-. Such roots in their extended shapes will be considered to be extended, even though they lack the characteristic meaning commonly associated with them.

Structurally, the base verb can be said to consist of a base root + affixes. For a complete description of these affixes see Appendix III, pp. 317-326.

This description indicates the constituent members of a verb in a declarative or interrogative sentence. The imperative verb is composed of a different set of constituents. See p. 62

The most basic shapes of base-verb roots are consonant-(vowel) (-C(V)-) in monosyllabic verbs and consonant-vowel-(vowel)-consonant (-CV(V)C-) in dissyllabic verbs.

Chapter 2

1. The pronominal form of noun objects occurs as a prefix immediately preceding the verb root or, in the case of a locative NP, as a locative suffix. These particles are here termed 'object prefix' (OP) and 'locative suffix' (locS), respectively.
2. SP = 'subject prefix,' a particle in concordial agreement with the subject and obligatorily prefixed to the verb in all except imperative sentences. This particle is in the system of control.

Chapter 3

1. In the Journal of African Languages, Vol. 6, Part 3, 1967, an article by Carol M. M. Scotton was published (pp. 249-267). It was from this article that I borrowed the sketch as a means of summarizing each of my syntactic patterns. For this I have given recognition to Dr. Scotton on pp. 84-85 and on p. 88. I gave her credit for some of her conventions which I have used, most if not all of them being from her sketch.

It has been suggested that I mention some ways in which Dr. Scotton's article and my thesis are similar. This I wish to do at this time.

When first I decided to find the case functions of Shisa by means of surface behavior of verbs and the NP's with which they can be associated, I began grouping my referent sentences which I had collected during my 9½ months of research among the Shisa people of Kenya, East Africa. I grouped these sentences according to syntactic patterns, i.e. verbs associated with one NP into one group, then those with two, then three, and so on.

When this was done, I had a number of syntactic patterns with sample sentences for each. Then I decided to divide my presentation into two parts: the grammatical component and the lexical entries. This dual division had to be made for each syntactic pattern. The grammatical component needed to be organized according to the material at hand and the purpose of the study. Certain criteria were set up for testings to locate exact differences between or among the various NP's and the verbs which were associated with them in syntactic patterns. The format for all this was worked out.

The preparation of the format was a slow, painstaking matter. Each of those different syntactic patterns had to be labelled. At first I labelled them Syntactic Pattern I, Syntactic Pattern II, and so on. But later it occurred to me that I needed the Roman numerals for extension labels in the lexical entries. I changed the Roman numerals to Arabic numerals, but these latter numerals seemed necessary for lexical entries in the classification of verbs according to the semantic features employed at that level. Then I adopted the terms Syntactic Pattern A, B, C, and so on.

Examples of each pattern were needed in the format. I placed them under the title of the syntactic pattern in question, for example Syntactic Pattern A and then the sample sentences. Then I added the heading 'Grammatical Component.' (See Lyons, 1969, pp. 167-68) Under it I gave a resumé of the core elements of the syntactic pattern in question. I used various formulae for these resúmes for the sake of variety, among them the one which now occurs again in my thesis presentations. After this, the testing criteria were applied: semantic features, ability or inability of the NP's to occur in pronominal forms and what kinds, clausal transpositions possible, and such. From the results of testing of surface behavior, case functions were assigned. Then the division of lexical entries was presented.

I worked out the reciprocal extension according to this format and took it to Professor Whiteley, who was my tutor at that time. Professor Whiteley went over the material with me. He approved the titles for syntactic patterns, i.e. Syntactic Pattern A, B, and so forth, and made the following suggestions for changes:

1. The resumé of the syntactic pattern should be under the title: Syntactic Pattern A, B, and so on. He also suggested that I keep one standard wording for the resumé--and for other terms I should not use synonyms.
2. Change the term Example 1, Example 2, and so on, for referent sentences to Class 1, Class 2, and so forth.
3. Place the heading 'Grammatical Component' under the sample sentences, for in that way there would be better balance with the section on lexical entries.

The result? The pattern of presentation ever recurring in my thesis. However, it has been brought to my attention that much of my thesis is like Scotton's article. Searching out her article, I studied it carefully. Yes, in several ways mine seems to resemble hers: Titles of syntactic patterns, wording of resumes of syntactic patterns, and presentation of the sample sentences. Both of us have employed the same terms, and yet they are terms which many other linguists have used.

I would like to relate what I believe has happened. When I was ready to leave London to travel to Kenya for my research, Professor Whiteley told me about Dr. Scotton, gave me her name and address (Makerere University College, Kampala, Uganda, where she was on teaching and research assignment for one year), and told me to look her up and let her help me. I had never seen nor heard of her before.

After arriving in Kenya, I contacted her, and she gave me a date when I could come to see her--in May, 1970. I went to Kampala for one week, and she gave me generously of her time everyday but one during that week. She taught me much about transformational grammar, told me about Fillmore's case theory, and sold me her book Universals of Linguistic Theory by Bach and Harms, in which is found Fillmore's article on case.

With all this influence and working with Dr. Scotton, it is highly probable that I picked up some of her expressions, for I was very eager to build up my linguistic terminology. Also, she was a student of Professor Whiteley's when he was visiting scholar on campus at the University of

Wisconsin in the U.S.A. one year. Three students who studied under him that year did their doctoral dissertations in the verbal extensions of Swahili, each doing a different aspect of the extensions. Since Dr. Scotton and I were both students of Professor Whiteley, we naturally picked up many of his expressions and terms as well as many of his views on language.

I have given acknowledgement in my preface for Dr. Scotton's help, but here I would like to recognize again and express my thankfulness for all I have received from her consciously and unconsciously, particularly for her sketch and possibly for her form of presentation of the syntactic patterns, their resumes, and the sample sentences.

But from these points on, our analyses differ. Her analysis is intuitive, i.e. from deep structure, while mine is done according to criteria set up for surface behavior. She did no case study, neither did she divide her descriptions into the two areas of grammatical component and lexical entries. My work led to the identification of grammatical functions and lexical entries. She only suggested that these two areas should be included in a descriptive analysis.

Her hypothesis had to do with problems related to form and meaning of verbal extensions, and she said, "...a deep structure semantic and/or syntactic subcategorization is a necessary feature of any adequate description of the verb system" (p. 249). My hypothesis states that there is a set of case functions in Shisa and that this set can be found by means of surface behavior. One level of my research requires the semantic features of animacy and meaning,

but that is very limited.

She sought to prove that there is a system underlying explicit knowledge of language use. I sought to identify case functions and to provide a suitable vehicle for making lexical entries.

Scotton treated of deep structure semantic factors. I treated of surface factors--which can also be found in deep structure but are not considered to be identical with surface semantic features. She stated, "Therefore, in this paper, a feature such as that which divides verbs according to the meaning of their subjects as actors or directors, for example, will be called a general semantic feature" (p. 251). Many linguists have employed these terms (i.e. initiator, actor, benefactive, and so on), for example Fillmore, Lyons, Halliday, Hockett, and many others. I, therefore, did not feel it necessary to give Scotton special credit in this area. Rather I have given Fillmore the credit, for I have borrowed more from him in this area.

I did use what she termed 'strict semantic features, such as plus and minus animate in reference to a verb object' (p. 251). But so have many others. What is unique about mine is that, under Professor Whiteley's guidance, I kept to surface structure.

Scotton stated, "The verbs are placed in groups one through four according to the relationship of the subject to the action-meaning signified by the verb root" (p. 252). Her syntactic patterns were not always uniform. For example, in Group 1 she has a verb + object; but in Group 2 she has some sentences with verb + object and some with

verb + object + object. My syntactic patterns are uniform within themselves.

But the point to keep in mind is that her analysis is intuitive whereas mine is based upon criteria which were set up for surface, mainly syntactic, behavior: Pronominal and clausal affiliations, imperativization, and the semantic features of meaning and plus/minus animate.

Scotton made rather much of her 'Real World Picture' idea as a means of explaining some problem areas (pp. 252, 257, 261, 266, 267). This is an easy way out, but I used no such criterion.

She seems to consider that when two objects are present, one is always the indirect or benefactive object (p. 265). I have proven that these may be objects of inalienable possession or a direct object paired with the object of material used or simply an animate object followed by an inanimate object (e.g., -reeb- 'ask pupils questions,' where either object may be used as a direct object or both together may be two direct objects) or an indirect/benefactive object plus a direct object. I believe several such objects also exist in Swahili.

She stated in her conclusion (p. 266), (c), as follows: "Thus it seems that this study fails to support any distinction between syntax and semantics, in terms of levels of representation." I believe my study does support a distinction in levels. For one classification of verb levels is semantic, symbolized in the lexical entries by Arabic numerals. This Arabic numeral represents, however, only

the features of plus/minus animacy and meaning, and in the reciprocal extension--plural number. Furthermore, I do not believe that my use of semantic factors and Scotton's use have been the same.

In conclusion I would state that some of our terminology and form of presentation may be the same or similar, but others have used the same terminology and in some way have presented sample sentences with a discussion following. The fact that both of us have been students of the same professor, who has had something to do in guiding both of us in our research and planning of our theses, and that both of us have treated languages belonging to the same language family, in the same part of the world (i.e. Kenya), and in the same area of those languages (namely, verbal extensions), would not cause anyone to be surprised if we employed some of the same terminology and have some results which are similar, even though we arrived at these results independently, by different methods, and at different times.

2. See pp. 284-85 for meanings of abbreviations.
3. See pp. 286-87 for interpretations of conventions.
4. With the possible exception of -^Yinjil- 'stand up' to be explained and/or discussed under Syntactic Pattern A₁ of descriptive clauses, pp. 88-89. See p. 288 for explanation of base verbs.

Chapter 8

1. If the subject NP's are of different noun classes, e.g., Cl.3 and Cl.5, the SP bi-, the concordial SP for Cl.7--the plural of the 'things' class--is used.

2. The position taken in this analysis is that a two-nominal verb is so termed because of its capacity to be associated with two nominals. The fact that only one, or both, of these nominals may be represented in pronominal form does not alter the classification of the verb. What is obligatory is that these constituents must occur in some form. If one NP is optional, when it is represented, it may be in the shape of a noun or of a pronominal affiliation, a phenomenon which obtains with all verb classifications-- whether two-, three-, or four-nominal.

APPENDIX I

Chapter 2. 2.21. I. Uni-Nominal

Base verbs of the uni-nominal variety can be classified into two groups: (1) those always associated with only one NP and (2) those sometimes associated with only one.

One-nominal

1. Always--only

-sĭnjil- 'stand up'
 -khú1- 'grow'
 -khám- 'disappear'
 -its- 'come'
 -chòóny- 'become tired'
 -bol- 'rot/decay'
 -fúb- 'spoil (in cooking)'
 -saal- 'sizzle'

2. Sometimes

-lól- 'see'
 -hulil- 'hear'
 -onoon- 'sin'
 -ilukh- 'run'
 -húnv- 'small (bad)'
 -atikh- 'crack'
 -ráats- 'bleed/flow'
 -kon- 'sleep/lie down'
 -lwal- 'be/become ill'
 -reéb- 'ask'
 -sòóm- 'read'
 -hom- 'smear (mud)'
 -cháák- 'begin/start'
 -teekh- 'cook'
 -bool- 'say/talk/speak'

2.22 II. Multi-Nominal

Base verbs of the multi-nominal variety can be classified into three general groups and two special sets of multivalent groups. The three general groups are (1) two-nominal (sometimes, always), (2) three-nominal (always at least three, sometimes three), and (3)

four-nominal (sometimes). The following lists show these groupings.

A. Two-nominal

1. Always--only

-bis- 'hide'
 -chǐng- 'carry'
 -búl- 'not have'
 -yíl- 'take (to a place)'
 -leer- 'bring'
 -lǐnd- 'wait for'
 -kon- 'sleep with (sexually)'

2. Sometimes

-nyóol- 'find'
 -sǎmb- 'burn'
 -mal- 'finish'
 -rék- 'set (trap)'
 -fúnak- 'break/snap'
 -fwal- 'dress/put on'
 garment'
 -húny- 'take whiff of'
 -sááb- 'wash (body part)'
 -chet- 'strain'
 -fumb- 'fold/roll up'
 -khuul- 'pull out'
 -sóom- 'read'
 -bool- 'say/speak/talk'
 -rats- 'kick'
 -kul- 'buy/exchange for'
 -rém- 'chop/slash'
 -bóh- 'tie/bind'
 -méét- 'add'
 -khúp- 'strike'
 -eny- 'want/need/desire'
 -lǒnd- 'follow'
 -nyal- 'be able/equal for'
 -khaab- 'seek/hunt'

- tsom- 'insert'
- fuub- 'throw'
- bǎmb- 'stretch'
- many- 'know'
- buul- 'tell/guess'
- lind- 'watch over'
- heng- 'look at'
- nin- 'scold harshly'
- sin- 'annoy/irritate'
- niin- 'climb/climb for'
- khay- 'refuse'
- fung- 'lock'

All of the group of verbs under 2 of the one-nominal group above are included with verbs of this group.

B. Three nominal

1. Always--at least three

-h- 'give'

2. Sometimes three

The group of verbs under 'Two-nominal--2' are included in this set, except -atikh-, -rǎáts-, -kon-, and -lwal-. These last four are of the 'one-nominal--2' set, which is included also in the 'two-nominal--2' set.

C. Four-nominal

1. Always--only

∅

2. Sometimes

-tsom- 'insert'

- rèéb- 'ask'
- heng- 'look at'
- fwal- 'dress/put on garment'
- rats- 'kick'
- sááb- 'wash (body part)'
- hom- 'smear (mud)'
- h- 'give'
- many- 'know/recognize'
- sám- 'burn'
- khúp- 'strike'
- rém- 'chop/slash'
- bóh- 'tie/bind'
- khuul- 'pull out (tooth)'
- niin- 'climb/climb for'

2.221. Classification according to univalence

a. obligatorily one nominal only

- sínjil- 'stand up'
- khúl- 'grow'
- khám- 'disappear'
- its- 'come'
- chòóny- 'be/become tired'
- bol- 'rot/decay'
- fúb- 'spoil (in cooking)'
- saal- 'sizzle'

b. obligatorily only two nominals

- bís- 'hide'
- chǐng- 'carry'

- búl- 'not have'
- yíl- 'take (to a place)'
- leer- 'bring'
- līnd- 'wait for'
- kon- 'sleep with (sexually)'

2.222. Classification according to multivalence

Verbs can be classified according to the minimum number of nominals with which they must be associated and the maximum number with which they may be associated. The following lists show these classifications.

a. Minimum 1--Maximum 2

- raáts- 'bleed/flow'
- kon- 'sleep/lie down'
- lwal- 'be/become ill'
- atikh- 'crack'

b. Minimum 1--Maximum 3

- lól- 'see'
- hulil- 'hear'
- onoon- 'sin/spoil'
- ilukh- 'run'
- húny- 'smell (bad) take whiff/oof'
- cháak- 'begin/start'
- teekh- 'cook'
- bool- 'say/speak/talk'
- sóom- 'read/attend school'

c. Minimum 1--Maximum 4

- reéb- 'ask/question'

-l_ol- 'see'

d. Minimum 2--Maximum 3

-l_ond- 'watch over/wait for'

-mal- 'finish'

-rek- 'set (trap)'

-funak- 'break/snap'

-chet- 'strain'

-fung- 'lock'

-fumb- 'fold/roll up'

-nyal- 'be able for/be equal to'

-kul- 'buy/exchange for'

-siny- 'annoy/irritate/vex'

-meet- 'add'

-khay- 'refuse'

-eny- 'want/need/desire'

-l_ond- 'follow'

-khaab- 'hunt/seek'

-nyo_ol- 'find'

-fuub- 'throw'

-bamb- 'stretch'

-many- 'know'

-buul- 'tell/guess'

-l_ind- 'watch over'

-nin- 'scold harshly'

e. Minimum 2--Maximum 4

-tsom- 'insert/stick in'

-samb- 'burn'

- rats- 'kick'
- niin- 'climb/climb for'
- rém- 'chop/slash'
- bóh- 'tie/bind'
- khúp- 'strike'
- fwal- 'dress/put on garment'
- sááb- 'wash (body part)'
- khuul- 'pull out (teeth)'
- heng- 'look at'

f. Minimum 3--Maximum 4

- h- 'give'

From 2.414. Affiliation classification according to univalence

a. obligatorily only one nominal

No OP or locS occurs with this group, for the one nominal is the subject. Only object nouns can occur as OP or locS. But the SP affiliation may occur.

Verbs of this class are as follows.

- =sinjil- 'stand up'
- khúl- 'grow'
- khám- 'disappear'
- its- 'come'
- chóony- 'become-tired'
- bol- 'rot/decay'
- fúb- 'spoil (in cooking)'
- saal- 'sizzle'

b. Obligatorily only two nominals

Seven verbs can be associated with the representation of NP₂ (See p. 34) as OP. The verb -bú1- 'not have' cannot be so associated.

-bís- 'hide'

-chǐng- 'carry'

-yíl- 'take (to a place)'

-leer- 'bring'

-nyóó1- 'find'

-lǐnd- 'wait for'

-kon- 'sleep with (sexually)'

2.415. Affiliation classification according to multivalence

a. Minimum 1--Maximum 2

No sequential affiliations occur, except the SP sequential affiliation.

-rááts- 'bleed/flow/leak'

-kon- 'sleep/lie down'

-lwal- 'be/become ill'

-atikh- 'crack'

b. Minimum 1--Maximum 3

(1) One verb may be associated with locS and optional

PP_I: -húny- 'smell (bad)/take whiff of'

(2) These verbs may be associated with OP and with

optional PP_I:

-lô1- 'see'

-hulil- 'see'

-onoon- 'spoil (something)/sin'

-ilukh- 'run'

- cháák- 'begin/start'
- teekh- 'cook'
- bool- 'say/speak/talk'
- sóom- 'read/attend school'

c. Minimum 1--Maximum 4

One OP may occur at a time, and PP_I is optional. If a second fixed object co-occurs, it is in the shape of NP

- reéb- 'ask/question'
- lol- 'see'
- hom- 'smear (mud)'

d. Minimum 2--Maximum 3

Only one OP occurs (and it is obligatory in a pronominal affiliation); PP_I is optional.

- mal- 'finish'
- rék- 'set (trap)'
- funak- 'break/snap'
- chet- 'strain'
- fung- 'lock'
- fumb- 'fold/roll up'
- nyal- 'be able for/be equal to'
- kul- 'buy/exchange for'
- siny- 'annoy/vex/irritate'
- meét- 'add'
- khay- 'refuse'
- eny- 'want/need/desire'
- lõnd- 'follow'
- khaáb- 'seek/hunt'
- fuub- 'throw'

- bǎmb- 'stretch'
- many- 'know'
- lǐnd- 'watch over/wait for'
- buul- 'tell/guess'
- nin- 'scold harshly'

e. Minimum 2--Maximum 4

- niin- 'climb for/climb'
- sǎmb- 'burn'
- rats- 'kick'
- rem- 'chop/slash'
- bóh- 'tie/bind'
- khúp- 'strike'
- fwal- 'dress/put on garment(s)'
- tsom- 'insert'
- sááb- 'wash (body part)'
- khuul- 'pull out (tooth, etc.)'
- heng- 'look at'

f. Minimum 3--Maximum 4

- h- 'give'

g. Minimum 1 + locS

- búl- 'not be (present)'

2.42. Polysemous verbs

a. Minimum 1 + locS--Maximum 2

- búl- 'not be (present)/not have'

b. Minimum 1--Maximum 2

- kon- 'lie down/sleep/sleep with (sexually)'

c. Minimum 1--Maximum 3

- lól- 'see' (i.e. be able to see/see something)

-hulil- 'hear' (i.e. be able to hear/hear something)

-onoon- 'sin/spoil (something)'

-lĭnd- 'wait for/watch over'

-huny- 'smell (bad)/take whiff of'

d. Minimum 2--Maximum 4

-niin- 'climb for/climb'

-rék- 'set (trap)'

2.43. Mixed Affiliations

These are verbs which may be associated with two objects of the OP-type or of the locS-type or a combination of both, but two OP's may not co-occur although an OP-locS combination may co-occur.

2.431. Classification according to univalence

i.e. obligatorily one nominal only, two nominals only

Mixed affiliations are zero.

2.432. Classifications according to multivalence

(1) Minimum 1--Maximum 2

Mixed affiliations do not occur.

(2) Minimum 1--Maximum 3

(a) One verb: locS \pm SCP_I

-huny- 'smell (bad)/take whiff of'

(b) Verbs associated with OP and SCP_I

-lol- 'see'

-hulil- 'hear/feel/taste/understand'

-onoon- 'spoil'

-ilukh- 'run'

-cháák- 'begin/start'

-teekh- 'cook'

-bool- 'say/speak/talk'

-sòom- 'read'

(3) Minimum 1--Maximum 4

OP-NP mixed affiliation and PSAP_I in maximum structures occur with this group.

-réeb- 'ask'

-hom- 'smear'

-lol- 'see'

(4) Minimum 2--Maximum 3

Affiliations in this group are OP and PSAP_I

-mal- 'finish'

-rék- 'set (trap)'

(5) Minimum 2--Maximum 4

(a) One verb only, -niin- 'climb for/climb-', occurs with OP-locS--+PSAP_I

(b) The verb -búl- does not occur with this group.

(c) Other verbs in this class are associated with mixed affiliations OP-NP ± PSAP_I.

-sămb- 'burn'

-khúp± 'strike'

Verbs under e, p. 10 also occur in this group.

(6) Minimum 3--Maximum 4

-h- 'give' (OP-NP ± PSAP_I)

A P P E N D I X II

PHONOLOGY NOTES

Since the major emphasis of this research was syntactic, no attempt was made to do a detailed study of the phonological system. These notes are intended only as aids to the reader in translating the orthography used in this study into sound.

VOWEL PHONEMES

In Shisa the following vowel phonemes are used:

| | <u>Front</u> | <u>Back</u> |
|---------------|------------------|----------------|
| | <u>Unrounded</u> | <u>Rounded</u> |
| High Close | ii | uu |
| *For the open | *i | *u |
| Mid | e, ee | o, oo |
| Low | a, aa | |

*Note: The short variant has a more open quality than the long phones, i.e. than ii and uu.

As the following examples show, there is an apparent contrast between long and short vowels.

Verbs:

| <u>Short</u> | <u>Long</u> |
|--------------------------------|------------------------------------|
| - <u>sab</u> - 'ask/request' | - <u>saáb</u> - 'wash (body part)' |
| - <u>hel</u> - 'be equal to' | - <u>heél</u> - 'love' |
| - <u>bol</u> - 'rot/decay' | - <u>bool</u> - 'say/speak/talk' |
| - <u>nin</u> - 'scold harshly' | - <u>niin</u> - 'climb' |
| - <u>rum</u> - 'send' | - <u>ruum</u> - 'jump' |

Nominals:

| <u>Short</u> | <u>Long</u> |
|----------------------------------|---|
| - <u>rumi</u> 'messenger' (1/2)* | - <u>ruumi</u> 'jumper/one who jumps' (1/2) |
| - <u>bolo</u> 'penis' (10/11) | - <u>boolo</u> 'saying' (5/6) |
| - <u>béle</u> 'millet' (5/6) | - <u>béèle</u> 'milk' (5/6) |
| - <u>nyali</u> 'power' (14) | - <u>nyaaali</u> 'line' (10/11) |

*Note: Numbers in parentheses indicate noun classes.

Some principles of vowel sequence are operative in Shisa as follows:

Coalescence. Such changes and sequences are formed from low, front, unrounded phoneme /a/ which is the vowel final of one part of a word (i.e. prefix, root) followed by the initial vowel of another part, e.g., aba + ana = abaana 'children.'

The following dissimilar, contiguous vowel sequences were found in which a + dissimilar V occurs.

ba + ina? = beena? 'who?' Sequence of a + i = ee

ba + ula = boola 'they arrive' a + u = oo

This type of sequence will be termed coalescence, for these contiguous vowels coalesce to form a completely new sound.

Vowels in this sort of sequence are always double.

Assimilation. A second type of sequence of the a + V (similar and/or dissimilar) sort was also found:

aba + ana = abaana 'children' (1/2) Sequence of a + a = aa

ba + eka = beekâ 'they study' a + e = ee

ba + ora = boorâ 'they warm (themselves)' a + o = oo

In these sequences a preceding a is assimilated into the sound of the same quality of the following a, e, or o. These sounds are pronounced long and may or may not be uttered on the same tone.

There was found a third set of sequences, a subgroup of the above type of assimilation. In this set the a of the possessive adjective particle ending in -a (e.g., ba-) and of the possessive pronoun particle, which ends in -a (e.g., aba-), and the particle na- 'and/by/with' is assimilated into the following initial vowel sound as follows:

ba abakhasi = băbakhâsi 'of the women' Sequence of a + a = ă

aba + ehále = aběhále 'persons from afar' a + e = ě

na- + omundu = nômundu 'and/by/with person' a + o = ô

It was noted that the resultant short assimilated vowel is spoken on a low-rising tone.

VOWEL HARMONY

A final set of vowel sequences pertinent to this study should be considered, that of vowel harmony. There are two sets of vowel harmony, both of them between the extremities: (1) between high, unrounded, front vowel /i/; high, rounded, back vowel /u/; and low, unrounded, front vowel /a/; and (2) between mid, unrounded, front vowel /e/; and mid, rounded, back vowel /o/. These sets of vowels co-occur in the following sequences with verbal suffixes.

1. If final radical vowel is a, i, or u, suffix vowel (where it pertains) is i.

Examples:

| <u>Verb Radical</u> | <u>Benefactive Ext.</u> | <u>Persistive Ext.</u> |
|----------------------------------|-------------------------|------------------------|
| <u>-sááb-</u> 'wash (body part)' | <u>-il-</u> | <u>-ilíil-</u> |
| <u>-siny-</u> 'irritate/annoy' | <u>-il-</u> | <u>-ilíil-</u> |
| <u>-fuub-</u> 'throw' | <u>-il-</u> | <u>-ilíil-</u> |

2. If final radical vowel is e or o, suffix vowel (where it pertains) is e.

Examples:

| <u>Verb Radical</u> | <u>Benefactive Ext.</u> | <u>Persistive Ext.</u> |
|-------------------------|-------------------------|--------------------------|
| - <u>kon</u> - 'sleep' | - <u>e</u> l- | -e <u>l</u> e <u>l</u> - |
| - <u>teekh</u> - 'cook' | - <u>e</u> l- | -e <u>l</u> e <u>l</u> - |

3. A third type of vowel harmony, one with which this thesis is not concerned, exists in the reversive extension. If the final radical vowel is o, the suffix vowels are o. All other co-occurrences in this extension are with suffix vowel u.

CONSONANT PHONEMES

The following table illustrates the consonant phonemes of Shisa.

| Type of Phoneme | Bilabial | Labiodental | Alveolar | Alveopalatal | Velar | Glottal |
|--------------------|----------|-------------|----------|--------------|---------|---------|
| Voiceless: Stops | p | | t | | k | |
| Affricates | | | ts | č (ch)* | | |
| Fricatives | | f | | | x (kh) | |
| Grooved fricatives | | | s | š (sh) | | |
| Voiced: Fricatives | β (b) | | | | | ɦ (h) |
| Affricate | | | | ǰ (j) | | |
| Lateral | | | l | | | |
| Nasals | m | | n | ɲy | ŋ (ng') | |
| Semi-vowels | w | | | y | | |
| Trill | | | ɽ (r) | | | |

*Note: The present orthography for Shisa has been employed in this thesis. Therefore, forms in parentheses are the forms used in the spelling to represent the phoneme symbols.

Laterals. At the phonetic level, the phoneme /l/ has three allophones: lateral [l], flapped [ɫ], and a one-tap ɾ (whose allophonic symbol here will be [ɾ]). They are in complementary distribution as follows:

a/o/u(w) + [l] + a/o/u(w) → [l] e.g., amalwa 'beer'

i/ɛ + l → [ɫ] e.g., liléesi 'cloud'

a/o/u + l + i/ɛ → [ɫ] e.g., amaléesi 'clouds'

Homorganic nasal. The phonotactic rules of Shisa permit only homorganic sequences of nasal + consonant(s). Nasals do not occur before fricatives (except ʃ) or before semi-vowel or other nasals. Across morpheme boundaries the nasal /n/ assimilates in point of articulation as illustrated in the following table.

Examples

p/ɸ/b → mb en + pára = embára 'I think'

en + bóha = embóha 'I tie/bind'

t/r/l → nd ya + n + téema = yandéema 'He tried/tested me'

ya + n + rèeba = yandéeba 'He asked me'

ya + n + lolâ = yandolâ 'He saw me'

*But: *en + lima = eníma 'I dig'

k → ng tsin + kálamu = tsingálamu 'pencils'

ts → nz in + tsû = inzû 'house'

ch → nj en + cháma = eníama 'I like'

*Note: This combination seems to be the only part of Meinhof's rule (van Warmelo's translation, pp. 183-84), called the Ganda Law, operative in Shisa, i.e. n + l + vowel + nasal is realized as n + vowel + nasal.

Palatalization. In the environment of a following i or ɛ the voiceless, velar stop /k/ is realized as voiceless, alveopalatal

affricate /č/ (ch); voiceless, velar fricative /x/ (kh) is realized as alveopalatal, grooved fricative /š/ (sh); the voiced, glottal fricative /ɦ/ (h) is realized as voiced, alveopalatal semi-vowel /y/; and the voiced, nasalized, velar stop /ŋg/ is realized as voiced, alveopalatal affricate /nj/.

-tone

Tonal Phonemes

Two tonal phonemes may be set up: (1) high (ˆ) and (2) low (unmarked). High-falling or low-rising variants of these also occur. They are marked (ˆ) and (ˇ), respectively, in the text.

A P P E N D I X I I I

NOTES ON WORDS AND PHRASES

In this section the morphological elements of some word and phrase structures will be examined and exemplified. Only those word categories occurring in the corpus chosen for this thesis are discussed here.

One of the characteristics inherent in both word and phrase structures is stability. Within a sentence certain permutations of single words or of phrases are possible, but under all the permutations certain pairs or triples, and so on, of morphemes or words behave as 'blocks,' not only occurring always together, but also in the same order relative to one another. The word tends to be internally stable, and so does a phrase within its own type, in terms of the order of their components. Positionally, one phrase may be permutable with another, and likewise one word with another, but the internal cohesion remains.

Word Structures

Bloomfield (1933, pp. 177-8) defines a word as being a structure which is 'part of a larger form' (a phrase or a sentence being the larger form referred to). He contrasts 'bound forms' (linguistic forms which convey meanings but which can never stand alone as linguistic units) with 'free forms,' (i.e. forms which 'can be isolated in actual speech'). He terms the word a 'minimum free form.' He adds, "For the purposes of ordinary life, the word is the smallest unit of speech."

What Bloomfield was saying amounts to this: forms which never occur alone as whole utterances in ordinary speech are 'bound' forms; forms which may occur alone are 'free' forms. By his definition, then, any free form no part of which is itself a free form is a word.

One could define a word as a unit of speech having a particular meaning with a particular complex of sounds and capable of a particular grammatical employment. Other units of speech could fit this description. To differentiate, it will be necessary to concentrate upon the grammatical structure, or employment, of a word, for herein lie the characterizing differences.

For the purpose of this analysis, words are characterized as being of two general types of structures: (1) variable and (2) invariable. Variable words are polymorphemic (i.e. a 'unit' consisting of a 'complex' of morphemes), comprising 'bound forms'; and invariable words are monomorphemic, termed 'free forms' by Bloomfield (Ibid.)

Invariable words. Five categories of invariable words occur in the corpus: (1) Connectors and/or prepositions, (2) adverbials, (3) intensifiers, (4) interjections, and (5) negators. (I am indebted to Professor Whiteley--1966, pp. 69-75--for the terms 'connectors,' 'intensifiers,' and 'negators.')

Connector and/or Preposition

The connector/preposition, nende 'and/by/with' serves as either a connector or a preposition, depending upon its environment and function in a sentence. Variants of this element are the prefixes na-/nina-. Both these forms follow the vowel sequence rules of coalescence or assimilation, as the case may be, and are not free

forms in Shisa. (See pp. 312-313.) Na- occurs with nouns, and nina- with absolute pronouns (Abs. Pron), for example:

na + omundu = nõmundu 'and/by/with person'

nina + ye = ninayê 'and/by/with him/her'

Adverbials

Adverbials often follow adjectives in NP's, but more commonly they co-occur with and follow verbs. The shapes of adverbials vary:

1. Some shapes are homophonous with those of noun shapes:

(i) three morphemes:

pre-prefix + prefix + stem (e.g., o-bu-láyi 'well')

(ii) two morphemes:

prefix + stem (e.g., ma-fumáma 'prone')

2. Another shape is identical with that of the infinitive:

*infinitive prefix + verb radical + -a

(e.g., okhu-shíl-a 'very/very much')

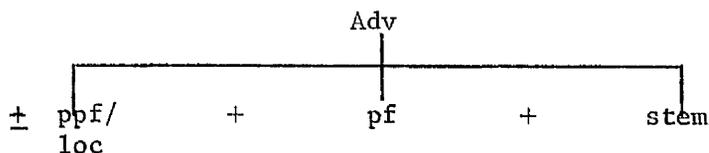
*Note: The infinitive pre-prefix and prefix are o-khu- 'to' before consonant and u- vowel verb roots and o-khw- before verb roots having dissimilar initial vowels.

3. Locative adverbials are of this shape:

locative prefix + prefix + stem

(e.g., ha-mi-sáála 'at place of trees')

The following diagram illustrates these types:



4. A few shapes cannot be related to polymorphemic analogues, for example:

(i) time adverbials

e.g., tsúli 'early (in the morning)'

khále 'long ago/early (i.e. earlier than expected)'

(ii) manner adverbials

e.g., kalaha 'carefully/slowly/softly'

munô 'very much'

Intensifiers

Two words 'okhushíla and munô 'very/very much,' occur either as adverbials or as intensifiers. If either follows a verb or an adjective, it will be termed an adverbial. If it follows an adverb, it will be considered an intensifier. The okhushíla here is not to be confused with the infinitive okhushíla 'to exceed,' which occurs in constructions for forming the comparison of adjectives (e.g., Úno nomuláyi okhushíla óyo - 'This person is better than--i.e. good to exceed--that one.') and in verbal phrases (e.g., Úno anyala okhwílukha bwàngu okhushíla óyo - 'This one is able to run faster than--i.e. fast to exceed--that one.'). When okhushíla and munô co-occur, okhushíla precedes, whether as adverbial or intensifier.

Interjections

Interjections may be monomorphemic, commonly of the vocative type, and occur initially in the sentence, e.g., wale! 'see there!'

Negators

Except for marked sentences, double negators are employed in Shisa sentences, one a negative verbal prefix and the other a 'free' form (ta/tawe 'no/not,' variations of the same form), at the end of the clause.

Variable words. Variable words in Shisa are those which co-occur within the system of grammatical control. They are shapes

in which "ordered and regular series of grammatically different word forms are found, wherein parts remain relatively constant and the variations in the other parts are matched by similar variations in other words" (Robins, 1964, pp. 196-7). In Shisa sentences, series of regular, but variable, co-occurrences are distinguishable, particularly in specific elements of words, i.e. in prefixes and suffixes. These recurring and co-occurring morphemes are a characteristic of Bantu languages. At least one of the morphemes, in each category in which they occur, is a concordial prefix. These concordial elements co-occur in sentences and thus constitute relationships of control.

Word categories in which such regular variations occur in Shisa are (1) nouns, (2) possessives, (3) adjectives, (4) demonstratives, and (5) verbs, the structures of which are explained and illustrated as follows:

Nouns

Constituent morphemes are these:

(i) pre-prefix + prefix + stem

(e.g., o-mu-kháana 'girl')

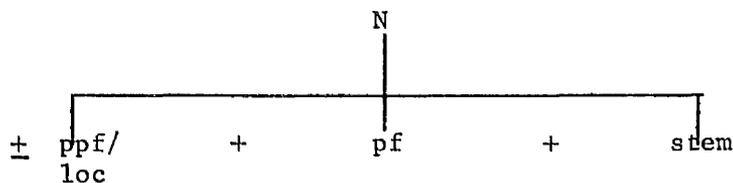
*lĩ-ramwa 'banana')

*Note: With some nouns the surface realization of the pre-prefix is zero, except when preceded by a morpheme whose final vowel is -a, requiring coalescence or assimilation with a following initial vowel (e.g., likhoba liélíramwa--i.e. likhoba + lia- + (e) + líramwa--'peel of a banana').

(ii) locative prefix + prefix + stem

(e.g., ha-mi-sáála 'place near trees')

Noun prefixes are the concordial elements in this word category. The structures of the nouns can be illustrated as follows:



Possessives

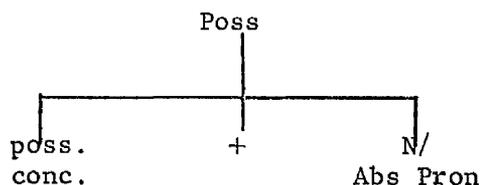
Co-occurring morphemes are these:

possessive concord + noun/absolute pronoun

(e.g., wa- + omukhási = wómukhási 'of woman'

wa + ifwe = wééfwe 'our')

Coalescence or assimilation is operative with all nouns, adjectives, and with absolute pronouns possessing initial vowels. The possessive morpheme is the concordial element in the structure, which is illustrated below:



Adjectives

The structure of adjectives and nouns are identical, but the privilege of occurrence of adjective prefixes is larger than that of nouns. Adjective stems usually differ from noun stems; but when they are homophonous, they do not co-occur, e.g., -chéni 'visitor'---chéni 'new/strange' do not co-occur in constructions like this: *Omuchéni omu-chéni witsile leelo - 'A strange stranger/visitor came today.'

Demonstratives

Demonstratives have the following constituent morphemes. (Note that the noun-class concord is represented as CC.)

(i) CC + -no 'this/these' (near speaker) (kúno)

-op- = object prefix (within the system of control)

BVR = base-verb root/radical

-ExtS = extension suffix

-TS = tense suffix

-locS = locative suffix (within the system of control)

The minimal structure of the verb in a declarative or interrogative sentence is characterized by the following co-occurrences.

V → SP + TP + BVR + TS

SP, 'subject prefix,' is that verbal prefix which, in unmarked sentences, is in controlled relationship with the grammatical noun-subject, the NP to the left of the verb radical. i.e. SP is prefixed to the verb radical, i.e. when no other prefixes co-occur between SP and VR. Here it should also be stated that in some tenses the tense prefix (TP) is zero.

Since the imperatival form is used as a criterion for classifying some verbs, its structure was explained in Chapter 2, p. 63.

Phrase Structures

Traditionally, a phrase is considered to be any group of words which is grammatically equivalent to a single word and which does not have its own subject and predicate. It is an intermediate grammatical unit between the word and the clause.

Structurally, a phrase consists of a head and modifier(s). Lyons (1969, p. 233) defines the term 'head' in this manner: "The constituent whose distribution is the same as that of the resultant construction is called the head; the other constituent is the modifier." These words define the stance taken in this analysis.

Nouns have the capacity to co-occur as the phrase head with certain other word categories, thus forming a higher level of

structure--a phrase. Adverbs have the same capacity. Each of these types of heads are different types of words and, consequently, have different kinds of modifiers. Since in this thesis the principal concern is the verb in sentence structures, that category has been treated in the sections in the thesis devoted to verbs. The three other types of phrases which occur in the sample or referent sentences will be explained here: Noun phrases, prepositional noun phrases/connector phrases, and adverbial phrases.

Noun Phrases

A noun-phrase structure may consist only of a nominal, or of a nominal and one or more of these word categories: possessives, adjectives, demonstratives, or intensifiers in any of the following sequences of co-occurrence.

$$NP \rightarrow N \pm \left\{ \begin{array}{l} \text{poss.} \\ \text{dem.} \\ \text{adj.} \end{array} \right\} // \left\{ \begin{array}{l} \text{dem.} + \text{adj.} + \text{inten.} \\ \text{adj.} + \text{inten.} \\ \text{adj.} + \text{dem.} \end{array} \right\} // \text{poss.} \pm$$

$$\left\{ \begin{array}{l} \text{dem.} \\ \text{adj.} + \text{inten.} \\ \text{adj.} + \text{dem.} \end{array} \right\} \#$$

Examples:

$$\begin{array}{l} \text{Omukhási} \left\{ \begin{array}{l} \text{wééfwe} \\ \text{uyo} \\ \text{omuláyi} \end{array} \right\} // \left\{ \begin{array}{l} \text{úyo omuláyi okhushíla} \\ \text{omuláyi okhushíla} \\ \text{omuláyi úyo} \end{array} \right\} // \\ \text{wééfwe} \left\{ \begin{array}{l} \text{úyo} \\ \text{omuláyi okhushíla} \\ \text{omuláyi úyo} \end{array} \right\} \\ \text{Wife} \left\{ \begin{array}{l} \text{our} \\ \text{that} \\ \text{good} \end{array} \right\} // \left\{ \begin{array}{l} \text{that very good} \\ \text{very good} \\ \text{that good} \end{array} \right\} // \\ \text{our} \left\{ \begin{array}{l} \text{that} \\ \text{very good} \\ \text{that good} \end{array} \right\} \end{array}$$

Connector/Prepositional Phrases (PNP)

The constituent members of these phrases are listed here:

(i) $\left. \begin{array}{l} \text{nende} \\ \text{na-} \end{array} \right\} \begin{array}{l} \text{'and/by/with'} \\ \text{'and/by/with'} \end{array} \right\} + \text{NP}$

(ii) nina- 'and/by/with' + Abs Pron

Examples:

$\left. \begin{array}{l} \text{nende omundu} \\ \text{nõmundu} \end{array} \right\} \begin{array}{l} \text{'and/by/with person'} \\ \text{'and/by/with person'} \end{array} \right\}$
ninayê 'and/by/with him/her'

Adverbial Phrases

Adverbial phrases may consist of a single adverbial or of an adverbial + one or two intensifiers:

Adv. Omwána alilanga obutínyu.
Child he-is crying hard.

Adv. + one inten. Omwána alilanga obutínyu munô.
Child he-is crying very hard.

Adv. + two inten. Omwána alilanga obutinyu okhushíla munô.
Child he-is crying very, very hard.

A P P E N D I X I V

LEXICAL ENTRIES OF VERBS

Lexical entries will here be presented in this order: (1) pure descriptive verbs, (2) pure agentive, (3) pure entailing, (4) pure stative, (5) descriptive-agentive (with ergative and instrumental subgroups), (6) agentive-back-and-forth, (7) descriptive-comitative, (8) agentive-comitative, (9) descriptive-agentive-stative, (10) descriptive-stative, and (11) descriptive-back-and-forth.

Pure Descriptive Verbs

1. Actor subjects

- sĭnjil- 'stand up' Des. A₁. 1. [Act ____ (L)]
 -sĭnjilil- 'stand in for' I. Des. A₁. 1. [Act ____ B (L)]
 -sĭnjilil- 'stand up by means of'
 II. Des. A₁. 1. [Act ____ I (L)]
 -sĭnjilil- 'stand up in,' etc.
 III. Des. A₁. 1. [Act ____ L₁]
 -khám- 'disappear' Des. A₁. 2. [Act ____ (L)]
 -khamil- 'disappear in,' etc.
 III. Des. A₁. 1. [Act ____ L₁]

2. Process Subjects

- bol- 'decay/rot'
 -fúb- 'spoil (in cooking)'
 -saal- 'sizzle
 Des. A₂. 2. [Pc ____ (L)]
 -bolél- 'rot in,' etc.
 -fubil- 'spoil (in cooking) in,' etc.

-saalil- 'sizzle in,' etc.

III. Des. A₂. 2. [Pc _____ L₁]

-khúl- 'grow'

Des. A₂. 1. [Pc _____ (L)]

-khulil- 'grow in,' etc.

III. Des. A₂. 1. [Pc _____ L₁]

-chóony- 'become tired'

Des. A₂. 1. [Pc _____ (L)]

-chóonyel- 'become tired of'

I. Des. A₂. 1. [Pc _____ B (L)]

-chóonyel- 'become tired in,' etc.

III. Des. A₂. 1. [Pc _____ L₁]

Pure Agentive Verbs

1. Two-nominal

-bís- 'hide'

-chǐng- 'carry'

Ag. A. 1. [Ag _____ D (X) O] (L)]

-bisil- 'hide for'

-chǐnjil- 'carry for'

I. Ag. A. 1. [Ag _____ B (D (X) O) (L)]

-bisil- 'hide in,' etc.

III. Ag. A. 1. [Ag _____ (D (X) O) L₁]

III. Ag. E. 1. [Ag _____ (D (X) O) L₂ L₁]

-chǐnjil- 'carry in,' etc.

III. Ag. A. 2. [Ag _____ (D (X) O) L₁]

III. Ag. E. 2. [Ag _____ (D (X) O) L₁ L₂]

-bisan- 'hide each other'

-chǐngan- 'carry each other'

IV. Ag. A. 1. [Ag _____ R (L)]

2. Polysemous two-nominal

-lǐnd- 'wait for'

Ag. A. 1. [Ag _____ (D (X) O) (L)]

-lëndil- 'wait for in,' etc.

III. Ag. A. 1. [Ag _____ (D X O) L₁]

-lëndan- 'wait for each other'

IV. Ag. A. 1. [Ag _____ R (L)]

-lënd- 'watch over'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-lëndil- 'watch over for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-lëndil- 'watch over with'

II. Ag. A. 1. [Ag _____ (D X O) I (L)]

-lëndil- 'watch over in,' etc.

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

3. Obligatorily two-nominal, optionally three-nominal

-lënd- 'follow'

Ag. A. 1. [Ag _____ (D X O) (L)]

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-lëndel- 'follow for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-lëndel- 'follow with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

-lëndel- 'follow on,' etc.

III. Ag. A. 2. [Ag _____ (D X O) L₁ (I)]

III. Ag. F. 3. [Ag _____ (D X O) L₂ L₁ (I)]

-lëndan- 'follow each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

-chet- 'strain'

Ag. B. 1. [Ag _____ O (I) (L)]

-chetél- 'strain for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

-chetél- 'strain with'

II. Ag. A. 1. [Ag _____ O I (L)]

-chetél- 'strain in,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

III. Ag. F. 1. [Ag _____ O L₂ L₁ (I)]

-fumb- 'fold'

-funak- 'break/snap'

-mal- 'finish'

Ag. B. 1. [Ag _____ O (I) (L)]

-fumbil- 'fold for'

-funachíl- 'break for'

-malíl- 'finish for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

-fumbil- 'fold with'

-funachíl- 'break'

-malíl- 'finish with'

II. Ag. A. 1. [Ag _____ O I (L)]

-fumbil- 'fold in,' etc.

-funachíl- 'break in,' etc.

-malíl- 'finish in,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

-fumban- 'fold each other's'

-funakán- 'break each other's'

-malán- 'finish each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-fung- 'lock'

Ag. B. 1. [Ag _____ O (I) (L)]

-funjil- 'lock for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

-funjil- 'lock with'

II. Ag. A. 1. [Ag _____ O I (L)]

-funjil- 'lock in,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

-rék- 'set (trap)'

Ag. B. 1. [Ag _____ O (I) (L)]

-rechel- 'set for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

-rechel- 'set with'

II. Ag. A. 1. [Ag _____ O I (L)]

-rechel- 'set in,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

-rekan- 'trap each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

-bāmb- 'stretch'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-bāmbil- 'stretch for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-bāmbil- 'stretch with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

-bāmbil- 'stretch in,' etc.

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

III. Ag. F. 3. [Ag _____ (D X O) L₂ L₁ (I)]

-buul- 'tell'

Ag. B. 1. [Ag _____ O (I) (L)]

-buulil- 'tell to/for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

-buulil- 'tell with'

II. Ag. A. 1. [Ag _____ O I (L)]

-eny- 'want/desire/need'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-enyél- 'want/desire for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-enyél- 'want/desire with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

-enyél- 'want in,' etc.

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

-enyán- 'want/desire each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

-fuub- 'throw'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-fuubil- 'throw to/for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-fuubil- 'throw with'

II. Ag. A. 2. [Ag _____ (D ʔ O) (I) (L)]

-fuubil- 'throw in,' etc.

III. Ag. B. 3. [Ag _____ (D ʔ O) L₁ (I)]

III. Ag. F. 3. [Ag _____ (D ʔ O) L₂ L₁ (I)]

-khaab- 'seek'

Ag. B. 3. [Ag _____ (D ʔ O) (I) (L)]

-khaabil- 'hunt for'

I Ag. B. 2. [Ag _____ B (D ʔ O) (I) (L)]

-khaabil- 'hunt with'

II. Ag. A. 2. [Ag _____ (D ʔ O) I (L)]

-khaabil- 'hunt in,' etc.

III. Ag. B. 3. [Ag _____ (D ʔ O) L₁ (I)]

-khaaban- 'hunt each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

-khaaban- 'hunt each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-khay- 'refuse'

Ag. B. 3. [Ag _____ (D ʔ O) (I) (L)]

-khayil- 'refuse for'

I. Ag. B. 2. [Ag _____ B (D ʔ O) (I) (L)]

-khayil- 'refuse with'

II. Ag. A. 2. [Ag _____ (D ʔ O) I (L)]

-khayil- 'refuse in,' etc.

III. Ag. D. 1. [Ag _____ L₂ L₁ (I)]

-khayan- 'refuse each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

-kul- 'buy/exchange'

Ag. B. 3. [Ag _____ (D ʔ O) (I) (L)]

-kulil- 'buy for'

I. Ag. B. 2. [Ag _____ B (D ʔ O) (I) (L)]

-kulil- 'buy with'

II. Ag. A. 2. [Ag _____ (D ʔ O) I (L)]

-kúíí- 'buy at,' etc.

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

-mèét- 'add

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-mèéteí- 'add for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-mèéteí- 'add with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

-mèéteí- 'add in,' etc.

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

III. Ag. F. 3. [Ag _____ (D X O) L₂ L₁ (I)]

-mèétan- 'add to each other'

IV. Ag. C. 4. [Ag ______{R_B} (D X O) (I) (L)]

-nyáí- 'be able'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-nyalíí- 'be able for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-nyalan- 'be able for/equal to each other'

IV. Ag. B. 1. [Ag ______R (I) (L)]

-nyòóí- 'find'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

-nyòóíeí- 'find for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

-nyòóíeí- 'find with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

-nyòóíeí- 'find in,' etc.

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

-nyòóílan- 'find each other'

IV. Ag. B. 1. [Ag ______R (I) (L)]

-nín- 'scold'

Ag. B. 2. [Ag _____ D (I) (L)]

-níníí- 'scold in'

III. Ag. B. 1. [Ag _____ D L₁ (I)]

-nínán- 'scold each other harshly'

IV. Ag. B. 1. [Ag ______R (I) (L)]

-siny- 'annoy/irritate'

Ag. B. 2. [Ag _____ D (I) (L)]

-sinyil- 'annoy with'

II. Ag. A. 3. [Ag _____ D I (L)]

-sinyil- 'annoy in,' etc.

III. Ag. B. 1. [Ag _____ D L₁ (I)]

-sinyán- 'irritate each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

4. Obligatorily three-nominal, optionally four-nominal

-h- 'give'

Ag. C. 1. [Ag _____ B (D X O) (I) (L)]

5. Obligatorily two-nominal, optionally three- or four-nominal

-khuul- 'pull out'

Ag. B. 1. [Ag _____ O (I) (L)]

-khuulil- 'pull out for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

I. Ag. B. 5. [G _____ B O (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-khuulil- 'pull out with'

II. Ag. A. 1. [Ag _____ O I (L)]

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-khuulil- 'pull out in,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

III. Ag. B. 4. [G _____ O L₁ (I)]

III. Ag. C. 3. [Ag _____ G O L₁ (I)]

-khuulan- 'pull each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-boh- 'tie/bind'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

Ag. B. 5. [G _____ O (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

- boyel- 'tie for' I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]
 I. Ag. B. 5. [G _____ B O (I) (L)]
 I. Ag. C. 3. [Ag _____ B G O (I) (L)]
- boyel- 'tie with' II. Ag. A. 2. [Ag _____ (D X O) I (L)]
 II. Ag. A. 5. [G _____ O I (L)]
 II. Ag. B. 2. [Ag _____ G O I (L)]
- boyel- 'tie in,' etc.
 III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]
 III. Ag. B. 4. [G _____ O L₁ (I)]
 III. Ag. C. 3. [Ag _____ G O L₁ (I)]
- bohan- 'tie each other'
 IV. Ag. B. 1. [Ag _____ R (I) (L)]
- 'tie each other's'
 IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]
- fwal- 'dress/put on garment'
 Ag. B. 2. [Ag _____ (D) (I) (L)]
 Ag. B. 6. [Ag _____ C (I) (L)]
 Ag. C. 5. [Ag _____ D C (I) (L)]
- fwalil- 'dress for' I. Ag. B. 7. [Ag _____ B D (I) (L)]
 I. Ag. B. 8. [Ag _____ B C (I) (L)]
 I. Ag. C. 5. [Ag _____ B D C (I) (L)]
- fwalil- 'dress with'
 II. Ag. A. 3. [Ag _____ D I (L)]
 II. Ag. A. 6. [Ag _____ C I (L)]
 II. Ag. B. 3. [Ag _____ D C I (L)]
- fwalil- 'dress in,' etc.
 III. Ag. B. 1. [Ag _____ D L₁ (I)]
 III. Ag. B. 5. [Ag _____ C L₁ (I)]
 III. Ag. C. 2. [Ag _____ D C L₁ (I)]

-heng- 'look at'

Ag. B. 3. [Ag _____ (D ʔ O) (I) (L)]

Ag. B. 5. [G _____ O (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

-henjel- 'look for'

I. Ag. B. 2. [Ag _____ B (D ʔ O) (I) (L)]

I. Ag. B. 5. [G _____ B O (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-henjel- 'look with'

II. Ag. A. 2. [Ag _____ (D ʔ O) I (L)]

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-henjel- 'look in,' etc.

III. Ag. B. 3. [Ag _____ (D ʔ O) L₁ (I)]

III. Ag. B. 4. [G _____ O L₁ (I)]

III. Ag. C. 3. [Ag _____ G O L₁ (I)]

-hengan- 'look at each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

'look at each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-khúp- 'strike'

Ag. B. 3. [Ag _____ (D ʔ O) (I) (L)]

Ag. B. 5. [G _____ O (I) (L)]

Ag. B. 6. [Ag _____ C (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

Ag. C. 4. [Ag _____ (D ʔ O) C (I) (L)]

-khupil- 'strike for'

I. Ag. B. 2. [Ag _____ B (D ʔ O) (I) (L)]

I. Ag. B. 5. [G _____ B O (I) (L)]

I. Ag. C. 1. [Ag _____ B (D ʔ O) C (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-khupil- 'strike with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. A. 6. [Ag _____ C I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-khupil- 'strike in,' etc.III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]III. Ag. B. 4. [G _____ O L₁ (I)]III. Ag. B. 5. [Ag _____ C L₁ (I)]III. Ag. C. 1. [Ag _____ (D X O) C L₁ (I)]III. Ag. C. 3. [Ag _____ G O L₁ (I)]-khupan- 'strike each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

IV. Ag. C. 2. [Ag _____ R C (I) (L)]

'strike each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]IV. Ag. D. 1. [Ag _____ R_G O C (I) (L)]-many- 'know/learn' Ag. B. 3. [Ag _____ (D X O) (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

-manyil- 'know with (memory)'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

-manyil- 'know in,' etc.III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]-manyán- 'know each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

'know each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-rém- 'chop/slash'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

Ag. B. 5. [G _____ O (I) (L)]

Ag. B. 6. [Ag _____ C (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

Ag. C. 4. [Ag _____ (D X O) C (I) (L)]

-remel- 'chop/slash for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

I. Ag. C. 1. [Ag _____ B (D X O) C (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-remel- 'chop/slash with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. A. 6. [Ag _____ C I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-remel- 'chop/slash in,' etc.III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]III. Ag. B. 4. [G _____ O L₁ (I)]III. Ag. B. 5. [Ag _____ C L₁ (I)]III. Ag. C. 1. [Ag _____ (D X O) C L₁ (I)]III. Ag. C. 3. [Ag _____ G O L₁ (I)]-reman- 'slash each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

IV. Ag. C. 2. [Ag _____ R C (I) (L)]

'slash each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]IV. Ag. D. 1. [Ag _____ R_G O C (I) (L)]-tsom- 'insert'

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

-tsomé1- 'insert for' I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

I. Ag. B. 5. [G _____ B O (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-tsomé1- 'insert with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-tsomé1- 'insert in'

III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]

III. Ag. B. 4. [G _____ O L₁ (I)]

III. Ag. C. 3. [Ag _____ G O L₁ (I)]

III. Ag. F. 2. [Ag _____ O L_{2a/i} L₁ (I)]

-tsomán- 'insert in each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

'insert in each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-sááb- 'wash (body part)'

Ag. B. 5. [G _____ O (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

-sáabil- 'wash for' I. Ag. B. 5. [G _____ B O (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-sáabil- 'wash with'

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-sáabil- 'wash in'

III. Ag. B. 4. [G _____ O L₁ (I)]

III. Ag. C. 3. [Ag _____ G O L₁ (I)]

-sáában- 'wash each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

'wash each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-niin- 'climb'

Ag. B. 7. [Ag _____ P (I) (L)]

Ag. B. 4. [Ag _____ L (I) (L)]

Ag. C. 2. [Ag _____ P L (I) (L)]

-niinil- 'climb for'

I. Ag. B. 3. [Ag _____ B L (I) (L)]

I. Ag. C. 2. [Ag _____ B P L (I) (L)]

'climb (to get) for'

I. Ag. B. 4. [Ag _____ B P (I) (L)]

-niinil- 'climb with'

II. Ag. A. 4. [Ag _____ L I (L)]

II. Ag. B. 1. [Ag _____ P L I (L)]

-niinil- 'climb in,' etc.

III. Ag. B. 7. [Ag _____ P L₁ (I)]

III. Ag. D. 1. [Ag _____ L₂ L₁ (I)]

III. Ag. F. 4. [Ag _____ P L_{2a/i} L₁ (I)]

6. Subgroups of agentive verbs

a. Ergative verbs

-cháák- 'begin' Erg. Ag. A. 1. [Ag _____ N (I) (L)]

Erg. A. 1. [N _____ (L)]

-chááchil- 'begin for'

I. Ag. B. 1. [Ag _____ B O (I) (L)]

-chááchil- 'begin with'

II. Ag. A. 1. [Ag _____ O I (L)]

-chááchil- 'begin under,' etc.

III. Ag. B. 2. [Ag _____ O L₁ (I)]

III. Erg. A. 1. [N _____ L₁]

-sāmbil- 'burn in,' etc.

- III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]
 III. Ag. B. 4. [G _____ O L₁ (I)]
 III. Ag. C. 3. [Ag _____ G O L₁ (I)]
 III. Instr. A. 1. [I _____ (D X O) L₁]
 III. Instr. B. 1. [I _____ G O L₁]

-sāmban- 'burn each other'

- IV. Ag. B. 1. [Ag _____ R (I) (L)]
 IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

Pure Entailing Verbs

-rāāts- 'bleed/leak'

- Ent. B. 2. [L₂ _____ (L)]
 Ent. A. 2. [L₂ _____ Act_C (L)]

-rāātsil- 'bleed/lead in,' etc.

- III. Ent. A. 1. [L₂ _____ L₁]
 III. Ent. B. 1. [L₂ _____ Act_C L₁]

-atikh- 'crack'

- Ent. B. 1. [L₁ _____ (L)]
 Ent. A. 1. [L₁ _____ Pc_C (L)]

-atishīl- 'crack in,' etc.

- III. Ent. A. 2. [L₁ _____ L₁]
 III. Ent. B. 2. [L₁ _____ Pc_C L₁]

-atikhān- 'crack all over/in pieces'

- V. Ent. A. 1. [L₁ _____ (L)]
 V. Ent. B. 1. [L₁ _____ C (L)]
 V. Ent. B. 2. [L₁ _____ Rt (L)]

Pure Stative Verb

-būl- 'not be/not have'

- St. A. 1. [St _____ L_{st} (L)]
 St. B. 1. [St _____ (D_{st} X O_{st}) (L)]

Descriptive-Agentive Verbs

- rëéb- 'ask/question' Des. A₁. 1. [Act _____ (L)]
 Ag. B. 2. [Ag _____ D (I) (L)]
 Ag. B. 6. [Ag _____ C (I) (L)]
 Ag. C. 5. [Ag _____ D C (I) (L)]

- rëébel- 'ask on behalf of'
 I. Ag. B. 1. [Ag _____ B O (I) (L)]
 I. Ag. B. 7. [Ag _____ B D (I) (L)]
 I. Ag. B. 8. [Ag _____ B C (I) (L)]
 I. Ag. C. 5. [Ag _____ B D C (I) (L)]

- rëébel- 'ask with (mouth, i.e. orally)'
 II. Des. A₁. 1. [Act _____ I (L)]
 II. Ag. A. 3. [Ag _____ D I (L)]
 II. Ag. A. 6. [Ag _____ C I (L)]
 II. Ag. B. 3. [Ag _____ D C I (L)]

- rëébel- 'ask/question in,' etc.
 III. Des. A₁. 2. [Act _____ L₁]
 III. Ag. B. 1. [Ag _____ D L₁ (I)]
 III. Ag. B. 5. [Ag _____ C L₁ (I)]
 III. Ag. C. 2. [Ag _____ D C L₁ (I)]

- rëéban- 'ask each other's'
 IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]
 'ask each other'
 IV. Ag. C. 2. [Ag _____ R C (I) (L)]

- hom- 'smear (mud)'
 Des. A₁. 1. [Act _____ (L)]
 Ag. B. 1. [Ag _____ O (I) (L)]
 Ag. B. 8. [Ag _____ M (I) (L)]
 Ag. C. 6. [Ag _____ O M (I) (L)]

- homé1- 'smear for'
- I. Des. A₁. 1. [Act ____ B (L)]
- I. Ag. B. 1. [Ag ____ B O (I) (L)]
- I. Ag. B. 6. [Ag ____ B M (I) (L)]
- I. Ag. C. 4. [Ag ____ B O M (I) (L)]

- homé1- 'smear with'
- II. Des. A₁. 1. [Act ____ I (L)]
- II. Ag. A. 1. [Ag ____ O I (L)]
- II. Ag. A. 7. [Ag ____ M I (L)]
- II. Ag. B. 4. [Ag ____ O M I (L)]

-homé1- 'smear in,' etc.

- III. Des. A₁. 2. [Act ____ L₁]
- III. Ag. B. 6. [Ag ____ M L₁ (I)]
- III. Ag. C. 4. [Ag ____ O M L₁ (I)]

- onoon- 'sin/spoil'
- Des. A₁. 1. [Act ____ (L)]
- Ag. B. 3. [Ag ____ (D X O) (I) (L)]
- Ag. B. 6. [Ag ____ C (I) (L)]

- onooné1- 'spoil for'
- I. Ag. B. 1. [Ag ____ B O (I) (L)]

- onooné1- 'spoil with'
- II. Ag. A. 1. [Ag ____ O I (L)]

- onooné1- 'spoil in,' etc.
- III. Des. A₁. 2. [Act ____ L₁]
- III. Ag. B. 3. [Ag ____ (D X O) L₁ (I)]
- III. Ag. B. 5. [Ag ____ C L₁ (I)]

- onoonán- 'spoil each other'
- IV. Ag. B. 1. [Ag ____ R (I) (L)]

'spoil each other's'

- IV. Ag. C. 1. [Ag ____ R_G O (I) (L)]

-bool- 'say/speak/talk'

Des. A₁. 1. [Act ____ (L)]

Ag. B. 1. [Ag ____ O (I) (L)]

-boolel- 'speak/say/talk to'

I. Des. A₁. 1. [Act ____ B (L)]

I. Ag. B. 1. [Ag ____ B O (I) (L)]

-boolel- 'say/talk/speak with'

II. Des. A₁. 1. [Act ____ I (L)]

II. Ag. A. 1. [Ag ____ O I (L)]

-boolel- 'say/speak/talk in,' etc.

III. Des. A₁. 2. [Act ____ L₁]

III. Ag. B. 2. [Ag ____ O L₁ (I)]

-boolan- 'speak about each other'

IV. Ag. B. 1. [Ag ____ R (I) (L)]

-loi- 'see'

Des. A₁. 1. [Act ____ L]

Ag. B. 3. [Ag ____ (D X O) (I) (L)]

-lolél- 'see for'

I. Ag. B. 2. [Ag ____ B (D X O) (I) (L)]

-lolél- 'see with'

II. Des. A₁. 1. [Act ____ I (L)]

II. Ag. A. 2. [Ag ____ (D X O) I (L)]

II. Ag. A. 5. [G ____ O I (L)]

II. Ag. B. 2. [Ag ____ G O I (L)]

-lolél- 'see in,' etc.

III. Des. A₁. 2. [Act ____ L₁]

III. Ag. B. 3. [Ag ____ (D X O) L₁ (I)]

III. Ag. B. 4. [Ag ____ O L₁ (I)]

-lolán- 'see each other'

IV. Ag. B. 1. [Ag ____ R (I) (L)]

'see each other's'

- IV. Ag. C. 1. [Ag R_G O (I) (L)]
- sòóm- 'read'
- Des. A₁. 1. [Act (L)]
- Ag. B. 1. [Ag O (I) (L)]
- Ag. B. 6. [Ag C (I) (L)]
- sòómel- 'read for'
- I. Des. A₁. 1. [Act B (L)]
- I. Ag. B. 1. [Ag B O (I) (L)]
- I. Ag. B. 8. [Ag B C (I) (L)]
- sòómel- 'read with'
- II. Ag. Des. A₁. 1. [Act I (L)]
- II. Ag. A. 1. [Ag O I (L)]
- II. Ag. A. 6. [Ag C I (L)]
- sòómel- 'read in,' etc.
- III. Des. A₁. 2. [Act L₁]
- III. Ag. B. 2. [Ag O L₁ (I)]
- III. Ag. B. 5. [Ag C L₁ (I)]
- hulil- 'hear/feel/understand/taste/smell of'
- Des. A₁. 1. [Act (L)]
- Ag. B. 3. [Ag (D X O) (I) (L)]
- hulililil- 'hear for'
- I. Ag. B. 2. [Ag B (D X O) (I) (L)]
- hulililil- 'hear, etc., with'
- II. Des. A₁. 1. [Act I (L)]
- II. Ag. A. 2. [Ag (D X O) I (L)]
- II. Ag. A. 5. [G O I (L)]
- II. Ag. B. 2. [Ag G O I (L)]
- hulililil- 'hear, etc., in,' etc.
- III. Des. A₁. 2. [Act L₁]
- III. Ag. B. 3. [Ag (D X O) L₁ (I)]

-hulilán- 'hear each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

'hear each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]

-húny- 'smell (bad)' Des. A₂. 3. [Pc _____ (L)]

'take whiff of' Ag. B. 4. [Ag _____ L (I) (L)]

-hunyil- 'take whiff of for'

I. Ag. B. 3. [Ag _____ B L (I) (L)]

-hunyil- 'take whiff of with'

II. Ag. A. 4. [Ag _____ L I (L)]

-hunyil- 'smell bad in,' etc.

III. Des. A₂. 2. [Pc _____ L₁]

'take whiff of in,' etc.

III. Ag. D. 1. [Ag _____ L₂ L₁ (I)]

-hunyan- 'take whiff of each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

'take whiff of each other's'

IV. Ag. C. 3. [Ag _____ R_G O_{loc} (I) (L)]

Agentive-Back-and-Forth (B-F)

-rats-

Ag. B. 3. [Ag _____ (D X O) (I) (L)]

Ag. B. 5. [G _____ O (I) (L)]

Ag. B. 6. [Ag _____ C (I) (L)]

Ag. C. 3. [Ag _____ G O (I) (L)]

Ag. C. 4. [Ag _____ (D X O) C (I) (L)]

-ratsil- 'kick for'

I. Ag. B. 2. [Ag _____ B (D X O) (I) (L)]

I. Ag. C. 1. [Ag _____ B (D X O) C (I) (L)]

I. Ag. C. 3. [Ag _____ B G O (I) (L)]

-ratsíl- 'kick with'

II. Ag. A. 2. [Ag _____ (D X O) I (L)]

II. Ag. A. 5. [G _____ O I (L)]

II. Ag. A. 6. [Ag _____ C I (L)]

II. Ag. B. 2. [Ag _____ G O I (L)]

-ratsíl- 'kick in,' etc.III. Ag. B. 3. [Ag _____ (D X O) L₁ (I)]III. Ag. B. 4. [G _____ O L₁ (I)]III. Ag. B. 5. [Ag _____ C L₁ (I)]III. Ag. C. 1. [Ag _____ (D X O) C L₁ (I)]III. Ag. C. 3. [Ag _____ G O L₁ (I)]-ratsán- 'kick each other'

IV. Ag. B. 1. [Ag _____ R (I) (L)]

IV. Ag. C. 2. [Ag _____ R C (I) (L)]

'kick each other's'

IV. Ag. C. 1. [Ag _____ R_G O (I) (L)]IV. Ag. D. 1. [Ag _____ R_G O C (I) (L)]-ratsán- 'kick and wave arms back and forth'

V. B-F. Des. A. 1. [Act _____ (L)]

Descriptive-Comitative-its- 'come'Des. A₁. 2. [Act _____ (L)]-itsíl- 'come to/for'I. Des. A₁. 1. [Act _____ B (L)]-itsíl- 'come in,' etc.III. Des. A₁. 1. [Act _____ L₁]III. Des. B. 1. [Act _____ L₂ L₁]-itsán- 'come with/bring along'

VI. Des. A. 1. [Act _____ CMA (L)]

Agentive-Comitative

- leer- 'bring' Ag. A. 1. [Ag _____ (D X O) (L)]
- leerel- 'bring to/for'
I. Ag. A. 1. [Ag _____ B (D X O) (L)]
- leerel- 'bring in,' etc.
III. Ag. A. 2. [Ag _____ (D X O) L₁]
III. Ag. E. 2. [Ag _____ (D X O) L₁ L₂]
- leeran- 'bring along'
VI. Ag. B. 1. [Ag _____ Cmb (L)]
- yíl- 'take (to a place)'
Ag. A. 1. [Ag _____ (D X O) (L)]
- yilil- 'take to/for'
I. Ag. A. 1. [Ag _____ B (D X O) (L)]
- yilil- 'take in,' etc.
III. Ag. A. 2. [Ag _____ (D X O) L₁]
III. Ag. E. 2. [Ag _____ (D X O) L₁ L₂]
- yilan- 'take each other'
IV. Ag. A. 1. [Ag _____ R (L)]
- yilan- 'take along with'
VI. Ag. B. 1. [Ag _____ Cmb (L)]

Descriptive-Agentive-Stative

- kon- 'lie down/sleep'
Des. A₁. 1. [Act _____ (L)]
- 'sleep with (sexually)'
Ag. A. 2. [Ag _____ D (L)]
- 'sleep'
St. B. 2. [Pc_{st} _____ C_{st} (L)]

-koné1- 'sleep in,' etc.

III. Des. A₁. 2. [Act ____ L₁]

III. Ag. A. 1. [Ag ____ (D Ø O) L₁]

III. Ag. B. 1. [Ag ____ D L₁ (I)]

III. St. A. 1. [Pc_{st} ____ C_{st} L₁]

-konán- 'sleep with each other (sexually)'

IV. Ag. A. 1. [Ag ____ R (L)]

Descriptive-Agentive-Back-and-Forth

-ilukh- 'run'

Des. A₁. 1. [Act ____ (L)]

Ag. B. 1. [Ag ____ O (I) (L)]

Ag. B. 6. [Ag ____ C (I) (L)]

-ilushí1- 'run to/for'

I. Ag. B. 1. [Ag ____ B O (I) (L)]

I. Ag. B. 8. [Ag ____ B C (I) (L)]

-ilushí1- 'run with'

II. Ag. A. 1. [Ag ____ O I (L)]

II. Ag. A. 6. [Ag ____ C I (L)]

-ilushí1- 'run in,' etc.

III. Des. A₁. 2. [Act ____ L₁]

III. Des. B. 1. [Act ____ L₂ L₁]

III. Ag. B. 2. [Ag ____ O L₁ (I)]

III. Ag. B. 5. [Ag ____ C L₁ (I)]

-ilukhán- 'run (relay)'

V. Ag. A. 1. [Ag ____ C (L)]

-ilukhán- 'run back and forth'

V. B-F Des. A. 1. [Act ____ (L)]

Descriptive-Static

-lwal- 'be/become ill'

Des. A₂. 1. [Pc _____ (L)]

St. B. 2. [Pc_{st} _____ C_{st} (L)]

-lwalil- 'be/become ill in,' etc.

III. Des. A₂. 1. [Pc _____ L₁]

III. St. A. 1. [Pc_{st} _____ C_{st} L₁]

Bibliography

- Abercrombie, David. Elements of General Phonetics. Edinburgh, (Scotland): Edinburgh University Press Ltd., 1967.
- Allen, J. P. B., and Paul van Buren, eds. Chomsky: Selected Readings. London: Oxford University Press, 1971.
- Allen, W. Sidney. "Transitivity and Possession," Language, XL, 3 (1964), 337-43.
- Appleby, L. L. "A First Luyia Grammar," Third edition. Nairobi, Kenya: The East African Literature Bureau, 1961.
- Ashton, E. O., A. N. Tucker, et al. A Luganda Grammar. London: Longmans, Green and Co., 1954.
- Ashton, E. O. Swahili Grammar. London: Longmans, Green and Co. Ltd., 1947.
- Bach, Emmon, and Robert T. Harms, eds. Universals of Linguistic Theory. Chicago: Holt, Rinehart and Winston, Inc., 1968.
- Beattie, John. Bunyoro: An African Kingdom. London: Holt, Rinehart and Winston, 1960.
- Bloomfield, Leonard. Language. London: George Allen and Unwin Ltd., 1935.
- Bryan, Margaret Arminel. The Bantu Languages of Africa. Published for the International African Institute. London: Oxford University Press, 1959.
- Cassidy, Frederick G. "Case in Modern English," Language, XIII (1937), 240-245.
- Chomsky, Noam. Aspects of the Theory of Syntax. Cambridge, Mass.: The M. I. T. Press, 1965.
- Curme, George Oliver. Parts of Speech and Accidence. London: D. C. Heath and Company, 1936.
- Doke, Clement Martyn. Bantu Linguistic Terminology. London: Longmans, Green and Co., 1935.
- Donohew, G. "A First Course in Luyia." Kisumu, Kenya: Bunyore Mission, P. O. Box 410, 1962. (Mimeographed)
- Fillmore, Charles J. "The Case for Case," Universals of Linguistic Theory. Bach and Harms, eds., pp. 1-88. Chicago: Holt, Rinehart and Winston, Inc., 1968.
- Gibbs, James L., Jr. Peoples of Africa. Chicago: Holt, Rinehart and Winston, Inc., 1966.

- Gimson, A. C. An Introduction to the Pronunciation of English. London: Edward Arnold (Publishers) Ltd., 1962.
- Gleason, H. A. An Introduction to Descriptive Linguistics. London: Holt, Rinehart and Winston, 1961.
- _____. Linguistics and English Grammar. Chicago: Holt, Rinehart and Winston, Inc., 1965.
- Guthrie, Malcolm. "A Two-Stage Method of Comparative Bantu Studies," African Language Studies, III (1962a), 1-24.
- _____. "Bantu Origins," Journal of African Linguistics, I (1962b).
- _____. Bantu Sentence Structure. London: School of Oriental and African Studies, University of London, Agents: Luzac and Co. Ltd., 46 Gt. Russell St., 1961.
- _____. Bantu Word Division. London: Oxford University Press, 1948a.
- _____. "Comparative Bantu: A Preview," Journal of African Linguistics, IV (1965).
- _____. "Gender, Number and Person in Bantu Languages," Bulletin of the SOAS, Parts 3-4, 1948c, pp. 847-56.
- _____. "Some Developments in the Pre-History of the Bantu Languages," Journal of African History, III, 2 (1962c), 213-52.
- _____. The Classification of Bantu Languages. Published for the International African Institute. London: Oxford University Press, 1948b.
- _____. "The Status of Radical Extensions in Bantu Languages," Journal of African Linguistics, I, 3 (1962d), 202-20.
- Halliday, M. A. K. "Notes on Transitivity and Theme in English," Parts I, II, Journal of Linguistics, 3 (1967, March, April), 37-81; 199-244.
- Harris, Zellig S. Structural Linguistics. Chicago 37, Illinois: The University of Chicago Press, Phoenix Books, 1951.
- Hjelmslev, Louis. "La Categorie des cas," Acta Jutlandica, VII, No. 1, 1935; IX, No. 2, 1937.
- Hobley, Charles William. Bantu Beliefs and Magic. Revised Edition. London: H. F. and G. Witherby, 1938.
- Hockett, Charles F. A Course in Modern Linguistics. New York: The MacMillan Company, 1958.
- Jespersen, Otto. Essentials of English Grammar. London: George Allen and Unwin Ltd., (Ruskin House, Museum Street), 1933.

- Johnson, Frederick. Director. Swahili-English Dictionary.
194 Elizabeth Street, New York 12, New York: Saphrograph Co.,
1969.
- Langacker, Ronald W. Language and Its Structure. Chicago:
Harcourt, Brace and World, Inc., 1968.
- Lyons, John. Chomsky. Fontana/Collins, 14 St. James Place, London
SW1: Wm. Collins and Co. Ltd., 1970b.
- _____. Introduction to Theoretical Linguistics. Cambridge: At
the University Press, 1969.
- _____. ed. New Horizons in Linguistics. Middlesex, England:
Harmondsworth, Penguin Books Ltd., 1970a.
- Maw, Joan Edith Mary. Sentences in Swahili: A Study of Their
Internal Relationships. A published Ph. D. thesis. London:
School of Oriental and African Studies, University of London,
1968.
- Meeussen, A. E. "Meinhof's Rule in Bantu," African Language Studies,
III (1962), 25-29.
- Meinhof, Carl. Introduction to the Phonology of the Bantu Languages.
N. J. v. Warmelo, translator. Berlin: Dietrich Reimer/Ernst
Vohsen, 1932.
- Middleton, John. The Lugbara of Uganda. London: Holt, Rinehart
and Winston, 1965.
- Osogo, John. The Baluyia. Nairobi, Kenya: Oxford University
Press, 1965.
- Pike, Kenneth L. "A Syntactic Paradigm," Language, XXXIX (1963),
216-230.
- _____. Phonetics. Ann Arbor: University of Michigan Press, 1943.
- Robins, R. H. General Linguistics: An Introductory Survey. London:
Longmans, 1964.
- Scotton, Carol M. M. "Semantic and Syntactic Subcategorization in
Swahili Causative Verb Shapes," Journal of African Languages,
VI, Part 3 (1967), 249-367.
- Tempels, Placide (trans.). Bantu Philosophy. Paris: Presence
Africaine, 1959.
- Wagner, Gunther. The Bantu of North Kavirondo. London: Oxford
University Press, 1949.
- Wako, Daniel M. Akabaluyia B̂mumbo. Nairobi, Kenya: The Eagle
Press, 1954.
- Wandai, Miriamu. Mundáálo Tsiámanáni. Nairobi, Kenya: The Highway
Press, P. O. Box 360, 1950.

- Ward, Ida C. "The Phonetic Structure of Bamum," Bulletin of the SOAS, IX (1937839), 423-38.
- Whiteley, W. H. A Study of Yao Sentences. Oxford: At the Clarendon Press, 1966.
- _____. "Case Complexes in Swahili," Studies in African Linguistics, III, i (1972), 1-45.
- _____. "Formality and Informality in Yao Speech," (with K. Mbagu), Africa, XXXI (1961), 135-146.
- _____. "Notes on the Syntax of the Passive in Swahili," African Language Studies, XI (1970), 391-403.
- _____. "Shape and Meaning in Yao Nominal Classes," African Language Studies, II (1961), 1-24.
- _____. "Some Problems of Syntax in a Bantu Language of East Africa," Lingua, IX, 2 (June, 1960), 147-174.
- _____. Some Problems of Transitivity in Swahili. London: School of Oriental and African Studies, University of London, 1968.
- _____. "The Verbal Radical in Iraqw," African Language Studies, I (1960), 79-95.
- _____. "The Structure of the Kuria Verbal and Its Position in the Sentence." Unpublished Ph. D. thesis. London: School of Oriental and African Studies, University of London, 1955.
- Whiteley, W. H., and J. D. Mganga. "Focus and Entailment: Further Problems of Transitivity in Swahili," African Languages Studies, VIII (1967), 108-25.