THE VERB IN BENA-BENA:
ITS FORM AND FUNCTION

A THESIS SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
IN LINGUISTICS
SEPTEMBER 1970

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Chapter I
INTRODUCTION

This statement is a description of the structure of the verb in Bena-bena, a language of the Eastern Highlands District of the Territory of New Guinea. ¹ Bena-bena is a language spoken by approximately 14,000 people living in the Goroka sub-district of the Eastern Highlands administrative district.

The language has been classified by Wurm 1964 as belonging to the East-Central family of the East New Guinea Highlands phylum. The Eastern and East-Central families share many similarities, and in terms of the typological features Wurm abstracts (1964:80-83), these two families are the most highly coded. By this is meant that there is a larger number of these typological features formally categorized in the languages of these two families than in the other language families of the phylum.

In the languages of the East New Guinea Highlands phylum, the structure of the verb is crucial to the interpretation of clause and sentence constructions; and in these two language families, in particular, the varying roles and relationships of the verb within the sentence are indicated by the verb morphology.
Bena-bena typifies this feature of the East-Central family in a marked way. Much of the motivation for this present description is to point up the importance of the verb in relation to the sentence as a whole and to show the interplay between the component parts of the sentence as registered in the verb.

Of very great significance in the composition of the Bena-bena verb are two dimensions: the dimensions of subject and of time. The morphological structure of the verb expresses the time and subject relationships between the clauses of the sentence. The formal and syntactic expressions of these relationships constitute a large part of this description.

The relationship between many of the components of the clause itself are also expressed in the verb morphology. Such relationships include the liaison between actor, action, object, indirect object, and benefactee.

The study of the composition of the verb gives much deeper insight into the structure of the language than does the study of other constituents of the clause. This paper therefore deals only with the verb constructions.

Because the description of New Guinea languages is still in the beginning stages, much of the terminology used in this statement may seem innovative or adaptive. Wherever possible, sources from which terms are drawn are cited and differences of usage are footnoted.
FOOTNOTE

Field work on which this analysis is based was carried out under the auspices of the Summer Institute of Linguistics during the period 1958-1968. The data were collected by monolingual methods and constitute virtually unelicited material.

The orthography used in this paper symbolizes the Bena-bena phonemes thus: p voiceless bilabial stop; t voiceless alveolar stop; k voiceless velar stop; " voiceless glottal stop; b voiced bilabial fricative; y voiced alveopalatal fricative; g voiced velar fricative; f voiceless labiodental fricative; s voiceless alveolar fricative; h voiceless glottal fricative; l voiced retroflexed alveolar liquid; m voiced bilabial nasal; n voiced alveolar nasal; and the vowels a, e, i, o, u.
Chapter II

THE VERB IN THE CONTEXT OF THE SENTENCE

2.1 General Statement

The nature of New Guinea Highland languages requires that a treatment of verb structure be set in the context of the sentence. It is therefore advantageous to begin this paper with a description of the Bena-bena sentence.

The sentence may be short but, on the other hand, is frequently greatly extended. The minimal sentence is a single clause, which in its shortest form consists of one verb. Longer sentences consist of a sequence of clauses linked by a complex inter-relationship of verbs. The verb occurs in clause final position.

The sentence has a characteristic onset and terminus. The onset, which is optional, may be (a) a time expression, such as etehi 'morning'; (b) an attention gaining expression, such as mafi 'listen'; (c) a vocative expression, such as emabe 'you down there'; (d) connectives, such as to 'and' and aku'i 'but'; (e) a repetition, in non-final form, of the final predicate of the preceding sentence; (f) the onset of the intonation contour, characterized by a rise in pitch and intensity. In addition there is a strong tendency for the sentence topic,
which may be subject or object, to occur near the sentence beginning.

The sentence terminus is indicated by an intonation contour which drops very low in pitch and volume. But the most striking feature of the sentence terminus is the form of the final verb. The final verb of the sentence differs morphologically from verbs which occur within the sentence; that is, from both verbs which occur at the end of clause-chains other than sentence terminal chains (hereafter referred to as chain-terminal verbs) and from verbs which occur within the clause-chain.

In New Guinea linguistics the differing forms of the verb which occur at the end of the sentence and those which occur within the sentence are termed 'sentence final' and 'sentence medial' respectively. In this description of Bena-bena, however, the term 'medial' is reserved for those forms of the verb which occur within the clause-chain, and 'final' is used for both (a) sentence final forms, and (b) chain terminal forms, because the chain-terminal forms bear more resemblance to the sentence final forms than to the forms which occur internal to the clause-chain and which are designated 'medial'.

Nevertheless, the form of the verb at the end of the sentence is distinct from both those chain-terminal forms internal to the sentence and from the medial forms in the following ways.
(a) Mood affixes occur only in sentence final forms of the verb.

(b) The tense of the final verb of the sentence is absolute. That is, it indicates the tense of the sentence as a whole, its setting in actual time. The tense of the medial verb, by contrast, is relative, indicating its temporal relationship to the clauses which follow. The tense of the chain-terminal verb is dominated by the tense of the sentence final verb, and, once again is relative.

(c) Medial verbs, and chain-terminal verbs have certain suffixes which do not occur on sentence final verbs.

2.2 Constituents of the sentence

In describing Bena-bena verbs it is convenient to identify syntactic units on three levels between the maximal and minimal levels of sentence and word. These units are, in descending order:

Sentence
Clause-chain
Clause
Verb Compact
Word

These five syntactic units will be discussed only in terms of the verb structure. The affixation of the terminal verb in each unit identifies the level, so that the morphology of the verb applies variously: it codifies the syntactic units.
The sentence may, in its minimal form, be a single clause-chain, a single clause, a single verb compact, or a single word, i.e. a verb. Examples of the sentence are included under section 2.3 (Types of Sentences).

The clause-chain is a unit on a hierarchical level intermediary to sentence and clause. It is a sequence of clauses linked to each other in a relationship of time and subject, these links being formally manifested by the verb affixation of each clause. In addition, the clause-chain in non-sentence-final position has distinctive closure. Chains occurring in sentence final position terminate with the normal sentence closure. In its minimal form a clause-chain may be a single clause, but much more commonly and more typically it is a sequence of clauses. The clause-chain has been identified by the following features.

(a) Intonation Contour. The clause chain-contour has the same shape as the sentence contour except that the onset and ending are less extreme, and the pause between the chains is less pronounced.

(b) Affixation. The affixation of the verb in chain terminal position identifies the chain. Certain such affixes simply indicate the end of the chain while others also indicate the relationship between chains. Clause-chains in sentence medial position carry such closure morphemes as -pa and -mo, in the standard sentence, and -tita and -gi, in the paired-chain sentence. In sentence
final position, the terminal verb of the chain carries a suffix indicating mood, which is the typical sentence closure. Examples of the clause-chain are given below. (Subscript numbers correlate words in the vernacular with those in the English.)

\[ \text{nani}_1 \text{ yatae}_2 \text{ etepo}_3 \text{ lumu-pa}_4 \ldots \ 'I_1 \text{ came down}_4 \text{ today}_2 \text{ in the morning}_3 \ldots' \]

\[ \text{tite}_1 \text{ mina filo}_2 \text{ lugo}_3 \text{ yaga}_4 \text{ tilago}_5 \text{ nohu-pa}_6 \ldots \ 'I_3 \text{ said}_3, \text{ "Go up (there) and}_1 \text{ buy (it)_2," and}_3 \text{ when they had gone up}_5 \text{ there}_4, \text{ I remained}_6 \ldots' \]

\[ \text{anaga}_1 \text{ nohuna-mo}_2 \ldots \ 'I_2 \text{ was}_2 \text{ there}_1 \ldots' \]

\[ \text{limito}_1 \text{ oto}_2 \text{ kapogu}_3 \text{ noota-mo}_4 \ldots \ 'We_1 \text{ came down and}_2 \text{ came}_2 \text{ and were coming}_4 \text{ along the road}_3 \ldots' \]

\[ \text{ha-tita} \ldots \ 'If_2 \text{ you had shot} \ldots' \]

\[ \text{mina ito}_1 \text{ ito}_2 \text{ mala-tita}_3 \ldots \ 'If_3 \text{ you had}_3 \text{ bought (it) and}_1 \text{ taken (it) and}_2 \text{ placed it}_3 \ldots' \]

\[ \text{bu'ehina-gi} \ldots \ 'Since_2 \text{ he has gone} \ldots' \]

\[ \text{muya}_1 \text{ hepatoti}_2 \text{ maya}_3 \text{ mina filube}_4 \text{ luto}_5 \text{ ti'ehina-gi}_6 \ldots \ 'Since_2 \text{ he has gone up}_6 \text{ saying}_5, \text{ "I will buy}_4 \text{ sweet potato}_3 \text{ from the village}_2 \text{ up there}_1," \ldots' \]

The only obligatory constituent of the clause is the verb compact. The occurrence of the noun phrases in the clause produces the following pattern.
Subject always precedes Object, but Time and Subject may be inverted. Instrument and Indirect Object are mutually exclusive in the same clause. Instrument may occur adjacent to, but following Subject; whereas Locative may occur adjacent to Subject, either preceding or following it. It is very uncommon to have more than one or two noun phrases in any one clause.

The clause terminus is marked by the verb suffixes -to and -go when in medial position within the chain or sentence. Clauses occurring at the end of the chain or sentence bear the characteristic affixation of these units. The following examples are given.

(a) within the clause-chain

\[ \text{gu'i}_1 \text{ li-to}_2 \ldots \text{ 'He took}_2 \text{ the bag}_1 \text{ and}_2 \ldots \]  
\[ \text{anaga}_1 \text{ nobi-go}_2 \ldots \text{ 'He goes}_2 \text{ there}_1 \text{ and}_2 \ldots \]  

(b) at the end of a clause-chain

\[ \text{efahi}_1 \text{ ega-pa}_2 \ldots \text{ 'He saw}_1 \text{ the money}_2 \ldots \]  
\[ \text{maga}_1 \text{ menohu-tita}_2 \ldots \text{ 'If I were not}_2 \text{ here}_1 \ldots \]  

(c) at the end of a sentence

\[ \text{melekehi}_1 \text{ hekalala-be}_2 \ldots \text{ 'They will begin the dance.'} \]  
\[ \text{nehafi-he?} \text{ 'Are they (here)?} \]  
\[ \text{fili'ehi-be}. \text{ 'He died.'} \]
The verb compact may consist of (a) a single nuclear verb (i.e. its stem plus affixation), (b) a periphrastic verb complex, (c) a verb compound, or (d) a special auxiliary construction. Each of these functions as a semantic unit, and one that will not allow insertions within the verb compact. Modification, for example, is external to the verb compact and is manifested as a clause which occurs immediately prior to the verb compact. There is an optional but significant proclitic of the verb compact, the morpheme a- 'actualizer', which marks the onset of the verb compact. The various manifestations of the verb compact, listed above, will be described in greater detail in Chapter III. Examples follow.

emibo.  'Give him.'
laita hilube.  'I will cook.'
fi netabe.  'It pierced me.'
a-li molo'ehibe.  'He placed it.'
a-bilube'mu nohube.  'I am about to go.'
a-li bati hu ketalube.  'I will fix it for you.'

In terms of the verb structure, and with reference to only the verb, words are those free forms which occur as constituents of the verb compact and may be comprised of either inflected or uninflected stems.
2.3 Types of Sentences

There are two distinct types of sentence, based on internal constituent structure: (a) the standard sentence, and (b) the paired-chain sentence.

The standard sentence consists of one or more clause-chains, of which the only obligatory constituent is the final chain (which may be, minimally, one verb). This is the most generally used type of sentence structure, occurring freely in both narrative and dialogue. Examples follow (slant lines indicate the end of a clause chain).

bo. 'Come.'

fa'mene₁ nohube₂. 'I am doing₂ nothing₁.'

afo'nifu₁ koyapa₂ ana₃ yafa₄ kofo'ehina yabe₅.

'My father₁ planted₅ that₃ tree₄ long ago₂.'

hiya₁ kifina₂ beye nofibe₃? 'Which₁ grass₂ is he chipping₃?'

nani₁ ya'malo₂ nohunati₃ saboli₄ lito₅ mobuto₆

kapo₇ le'mo bati humofa'na nohunati₈ ya'ma₉

toto₁₀ nohunogo₁₁ nagami'i₁₂ biligo₁₃ buto₁₄

noloto₁₅ gu'i₁₆ lito₁₇ mobuto₁₈ misini₁₉ hepatoti₂₀

kokole₂₁ mu'a₂₂ lito₂₃ notona yabe₂₄. 'I₁ took₅ a shovel₄ from here₂ where we are₃ and went down₆ and from where we were mending₈ the road₇ came up₁₀ here₉ and while I was here₁₁ the water₁₂ boiled₁₃ and I went₁₄ and drank it₁₅ and took₁₇ a bag₁₆ and went down₁₈ and got₂₃ hen₂₁ eggs₂₂
from the mission\textsubscript{19} place\textsubscript{20} and I am coming up\textsubscript{24}.'

etehi\textsubscript{1} limito\textsubscript{2} nohunamo\textsubscript{3}/ bona'\textsubscript{4} yaga\textsubscript{5} kofite\textsubscript{6} abe\textsubscript{7}. 'This morning\textsubscript{1} I came down and\textsubscript{2} remained\textsubscript{3};/ men\textsubscript{4} came\textsubscript{7} carrying\textsubscript{6} a pig\textsubscript{5}.'

The paired-chain sentence consists of a pair of clause-chains, both of which are obligatory and which exhibit an interdependency of relationship. That is, the first clause-chain depends on the second and vice versa. This type of sentence is restricted in that (a) the sentence itself is non-expandable, other chains cannot be added; (b) the second chain has to be short, being confined to a single breath-pause group;\textsuperscript{6} (c) it occurs mainly in dialogue. Examples follow.

alo'ehinagi\textsubscript{1}/ lito\textsubscript{2} nobo\textsubscript{3}. 'It is cooked so\textsubscript{1}/ take it and\textsubscript{2} eat it\textsubscript{3}.'

babafi\textsubscript{1} anaga\textsubscript{2} ti'ehinagi\textsubscript{3}/ anaga\textsubscript{4} tilube\textsubscript{5}. 'The teacher\textsubscript{1} has gone up\textsubscript{3} there\textsubscript{2} so\textsubscript{3}/ I will go up\textsubscript{5} there\textsubscript{4}.'

malasini\textsubscript{1} natita\textsubscript{2}/ mefilitine\textsubscript{3}. 'If he had eaten the medicine\textsubscript{1} he would not have died\textsubscript{3}.'

kai\textsubscript{1} lebato'isi\textsubscript{2} minatita\textsubscript{3}/ nama\textsubscript{4} hatita'mu yabe\textsubscript{5}. 'If\textsubscript{3} you\textsubscript{1} had been\textsubscript{3} close\textsubscript{2}/ you would have shot\textsubscript{5} the bird\textsubscript{4}.'

melugu\textsubscript{1} alifi\textsubscript{2}/ kalegu\textsubscript{3} alibe\textsubscript{4}. 'Will he come\textsubscript{2} on foot (by ground)\textsubscript{1}/ or will he come\textsubscript{4} in a car\textsubscript{3}.'
A schematic view of the distribution of clauses within the clause-chain and sentence is given below. Information such as verb form and affixation crucial to the identification of a particular level, is also given.

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<td>Sentence</td>
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<td>Final verb + -pa -mo -tita -gi</td>
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<td>Final verb + Mood</td>
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This scheme is merely representative and is not intended to imply a dichotomous sentence or clause-chain structure. The units themselves will be described in succeeding chapters but the schematic view is included as an aid to the reading of this chapter.
FOOTNOTES

1 This use of the term 'sentence' follows the more traditional, non-generative usage of the term. It is in keeping with the notion as used by the majority of linguists in the New Guinea field. P. M. Healey 1966:41 describes the Telefol sentence in much the same way; as does Harland B. Kerr 1967:8 in his description of Witu; and Karl J. Franklin 1967:28 when contrasting dependent and independent sentences in Kewa. A. Capell and S. A. Wurm, in coining the terms 'sentence medial' and 'sentence final' verbs, do so with reference to a sentence containing multiple clauses.

2 The term 'sentence medial verb' was first used by Capell and occurs frequently also in the writings of Wurm and other linguists with reference to languages of the New Guinea area. In a previous description of Bena-bena (Young 1964:45), I used the terms 'primary' and 'secondary' to refer to sentence final and sentence medial verbs respectively. Since that date the terms 'medial' and 'final' have gained general acceptance in the New Guinea area and I have therefore discontinued the use of 'primary' and 'secondary'.

3 The term 'chain' was first proposed in New Guinea linguistics by Joy McCarthy 1965:59 to describe relationships between sequential clauses in Kanite. It has since been used by Franklin 1967:32, Healey 1966:1 and also by Orneal Kooyers 1966. Of the languages so described by these
authors, Kanite most closely resembles Bena-bena.

The term 'verb compact' has been coined rather than 'verb phrase' for this unit in the hierarchy because, unlike the noun phrases, the verb compact does not include modification. Modification is external to the verb compact. Bena-bena has very few verb modifiers; most modification is by the addition of a modifying clause. Modification of verbs has not been considered in this thesis. Clause modifiers of the verb compact could be regarded as being embedded in a unit which could be called verb phrase. For example *me'me huto\textsubscript{1} a-bubo\textsubscript{2} (do quickly\textsubscript{1} actualizer-go\textsubscript{2}) 'go quickly'.

This linking of clauses in a string in terms of time and subject is an important feature of New Guinea Highland languages and has been described in other terms by various authors. For instance, McKaughan 1966 describes certain types of clause sequences in Tairora in which the dimensions of time and subject play an important part. The use of the term 'chaining' was introduced by McCarthy 1965 to refer to the 'inter-clause concord and agreement in the relationships of time and subject'. McCarthy refers to the process of chaining but does not identify chains as units. Phyllis Healey 1966, on the other hand, does identify chains as units; a particular type of chain being manifested by a particular type of linkage and occurring on a particular level. Healey thus identifies chains on a
number of levels above clause level. What is here de-
scribed for Bena-bena therefore differs somewhat from the
use of the term by both Healey and McCarthy, though it is
closer to McCarthy's usage. Bena-bena chains are chains
of clauses and occur as marked units on one particular
level of the hierarchy.

6The breath-pause group is a phonological unit of rhythm
in Bena-bena speech and is not determined by counting
syllables. This type of rhythmic unit is well known in
certain types of poetry and folk song. A somewhat similar
phonological unit has been described as the 'phonological
word' for Siane by Dorothy James (personal communication).
Chapter III
THE VERB COMPACT

3.1 General Statement

The Verb compact is the crux of the Bena-bena sentence. It is the only obligatory component of the clause; all other components are lateral to it. It functions in a variety of differing roles and relationships within the levels of sentence, clause-chain and clause, these varying roles being marked by verb affixation.

The internal structure of the verb compact may be in some instances quite simple, but in others it may be very complicated. The verb compact may be manifested by (a) a simple nuclear verb, (b) a periphrastic complex, (c) a compound unit, or (d) a special auxiliary construction.

3.2 Nuclear Verb

The verb compact in its simplest form is comprised of a single verb. Any one-word verb which alone may so constitute the verb compact is termed 'nuclear'. Any such verb may be the nucleus of a verb compound, and certain such verbs may be the nucleus of a periphrastic complex. As the nucleus of such constructions, these verbs occur last in the string. When alone manifesting the verb compact and when functioning as the nucleus for the periphrastic
complex or the compound unit, such a verb carries the main affixation, signaling, for example, tense, subject and mood. Verbs which precede the nucleus do not carry such affixation. Thus the nuclear verb constitutes the center of an endocentric construction.

3.3 Periphrastic Complex

The periphrastic complex, which constitutes about fifty percent of the verbal entities in the lexicon, consists of a close-knit sequence of two components: a free form followed by a nuclear verb, both of which are obligatory. A scheme of the periphrastic complex with an example follows.

<table>
<thead>
<tr>
<th>Periphery</th>
<th>Nucleus</th>
</tr>
</thead>
<tbody>
<tr>
<td>loka</td>
<td>ho'ehibe 'he asked'</td>
</tr>
<tr>
<td>'ask'</td>
<td>'he hit'</td>
</tr>
</tbody>
</table>

The free form, which is in pre-position to the nuclear verb, fills largely a semantic role, but is peripheral in terms of grammatical function. The only affix which occurs on such words is the object prefix. These words, which are numerous, do not occur in any environment other than as adjuncts to particular nuclear verbs; they therefore constitute a class on their own, here called 'peripheral word'. It should be pointed out that though each peripheral word associates with one particular nuclear verb, each nuclear verb, on the other hand, may associate
with a diversity of peripheral words.

The role of the nuclear verb in a periphrastic complex is primarily one of grammatical function. It loses its intrinsic meaning in almost every instance, and becomes a nucleus to carry all the usual verb affixes except object. A relatively small number of verbs occurs as nucleus of the periphrastic complex.\(^3\)

The periphrastic complex always functions as a unit. The two components of the unit are obligatory, and no element may be interposed between them. Note however, that even so, the peripheral component is not a prefix. The peripheral component is a free word because (a) it conforms phonologically to the stress and pause patterns typical of the Bena-bena word, and (b) each such peripheral word associates with one, and only one specific nuclear verb, whereas prefixes attach to any verb.

Examples of the periphrastic complex follow. These have been selected to illustrate the association between certain frequently occurring nuclear verbs with a variety of peripheral words. Also included are some examples showing the object prefix attached to the peripheral word.

\begin{itemize}
\item \texttt{loka\textsubscript{1} ho'ohube\textsubscript{2}} (ask\textsubscript{1} hit\textsubscript{2}). 'I asked him.'
\item \texttt{kota\textsubscript{1} ho'ehibe\textsubscript{2}} (trip\textsubscript{1} hit\textsubscript{2}). 'I tripped.'
\item \texttt{gofa\textsubscript{1} ho'ehibe\textsubscript{2}} (break across\textsubscript{1} hit\textsubscript{2}). 'I broke it.'
\item \texttt{lag\textsubscript{1} hu'ohube\textsubscript{2}} (cut\textsubscript{1} do\textsubscript{2}). 'I cut it.'
\end{itemize}
3.4 Compound unit

A different type of verbal construction which manifests the verb compact consists of a paratactic sequence of verbs the last of which registers the major affixation. This is a form of compounding. Compounding of the verb is defined as the pre-positioning of a verb stem (or stems) before an inflected nuclear verb or before a periphrastic complex. This combination functions as a unified and coordinated verb expression showing formal agreement with the subject between components of the unit, and signaling a composite meaning.

A scheme of the compound unit, with examples, follows.
(Verb Stem) Verb Stem Inflected Verb

\begin{tabular}{lll}
  & \textbf{li} & \textbf{molobo} & 'place it' \\
  & 'take' & 'put' & \\
  & \textbf{li} & \textbf{heki} & \textbf{he'mibo} & 'throw it away' \\
  & 'take' & 'empty' & 'discard' & \\
\end{tabular}

Verbs which occur in pre-position within the compound unit are limited numerically but have a high frequency of occurrence with a variety of verbs occupying final position. The limitation in this context results from semantic restriction relative to a logical sequence of action. A verb which occurs in pre-position in one compound unit may occur in final position in another. Examples of the same verb occupying either pre-position or final position follow.

\underline{kisi₁ he'mi'}\underline{ohube₂} (untie₁ discard₂). 'Untying it I discarded it.'

\underline{li₁ kisi'}\underline{ohube₂} (take₁ untie₂). 'Taking it I untied it.'

The verb in final position carries all the usual affixes. A partial exception to this is the object prefix which attaches to whichever component is appropriate (that is, to whichever verb may take an object): the verb in final position or the verb in pre-position. The following examples illustrate such alternative occurrences of the
object prefix.

\[ \text{no-ho}_1 \text{ fillilibe}_2 \quad (\text{hit}_1 \text{ die}_2). \quad '\text{He will kill me.'} \]
\[ \text{li}_1 \text{ ni-milibe}_2 \quad (\text{take}_1 \text{ give}_2). \quad '\text{He will give it to me.'} \]

All affixes, including the object, apply to the compound as a whole.

When the periphrastic complex is used within the compound unit it may be a pre-positional component or a final component, or both. In final position the nucleus of the periphrastic complex carries all the characteristic affixation. In pre-position, the nucleus of the periphrastic complex is reduced to its basic stem while the peripheral word remains unchanged. The following examples of the compound unit include both periphrastic complexes and simple nuclear verbs as components in either final or pre-position.

\[ \text{ho}_1 \text{ ko'ohube}_2 \quad (\text{hit}_1 \text{ lie}_2). \quad '\text{I fell over.'} \]
\[ \text{lu}_1 \text{ bube}_2 \quad (\text{say}_1 \text{ go}_2). \quad '\text{I speak into (record).'} \]
\[ \text{li}_1 \text{ bati hubo}_2 \quad (\text{take}_1 \text{ right}_2). \quad '\text{Straighten it.'} \]
\[ \text{su ti}_1 \text{ he'mibo}_2 \quad (\text{uproot}_1 \text{ discard}_2). \quad '\text{You uproot it.'} \]
\[ \text{laita hu}_1 \text{ bati hubo}_2 \quad (\text{roast}_1 \text{ right}_2). \quad '\text{Cook it well.'} \]

3.4.1 Distinctions Between Periphrastic Complex and Compound Unit

There are several formal distinctions between the
A periphrastic complex and the compound unit.

(a) A peripheral word in a periphrastic complex occurs only with one specific verb, whereas the pre-positional verb in a compound unit may occur with a variety of other verbs in other compounds.

(b) The peripheral word of a periphrastic complex cannot occur alone but only in association with a particular nuclear verb, whereas the pre-positional word of a compound unit may also occur in isolation.

(c) The verb in pre-position in a given compound unit, may occur in final position in another compound, but the peripheral word of a periphrastic complex can never be the nucleus.

(d) The pre-positional word of a compound unit has a potential for full inflection, but the peripheral word of a periphrastic complex may not inflect except for object.

(e) The periphrastic complex may occur as a component of the compound unit, but not vice versa.

3.4.2 The Benefactive Compound

Benefaction in Bena-bena is indicated by a special compounding of a verb or periphrastic complex in pre-position and a special benefactive verb in final position. The object prefix, denoting benefactee, obligatorily attaches to the verb in final position. This final verb also carries all of the usual suffixes. The benefactive verb cannot occur except as the final component of this
type of compound. This compound is used where the actor performs an action on behalf of another person, or, in certain instances, where the other person is the recipient of the action.  

Other definitive features of the benefactive compound follow.

(a) Object prefixes are obligatory, and in contrast with the periphrastic complex, affix to the final component, that is, to the benefactive verb.

(b) In direct contrast to the final component of all other compounds and to the final component of the periphrastic complex, the benefactive verb carries no other prefixes. The negative and operative prefixes attach to the verb in pre-position.

(c) In addition to having stem variants showing formal agreement with subject, as mentioned with reference to the verbs of the compound unit (3.4 above), the benefactive verb also has stem variants showing formal agreement with object. These variants are displayed in matrix arrangement in Table I below.
Table I

STEM VARIANTS OF THE BENEFACTIVE VERB

<table>
<thead>
<tr>
<th>Object</th>
<th>Subject (past)</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monofoocal</td>
<td>Polyfocal</td>
</tr>
<tr>
<td>Sing., Dual and 1st person plural</td>
<td>-to-</td>
<td>-te-</td>
</tr>
<tr>
<td>2nd and 3rd person plural</td>
<td>-polo-</td>
<td>-pele-</td>
</tr>
</tbody>
</table>

The monofocal and polyfocal subject manifestations of verb stems are described in Chapter IV.8

The following are some examples of the benefactive compound.

\[ hu_1 \text{ ke-to'ohube}_2 \] (do\_1 you-benefactive\_2). 'I did it for you.'

\[ me-hu_1 \text{ ke-to'ohube}_2 \] (not-do\_1 you-benefactive\_2). 'I did not do it for you.'

\[ me-no-hu_1 \text{ ke-tobe}_2 \] (not-operative-do\_1 you-benefactive\_2). 'I am not doing it for you.'

\[ laita hi_1 \text{ ke-te'ehabe}_2 \] (cook\_1 you-benefactive\_2). 'They cooked it for you.'

\[ li_1 \text{ heki}_2 \text{ he'mi}_3 \text{ ne-te'ehabe}_4 \] (take\_1 tip out\_2 discard\_3 me-benefactive\_4). 'They threw it out for me.'

\[ li_1 \text{ laga hu}_2 \text{ e-polo'ehibe}_3 \] (take\_1 cut\_2 them-benefactive\_3). 'He cut it for them.'
hi₁ e-pele'ehabe₂ (do₁ them-benefactive₂). 'They
did it for them.'

3.5 Special Auxiliary Constructions

Another manifestation of the verb compact, and one
that is quite different from the three already described,
is the special auxiliary construction. Such constructions
constitute a special sequence of two (or three) inflected
verbs linked together in a relationship of interdependency.
These constructions are typically expressive of verb aspect
(and, in this sense differ from the three manifestations of
the verb compact already described), covering such ideas as
intention, customary action, repetitive action and other
kinds of interdependencies.

Each auxiliary construction has two essential com­
ponents: a verb component indicating aspect and an auxil­
iary component in that order. Any verb may constitute the
aspectual component, but the auxiliary component may only
be manifested by the verb 'to be' (hu-), or, in certain
instances, by yabe (stative word) which functions as a
clause closure unit.⁹ The verbs manifesting the aspectual
component differ somewhat in form depending on the aspect
being expressed.

The special auxiliary constructions indicate the
following aspects.

(a) Immediate Intensive Aspect. The immediate inten­
tive aspect employs the verb 'to be' as auxiliary which
carries all the usual nuclear affixation except the object and negative prefixes, and must be in the present tense and most frequently takes the operative prefix (no-). The verb indicating aspect, on the other hand, must be in the future tense in accord with the intensive idea, and conjugates for subject number but not for person (see 5.2.1). This does not create ambiguity because the auxiliary verb signals the absolute subject of the whole. The object prefix, when appropriate, attaches to the aspectual verb. The negative prefix also attaches to the aspectual verb. An intensive suffix (-'mu) terminates the aspectual verb. Some examples follow.

\underline{bilube-'mu_1 nohibe_2} (go-intensive_1 be_2). 'He intends to go right now.'

\underline{na-halube-'mu_1 nohibe_2} (me-hit-intensive_1 be_2).

'He is about to hit me.'

\underline{me-lilube-'mu_1 nohibe_2} (not-take-intensive_1 be_2).

'He is not on the verge of taking it.'

(b) Emphatic Intensive Aspect. The emphatic intensive aspect construction is like the immediate intensive in that it employs the -'mu suffix, with the negative and object prefixes attaching to the aspectual verb which must be in the future tense. It differs in that the auxiliary is yabe; and in that the usual nuclear affixation applies to the aspectual component, so that the subject is fully specified
in the aspectual component. The emphatic suffix (-na) is obligatorily included in the aspectual verb. Some examples follow.

\[
bilu-na-'mu_1 \text{yab}_e_2 \quad (g_0 \text{ stative}_2). \quad 'I \text{ will certainly go.}'
\]

\[
me-bilu'i-na-'mu_1 \text{yab}_e_2 \quad (\text{not-}g_0 \text{ stative}_2). \quad '\text{We two will definitely not go.'}
\]

\[
na-hali-na-'mu_1 \text{yab}_e_2 \quad (m_e-hi_1 \text{ stative}_2). \quad 'He will not hit me, definitely.'
\]

(c) Iterative Aspect. The iterative aspect also uses the verb 'to be' as auxiliary but there is no constraint as to its tense and the negative prefix attaches to this auxiliary verb. All the usual affixation, except object, occurs on the auxiliary verb. Object, when appropriate, attaches to the aspectual component. The aspectual component is comprised of a verb stem to which the iterative morpheme (-ba) is suffixed. This whole word is duplicated to give a two word aspectual component. There is agreement between the two parts of the aspectual component and the auxiliary for subject. Some examples of the iterative auxiliary construction follow.

\[
\begin{align*}
\text{no-ba}_1 \no-ba_2 \text{nobe}_e_3 & \quad (e_a_1 \text{ eat}_2 \text{ be}_3). \quad '\text{He eats and eats.'} \\
\text{lu-ba}_1 \lu-ba_2 \text{hilibe}_e_3 & \quad (t_a_1 \text{ talk}_2 \text{ be}_3). \quad '\text{He will talk and talk.'}
\end{align*}
\]
ko-ho-ba₁ ko-ho-ba₂ hu'enibe₃ (you-hit₁ you-hit₂ be₃). 'He hit you repeatedly.'

ko-ba₁ ko-ba₂ me-hilibe₃ (sleep₁ sleep₂ be₃).

'He will not sleep and sleep.'

(d) Customary Aspect. Customary aspect also requires the verb 'to be' as its auxiliary. The aspectual verb consists of a basic stem to which the customary suffix (-lata) is added. As with verb compounds and as with the iterative aspect construction, there is agreement between the aspectual component and the auxiliary component with regard to subject. The negative and object prefixes attach to the aspectual verb as in most other auxiliary constructions cited above. It is most common for the auxiliary verb to be in the present tense, but examples in past and future have also been noted. Some examples of the customary auxiliary construction follow.

kafa-lata₁ nohibe₂ (plant₁ be₂). 'He habitually plants.'

fala-lata₁ nohune₂ (hide₁ be₂). 'We always hide.'

keye li-lata₁ nehabe₂ (club₁ be₂). 'They kill by clubbing.'

As the last example partially illustrates, a periphrastic complex or a compound unit may substitute for the simple nuclear verb in the aspectual component of any of
these auxiliary constructions. The only constraint is that in the iterative construction only the last element of the periphrastic complex or the compound unit reduplicates. Some examples are as follows.

\[
\text{mina } fi_{1} \text{ fi}_{2} \text{ nohane}_{3} \quad \text{(buy}_{1} \text{ buy}_{2} \text{ be}_{3}). \quad \text{'You are buying and buying.'}
\]

\[
\text{li}_{1} \text{ malalube-'}\text{mu}_{2} \text{ nohibe}_{3} \quad \text{(take}_{1} \text{ put}_{2} \text{ be}_{3}). \quad \text{'He is about to place it.'}
\]

\[
\text{lag}a \text{ hu}_{1} \text{ he'}\text{mi}_{2} \text{ ke-tali-na-'}\text{mu}_{3} \text{ yabe}_{4} \quad \text{(cut}_{1} \text{ discard}_{2} \text{ you-benefactive}_{3} \text{ stative}_{4}). \quad \text{'He will definitely cut it off for you.'}
\]

3.6 Summary

This chapter has described the four differing manifestations of the verb compact: nuclear verb, periphrastic complex, compound unit and special auxiliary construction. Any one of these manifestations of the verb compact may occur as the essential component of the clause in any of the higher level units in which the clause occurs. For the sake of simplicity of description, in succeeding chapters (especially in Chapters V, VI and VII which describe the verb affixation in greater detail) reference is made simply to 'verbs' and most illustrations utilize only the nuclear verb. But it should be understood that the other manifestations of the verb compact are equally relevant.
FOOTNOTES

1 I know of only two exceptions, both recent innovations, and both of which use the peripheral word as a descriptive within a noun phrase: okala nopo 'wash house' and laita nopo 'kitchen'.

2 The periphrastic complex in Bena-bena is apparently somewhat similar to a construction in Telefol which Phyllis Healey 1965:32 calls Adjunct and Auxiliary, where she argues that Adjunct is a class of words in its own right. My description of Bena-bena final verbs (Young 1964:78-83) refers to the Bena-bena construction as a Periphrastic Complex and I am here continuing the use of the term, which I consider appropriate because the first component of the periphrastic complex is peripheral in terms of grammatical function.

3 It is hard to estimate a percentage because new expressions of this type are being observed from time to time.

4 Agreement for subject between the component verbs of a compound unit is manifested by variants of the verb stem which will be described in Chapter IV.

5 In compounds with two or three stems in pre-position only a very limited number of verbs may occur first.

6 This is indicative of a hierarchical arrangement of units within the verb compact.
The notion of substitution (to do something instead of someone else) is not conveyed by the benefactive but by an entirely different construction: a noun phrase and clitic.

The variation of the stem conditioned by the object also occurs in a few other verbs and is described in 5.3.1.

*yabe* is not a true verb but serves in a verbalizing function as is evidenced by the indicative mood ending *be*. The only other forms of this word are also verbal: *yago* and *yagi* are forms in keeping with sentence medial verb endings.
Chapter IV
VERB STEMS

4.1 Identity

The stem of the verb is the base to which prefixes and suffixes are attached.

The following schematic representation, showing the affixation for a nuclear verb in sentence final position, demonstrates the relative order of the bound components with reference to the stem. Though medial verbs differ to some degree in their affixation, ordering of the components is the same.


All prefixes (Negative, Operative, Object) are optional (except for certain verbs which require an object), each is independent of the others, and any combination is allowable. The operative has a natural affiliation with the verb in the present tense; it has been noted as occurring with other tenses, but with much less frequency. Of the suffixes (Tense, Subject, Emphatic, Question, Mood), Tense, Subject and Mood are obligatory in sentence final verbs.

The verb stem is a unit which is of one or two syllables, the final segment of which is a vowel. The
typical patterns are: V, CV, CVCV (or CV₁CV₁ where the subscript i indicates that the vowels are identical).

The segmentation of the verb into stem and affixes is by no means easy because of fusion in some forms and because of allomorphic variation. An alternative cut to the one adopted in this paper would assign the stem final vowel to the first suffix, but this has been rejected on the following grounds: (a) it would give lexically contrastive zero stems; (b) it would result in a large number of homophonous stems (including, incidentally, frequently occurring verbs); (c) stems which are mentioned above as containing two syllables in which the vowels are identical, would have to be described as containing a variable vowel, the identity of which could only be traced from the suffix; (d) such a segmentation places the formal distinction between open list lexical items on the form of the closed list items (the suffixes) and is therefore less attractive.

4.2 Stem Classification

The verb stems exhibit allomorphic stem alternation. The final vowel of the verb stem (or, in the case of two syllable stems which contain identical vowels, both vowels of the verb stem) varies, conditioned by two dimensions: (a) subject, and (b) time.¹

The subject dimension contrasts two oppositions of focus on the number of the subject, called Monofocal, where attention is focused on a singular subject or upon a
### Table II
MONOFOCAL VERSUS POLYFOCAL STEM FORMS FOR THE VERB 'to hit'

<table>
<thead>
<tr>
<th>Stem Form</th>
<th>Number</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monofocal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plural</td>
<td>Dual</td>
</tr>
<tr>
<td></td>
<td>ho'ohune</td>
<td>ho'ohu'ibe</td>
</tr>
<tr>
<td><strong>Polyfocal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>he'ehabe</td>
<td>he'eha'ibe</td>
</tr>
<tr>
<td></td>
<td>he'ehabe</td>
<td>he'eha'ibe</td>
</tr>
</tbody>
</table>

### Table III
STEM CLASSIFICATION IN PAST AND FUTURE TENSE

<table>
<thead>
<tr>
<th>Tense</th>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mono- focal</td>
<td>Poly- focal</td>
<td>Mono- focal</td>
</tr>
<tr>
<td>'hit'</td>
<td>ho-</td>
<td>he-</td>
<td>bu-</td>
</tr>
<tr>
<td>'go'</td>
<td>fi-</td>
<td>fi-</td>
<td>fi-</td>
</tr>
<tr>
<td>Future</td>
<td>ha-</td>
<td>ha-</td>
<td>bi-</td>
</tr>
<tr>
<td>'pierce'</td>
<td>fi-</td>
<td>fi-</td>
<td>fi-</td>
</tr>
</tbody>
</table>
When the operative prefix (no-\~ne-) is added to the medial verb in the present tense, the time relationship signaled is one of simultaneity or overlap. Some examples are as follows.

6.4.2 Simultaneity

When the operative prefix (no-\~ne-) is added to the medial verb in the present tense, the time relationship signaled is one of simultaneity or overlap. Some examples are as follows.

\[ \text{nani}_{1} \text{ maya}_{2} \text{ ito}_{3} \text{ bu-to}_{4} \text{ laita h-u-go}_{5} \text{ e-te}_{6} \text{ nele-te}_{7} \ldots \] 'When I have taken the sweet potato and gone and cooked it and they have come and eaten it ...'

6.4.3 Completion

When the sequence requires that one action be completed before the next is begun, the past tense is used.

There are some minor differences between the past tense forms of the verb in same subject constructions and in different subject constructions. The past tense forms in verbs marked for different subject relationships are identical with those used in final verbs. In verbs marked
6.4.2 Simultaneity

When the operative prefix (no~ne-) is added to the medial verb in the present tense, the time relationship signaled is one of simultaneity or overlap. Some examples are as follows.

\[\text{nani}_1 \text{ maya}_2 \text{ i-to}_3 \text{ bu-to}_4 \text{ laita}_5 \text{ h-u-go}_6 \text{ e-te}_7 \]
\[\text{nele-te}_7 \ldots \ 'When I have taken the sweet potato and gone and cooked it and they have come and eaten it . . . ' \]

6.4.3 Completion

When the sequence requires that one action be completed before the next is begun, the past tense is used.

There are some minor differences between the past tense forms of the verb in same subject constructions and in different subject constructions. The past tense forms in verbs marked for different subject relationships are identical with those used in final verbs. In verbs marked
for the same subject relationship, past tense forms utilize
only two of the three allomorphs of the past tense morpheme,
and utilize these two allomorphs to contrast monofocal and
polyfocal integral subject: o- monofocal and e- polyfocal.
Since e- is used in final forms with third person singular
(which is normally classified as monofocal) as well as with
polyfocal subjects, this medial use constitutes a modifica­
tion of the past tense matrix. Table XXII demonstrates the
matrix within which the same subject medial verb operates
for past tense. Compare this with Table X (5.2.2.3) which
shows the forms of the past tense morpheme as used in final
verb forms and in different subject medial forms. Examples
of sequences of clauses involving completion follow.

\[ \text{nani}_1 \text{ Goroka}_2 \text{ bu-'o-hu-to}_3 \text{ mina filube}_4. \ '\text{When}_3 \]
\[ \text{I}_1 \text{ go to (i.e. after I get to)}_3 \text{ Goroka}_2 \text{ I will} \]
\[ \text{buy it}_4. \]
\[ \text{yafa}_1 \text{ kofo-'e-hi-go}_2 \text{ notibe}_3. \ '\text{He planted}_2 \text{ the} \]
\[ \text{tree}_1 \text{ and}_2 \text{ it is growing}_3. \]
\[ \text{pana'i}_1 \text{ keto-'o-hu-to-'a}_2 \text{ kalibe}_3. \ '\text{After she} \]
\[ \text{has given birth to}_2 \text{ the child}_1 \text{ she}_2 \text{ will sleep}_3. \]
\[ \text{yaha'a}_1 \text{ laga hu-eh-i-go}_2 \text{ sa gi'ohube}_3. \ '\text{She had} \]
\[ \text{cut}_2 \text{ her hand}_1 \text{ and}_2 \text{ I bound it up}_3. \]
Table XXII

PAST TENSE FORMS OF MEDIAL VERBS MARKED FOR SAME SUBJECT RELATIONSHIP ILLUSTRATED BY fi- 'pierce'

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular</td>
</tr>
<tr>
<td>1st</td>
<td>fi'ohuto*</td>
</tr>
<tr>
<td>2nd</td>
<td>fi'ohuto</td>
</tr>
<tr>
<td>3rd</td>
<td>fi'ohuto</td>
</tr>
</tbody>
</table>

*The past tense morpheme is underlined, and, as for final verbs is immediately followed by the verb 'to be' (hu~hi). The glottal stop is a ligature which ties the past tense composite to the verb stem. The final suffix (-to~-te) indicates same subject relationship.
After they had cooked the pork and placed it on the platform, I saw the birds coming and eating it.

6.4.4 Priority

The future tense, which has the same form as described for final verbs (5.2.2.1) is used to indicate a sequential relationship in which the first action is a prerequisite to the following one and therefore must take place prior to the action which follows. It is very difficult to indicate the difference between clause sequences involving completion and those involving priority. But it should be noted that actions which are prerequisite to others do not necessarily have to be completed before the next action begins. Some examples of sequences involving priority follow.

When they go, they will buy it.

They slept and then went.

He died and we are burying him.

When the two of you give her twine, she will make you bags.
6.5 Conditional

The conditional relationship in a clause sequence involves the use of present or future tense. The verb of the first clause must be in either the present or future tense and the verb of the following clause must either be in the future tense, or be in the imperative mood.

In clauses marked for same subject relationship there is no formal difference between conditional and succession or priority. But in clauses marked for different subject sequences the conditional time relationship requires the addition of the conditional suffix (-no v -to) in third order. The allomorph -no is used with all integral subjects except second person singular and first person plural which use -to. 8

For different subject conditional constructions which are in the future tense, the integral subject contrasts only dual and non-dual (in this case -e'i and -e respectively). 9 For different subject conditional constructions in the present tense integral subjects are the same as those described in 6.3.3.2 above.

Use of the future indicates possibility and translates approximately as 'when'. Where the present is used, the approximate meaning is 'if'.

Examples of clauses marked for conditional sequence are as follows.
ko'\textsubscript{mo} \textsubscript{1} i-no-go \textsubscript{2} minalube \textsubscript{3}. 'If it rains (if\textsubscript{2} rain\textsubscript{1} does\textsubscript{2} ) I will stay\textsubscript{3}.'

ko'\textsubscript{mo} \textsubscript{1} laga hu-l-e-no-go \textsubscript{2} bilune \textsubscript{3}. 'When\textsubscript{2} the rain\textsubscript{1} stops\textsubscript{2} we will go\textsubscript{3}.'

kagabu'\textsubscript{1} gi-no-go \textsubscript{2} malasini \textsubscript{3} li-to \textsubscript{4} nobo \textsubscript{5}. 'If\textsubscript{2} your pain\textsubscript{1} increases\textsubscript{2} take\textsubscript{4} the medicine\textsubscript{3} and\textsubscript{4} eat it\textsubscript{5}.'

ke-l-e'i-no-go \textsubscript{1} bilo \textsubscript{2}. 'When they are both asleep\textsubscript{1} you all go\textsubscript{2}.'

e go-l-e-to-go \textsubscript{1} lu nimibo \textsubscript{2}. 'When you see it\textsubscript{1} tell me\textsubscript{2}.'

\textbf{FOOTNOTES}

\textsuperscript{1}The verb dichotomy 'medial' versus 'final' has been frequently referred to in the literature describing New Guinea Highlands languages, but the exact application of the two terms varies from language to language thus reflecting the diversity of structure among the languages. But in each of the languages so described the terms denote a difference in both form and distribution. Wurm 1964:81 draws attention to this general distinction of form and distribution between medial and final verb forms and goes on in successive pages to describe these distinctions in terms of a number of different languages of the 'East New Guinea Highlands Stock.'
Vincent 1962:13 describes medial verb forms for Tairora as those forms which include a 'portmanteau anticipatory subject suffix which indicates a change of subject in the following construction.' This differs from Bena-bena in that Bena-bena medial verbs also differ from final verbs in stem form as well as affixation, and include those which indicate no change of subject as well as those which indicate a change.

P. Healey 1966:4 uses the terms 'non-finite' and 'finite' respectively in describing a similar phenomenon in Telefol and defines these terms (p. 59) as the absence or presence of certain suffixes: 'person-number-gender suffixes'. Deibler 1963:3 describing Gahuku, categorizes clauses as dependent or independent medial and dependent or independent final.

The importance of time and subject has been emphasized in several publications on New Guinea languages in recent years. See McCarthy 1965:59; Kerr 1967:9; Deibler 1963:19.

Wurm 1964:84-85 remarks that in Bena-bena the presence of this morpheme is almost as frequent as its absence.

McKaughan 1966:3-4 describes a portmanteau suffix in Tairora which he terms 'anticipatory subject marker', which occurs with clauses involved in different subject sequences, and which appears to cover the function of both the relational subject suffix and the preview subject suffix in Bena-bena. McCarthy 1965:67 describes an affix
somewhat similar to the Bena-bena preview subject as 'secondary subject', occurring after the 'primary subject marker' in same subject constructions and linked to the primary subject marker by a 'transitional morpheme' in different subject constructions. Her 'transitional morpheme' is probably somewhat similar to the Bena-bena relational subject suffix, but whereas the Kanite affix occurs only in different subject constructions, the Bena-bena affix occurs in both same and different subject constructions and fills a functional role beyond mere transition. Healey 1966:14 describes 'subject preview suffixes' for Telefol and it is her term 'preview' that is taken for the description of Bena-bena here.

5See Wurm 1964:81.

6Wurm 1964:81 uses the terms 'identity' and 'non-identity' for what is here called 'same subject' and 'different subject'. Healey 1966:14 refers to 'homopersonal' and 'heteropersonal' sequences being indicated by the preview subject. Vincent 1962:21 and McKaughan 1966:3 use the terms 'same subject' and 'different subject' describing Tairora. So also does McCarthy for Kanite (1965:67), and Deibler 1963:19. Kerr 1967:9 refers to 'single subject' sentences and 'multisubject' sentences.

7McCarthy 1965:66 discusses a similar phenomenon in Kanite when there is no aspect or mood indicated. McKaughan 1966:4 itemizes what appears to be a neutral tense or
aspect which is similar in some respects to Bena-bena present tense. Healey 1966:16 also refers to a neutral tense.

8Compare this with the Emphatic suffix, the Question suffix and the Indicative Mood suffix (5.2.3) all of which operate within a similar matrix.

9Compare with 6.3.3.2 (different subject constructions in the future tense) and 3.5 (immediate intensive auxiliary construction) which also contrast dual and non-dual but each does so with different vowels: immediate intensive, -u'í and -u; different subject future -a'í and -a; and, here, different subject future conditional, -e'í and -e.
Chapter VII

PAIRED-CHAIN SENTENCES

7.1 General statement

The paired-chain sentence, as indicated in Chapter II (section 2.3), is composed of a pair of interdependent clause chains. The clause-chains of a paired-chain sentence are interdependent because both are obligatory components of the sentence. In its minimal form the paired-chain sentence may, therefore, be manifested as two verbs each exhibiting the formal characteristics of the terminus of the component chains of the sentence. Thus in its elementary form the paired-chain sentence contrasts sharply with the standard sentence. Two components are essential to the paired-chain sentence and these two components each depend on the other. The elementary form of the standard sentence, on the other hand, has only one component, which is independent. A further difference between the standard sentence and the paired-chain sentence is the difference in expansion potential. The standard sentence may be expanded by the addition of any number of dependent clauses or clause-chains prior to the sentence terminus. The paired-chain sentence is much more restrictive as regards expansion potential. The first
chain may be quite long and include a number of dependent clauses, but the second chain, even with the inclusion of dependent clauses, must be limited to a single breath-pause group, as mentioned in Chapter II (section 2.3). This restriction on the length of the second chain is a manifestation of the interdependent relationship that ties the two chains together as a kind of twin nucleus to the sentence.

The form of the verb in the terminal clause of each chain indicates the type of interdependency involved. There are three types: (a) conjecture, (b) alternative and (c) reason.

7.2 Conjecture

Conjecture sentences are those which speculate about what would have happened had circumstances been different. The first chain expresses the circumstance which would have caused the conjecture expressed in the second chain to eventuate or which did not favor the conjecture taking place. The absolute tense of the conjecture sentence may be either past or present, but future tense is precluded. The stem forms employed in the chain terminus of either component are those typical of sentence final verbs in past or present tense.

Conjecture affixes occur in final position in each chain and attach directly after the subject suffix, that
is, in third position from the stem. The conjecture affix occurring on the terminal verb of the first chain is -tita; and on the terminal verb of the second chain is -tine. Another slightly different form of the conjecture sentence uses an auxiliary construction at the end of the second chain which bears a resemblance to the emphatic intiative construction described in Chapter III (section 3.5). It is marked by the portmanteau morpheme -tita'mu and the clause closure word yabe. Some examples of the conjecture sentence follow.

\[ \text{kai}_1 \text{ noha-tita}_2 / \text{ega-ti}3. \text{ 'If}_2 \text{ you}_1 \text{ were (here)}_2 / \text{ you would have seen (it)}_3.' \]

\[ \text{nani}_1 \text{ malasino}_2 \text{ emi-tita}_3 / \text{mefili-tita'mu yabe}_4. \text{ 'If}_3 \text{ I}_1 \text{ had given him}_3 \text{ medicine}_2 / \text{ he would not have died}_4.' \]

\[ \text{ai}_1 \text{ yaga}_2 \text{ le'moto}_3 \text{ mebu'eni-tita}_4 / \text{hoto}_5 \text{ no-tine}_6. \text{ 'If}_4 \text{ he}_1 \text{ had not}_4 \text{ taken}_3 \text{ the pig}_2 \text{ and gone}_4 / \text{ we would have}_6 \text{ killed}_5 \text{ and eaten it}_6.' \]

\[ \text{go'i}_1 \text{ ligo}_2 \text{ ba-tita}_3 / \text{kiya'nefa}_4 \text{ ha-tita'mu yabe}_5. \text{ 'If you had gone}_3 \text{ when}_2 \text{ dawn}_1 \text{ broke}_2 / \text{ you would have shot}_5 \text{ a cassowary}_4.' \]

7.3 Alternative

Alternative sentences are those which express a degree of uncertainty between two alternative courses of action. The terminal verb of each chain is exhibited as
a sentence final verb, but the verb of the first chain omits mood and obligatorily takes the question suffix. The second chain, on the other hand, must terminate in the indicative mood. Examples of the alternative sentence follow.

\[\text{bibu-fi}_1 / \text{minalu-be}_2 ? \] 'Shall I go or \_ shall I stay?'

\[\text{mino'ehi-fi}_1 / \text{memino'ehi-be}_2 ? \] 'Has he stayed or \_ has he not stayed?'

\[\text{yege}_1 \text{lali-fi}_2 / \text{ko'1}_3 \text{ili-be}_4 ? \] 'Will \_ the sun \_ shine or \_ will it rain?'

\[\text{afokafu}_1 \text{olenogo}_2 \text{kafala-pi}_3 / \text{meago}_4 \text{kafala-ne}_5 ? \] 'Will you plant \_ when \_ you father \_ comes or \_ before he comes?'

7.4 Reason

In reason sentences the first clause-chain expresses the reason for a course of action, and the second chain expresses the resultant action as a corollary. Reason sentences always involve a change of subject between the two chains. Not only are the actions of the two chains interdependent, but the actor of the second chain is influenced by the actor of the first.

Reason sentences are marked by the occurrence of the reason suffix \(-gi\), which translates as 'because', 'since', or 'so'. It necessarily requires the
co-occurrence of the emphatic morpheme -na^ta in pre-
position (see 5.2.3.1). Note that the reason suffix is 
mutually exclusive with the question suffix (5.2.3.2) and 
occurs in fourth order from the stem. Verbs which affix 
for reason are formally patterned on sentence final verbs.

Reason sentences are indicated by either of two 
formal devices.

(a) The first chain terminates in -gi and the second 
with any of the sentence final forms described for the 
standard sentence. For example,

\[
\text{nani}_1 \text{minaluna-gi}_2 / \text{kai}_3 \text{bubo}_4. \quad 'I_1 \text{ will stay}
\text{so}_2 / \text{you}_3 \text{go}_4.'
\]

(b) The second chain terminates in -gi plus the mood 
suffix -he and the first chain terminates with a sentence 
medial verb marked by the relational subject suffix for 
different subject -go. For example,

\[
\text{efahi}_1 \text{ nimi'ehi-go}_2 / \text{gelo bi'ohuna-gi-he}_3.
'Because he gave me}_2 \text{ the money}_1 / \text{ I was happy}_3.'
\]

Other examples of the reason sentence follow.

\[
\text{faya'}_1 \text{ mina fito}_2 \text{ ito}_3 \text{ o ketalina-gi}_4 / \text{geba hubo}_5.
'Since he will}_4 \text{ buy}_2 \text{ fish}_1 \text{ and bring (take}_3, \text{ come}_4) 
it for you}_4 / \text{ you wait}_5.'
\]
kai₁ buletogo₂/ nani₃ minaluna-gi-he₄. 'If you₁ go₂/ I₃ will stay₄.'
safa'mo₁ nonimi-go₂/ lito₃ nobuna-gi-he₄. 'Since the white man₁ gave it to me₂/ I am taking it₃,₄.'

FOOTNOTES

A structure similar to the Bena-bena conjecture sentence in other New Guinea languages is often called 'contrary to fact' (Vincent 1962:13 and McKaughan 1966:8; Kerr 1967:49). But to use this designation for Bena-bena is to emphasize the negative semantic aspect of this construction (that is, that what was conjectured did not take place). I therefore prefer the term conjecture which emphasizes the positive semantic aspect (that what was conjectured would most certainly have taken place) which seems to me to be more in keeping with the contexts in which I have heard the sentence used.
REFERENCES CITED


