vafMP-R2 \( XH + \begin{bmatrix} \text{te}- \\ \text{to}- \end{bmatrix} \rightarrow \begin{bmatrix} \text{ti}- \\ \text{tu}- \end{bmatrix} \)

The correct shapes are thus \( \text{ri-tu} \) (30b) and \( \text{ri-tima} \) (30d).\(^{15}\)

The combination of active verb bases and the immediate imperative suffixes follows the general pattern of vafMP-R2:

\[ XL \rightarrow X / \_ \text{Imp} \].

The underlying form of the imperative suffix is \(-\text{lepaas}\) for all verb patterns, except that pattern L requires an addition to vafMP-R1:

\[ XL + -\text{le} \rightarrow -\text{te} \].

In every case the imperative is marked by \(-\text{tepaas}\) for altrocentric benefaction (Cf. Chart 6). Examples of each active verb stem morphophonemic pattern are:

(33) \( \text{vda}\) ‘to pull’ + n-1mm n-sg → \( \text{vd-tepaas}\)

‘You all pull it’

(33a) \( \text{vda} + \text{n-1mm n-sg (Alo)} \rightarrow \text{vd-dae-tepaas}\)

‘You all pull it on behalf of someone’

(34) \( \text{ria} \) ‘to carry’ + n-1mm n-sg → \( \text{ria-lepaas}\)

‘You all carry it’

(34a) \( \text{ria} + \text{n-1mm n-sg (Alo)} \rightarrow \text{ria-tepaas}\)

‘You all carry it on behalf of someone’

(35) \( \text{t\d}\) ‘to hit’ + n-1mm n-sg → \( \text{t\d-lepaas}\)

‘You all hit it’

(35a) \( \text{t\d} + \text{n-1mm n-sg (Alo)} \rightarrow \text{t\d-tepaas}\)

‘You all hit it on behalf of someone’
Active verb bases which occur with Non-Terminal suffixes (Chart 8) also require MP rules. The following rule applies to bases which combine with suffixes marking successive actions involving same persons:

\[
\begin{bmatrix}
XL \\
XA
\end{bmatrix} \rightarrow \begin{bmatrix}
X1o \\
X2
\end{bmatrix}
\]

\[ / \]

N-Term (suc-sp),

where in the case of examples (40) and (41) the vowel harmony rule applies to the vowel preceding the successive-same person suffix, i.e. -a becomes -u:

(36) \[\text{péla} \ 'to \ pull \ out' \ + \ -a \rightarrow \text{pélo-a píra-wa}\]

'I pulled it out and sat down.'

(37) \[\text{rákópá} \ 'to husk' \ + \ -a \rightarrow \text{rákópá-a píra-wa}\]

'I husked it and sat down.'

(38) \[\text{róá(s)} \ 'to pluck' \ + \ -a \rightarrow \text{róá-a píra-wa}\]

'I plucked it and sat down.'

(39) \[\text{póndá} \ 'to sharpen' \ + \ -a \rightarrow \text{pónd-a píra-wa}\]

'I sharpened it and sat down.'

(40) \[\text{úfífína} \ 'to grasp' \ + \ -a \rightarrow \text{úfífína-a píra-wa}\]

'I grasped it and sat down.'

(41) \[\text{sa16} \ 'to put' \ + \ -a \rightarrow \text{sa-a píra-wa}\]

'I placed it and sat down.'

(41a) \[\text{saá-wa píra-wa} \ 'I placed it (for someone) and sat down.'\]

In all of the above examples the tense is signalled by the terminal suffix -wa (1 sg Pa).
If the persons involved in the successive actions are different the following rule applies:

\[
\begin{bmatrix}
XL \\
\{XA\} \\
XE
\end{bmatrix} \rightarrow \begin{bmatrix}
X \\
Xe \\
\end{bmatrix} / -3rd \text{ person} \quad (\text{any number})
\]

A variation of vaMP-R1 provides for the only other suffix alternants:

\[
L + \begin{bmatrix}
-limi \\
-limi
\end{bmatrix} \rightarrow \begin{bmatrix}
-tepe \\
-tepe
\end{bmatrix} / -2 \text{ dl, pl}
\]

Some examples are:

(42) \(\text{aw\textsuperscript{aa}}\) 'to dig' + -\(\text{na}\) \(\rightarrow\) \(\text{aw\textsuperscript{aa}-na pf\text{ra}-wa}\)

'He dug it and I sat down.'

(43) \(\text{af\textsuperscript{aa}}\) 'to fasten' + -\(\text{na}\) \(\rightarrow\) af\text{ra-na pf\text{ra}-wa}

'He fastened it and I sat down.'

(44) \(\text{yd\textsuperscript{l\text{\text{"a}}}}\) 'to pull' + -\(\text{na}\) \(\rightarrow\) y\text{d-na pf\text{ra}-wa}

'He pulled it and I sat down.'

(45) \(\text{d\text{\text{"a}}\text{\text{"o}}\text{\text{"a}}p\text{\text{"a}}\text{\text{"e}}}\) 'to break' + -\(\text{na}\) \(\rightarrow\) d\text{\text{"a\text{\text{"o}}\text{\text{"a}}\text{\text{"o}}\text{\text{"e}}-na pf\text{ra}-wa}

'He broke it and I sat down.'

(46) \(\text{b\text{\text{"u}}\text{\text{"a}}\text{\text{"i}}\text{\text{"a}}\text{\text{"a}}\text{\text{"e}}}\) 'to compensate' + -\(\text{na}\) \(\rightarrow\) b\text{\text{"u}\text{\text{"a}}\text{\text{"a}}\text{\text{"i}}\text{\text{"a}}\text{\text{"a}}-na pf\text{ra}-wa}

'He compensated and I sat down.'

(47) \(\text{d\text{\text{"u}}\text{\text{"a}}\text{\text{"a}}\text{\text{"e}}}\) 'to come' + -\(\text{na}\) \(\rightarrow\) d\text{\text{"u}\text{\text{"a}}\text{\text{"a}}-na pf\text{ra}-wa}

'He came and I sat down.'

In example (43) the vowel harmony rule must also be applied.

When two successive actions occur the first may be marked for purpose, rather than simply for time (as in pre-
vious examples). The person, number and tense of the action is again specified in the suffix of the final verb but the total action is a verb phrase (§5.42). The benefactive nature of the purpose suffix may be specified as egocentric or allocentric (note the contrast in (51) and (51a) below.

Some examples are:

(48)  dàng-la pu-lu  'I am going to see it'
(49)  ri-ta pu-a  'He went to carry it'
(50)  ráképá-te pé-lími  'They will go to husk it'
(51)  pógó-ta ép-eme  'They have come to jump'
(51a)  pógóláa-ta ép-eme  'They have come to jump on behalf of someone else'
(52)  rúmaa-ta yelé-a  'In order to ration it out, he yelled out'

The morphophonemic rule which applies to the combination of active verb stems and the purpose suffix (basic -la) is a continuation of earlier rules:

\[
\begin{align*}
\text{vstMP-5b} & : & \begin{bmatrix} XE \\ XL \\ XA \end{bmatrix} & \rightarrow & \begin{bmatrix} XV \\ X \\ XA \end{bmatrix} \\
& & \text{Pur}
\end{align*}
\]

where \( V \) is the penultimate of an XE pattern. If any pattern is also H, then \( o \rightarrow u / H \) according to regular vowel harmony rules. Additionally, the purpose suffix variation follows vafMP-H1 such that:

\[
\text{VB-L,E} + -la \rightarrow -ta
\]

Note examples (49-51) above.
Gerundive actions which are always by the same person are also part of a vp and have morphophonemic rules which are the same as those of R5, so that the environment can now be expanded to read: Pur, Ger. Some examples are:

(53) 뮬 프라-와 'Going on, I sat down'
(54) lève 프라-와 'Talking, I sat down'
(55) łuż 프라-와 'Cooking, I sat down'
(56) 숭 프라-와 'Placing it, I sat down'
(57) 깡ㅈ 프라-와 'Husking it, I sat down'
(58) ActionTypes 프라-와 'Compensating, I sat down'

The gerundive marker can be interpreted either as a zero suffix, or as the morphophonemic change which takes place, or as both. Example (53) also illustrates how the gerundive form of the verb 'to go' is often used to express an on-going or repetitive action.

Verbs denoting alto-centric simultaneous actions by the same person or by different persons are marked by the suffixes indicated in Chart 8 and by the accompanying vətMe-R1:

(59) ڵەە uy 프라-와 'While speaking on his behalf, I sat down'

3.24 Verb Syntagmemes

Active, stative, or derived stative stems expound the Nucleus of verb syntagmemes. The Pheriphery is expounded by affixes which are diagnostic of the type of verb syntagmemes. The Terminal and Non-Terminal suffixes of the pheriphery are
obligatory; other suffixes are optional within the framework
of the particular type of verb syntagmeme, still other suf-
fixes and clitics are optional to any verb syntagmeme:

\[
\text{NUC} : \text{va} / _- + (\text{ASP}^1) + \text{SET I} \\
\quad : \text{vs} \quad (\text{CAS}) + _- + (\text{ASP}^2) + \text{SET II} \\
\quad : \text{dvs}
\]

The Pheriphery can be expounded as follows:

\[
\text{PHERI:} \begin{cases} 
\{ \text{Term I} \} / \text{BASE} + (\text{ASP}^1) + _- \\
\{ \text{N-Term I} \} \\
\{ \text{Term II} \} / (\text{CAS}) + \{ \text{BASE} \} + (\text{ASP}^2) + _-, \\
\{ \text{N-Term II} \}
\end{cases}
\]

where if an ABASE is expounded, vstMP-H1 must be applied.

The remaining functional points for any verb syntagmeme
are:

\[ v \rightarrow (\text{NEG}) + \text{NUC} + \text{PHERI} + (\text{ASP}^3) + (\text{CON}^{\text{MOD}}) \],

where CON and MOD denote Sentence Connectors and Sentence
Modals, which are relevant to and discussed in Chapter 6.

The obligatory exponents have already been reviewed.
Optional categories expound NEG, CAS, ASP\text{A}, ASP\text{B}, and ASP\text{C}.
Each of these will now be dealt with.

3.24.1 Negative

The pre-clitic ne-negates the action signalled by cer-
tain verb phrases (see §5.42 and 5.43), the complemented ac-
tion of certain clauses (see §4.24), or simply the verbal ac-
tion of verb syntagmeme. Some examples are:

(60) na-pálua (neg-go I will = 'I will not go')
(61) na-ndo-la pálua (neg-see-pur, go I will = 'I will not go to see it')
(62) adaalu na-ya-lia (long, neg-affirm-he will = 'He will not grow tall')
(63) na-ma-adaalu yaa-lia (neg-cas-long, affirm-he will = 'He will not shorten it')

In the latter case, in order for the negative to not attach to a verb, it must co-occur with the causative pre-clitic.

Other examples of the use of na- follow:

(64) na-pi-lupaa-pe 'Don't all of you go now'
(65) na-toe 'I will not talk'
(66) na-ma-adóaa-lia 'He should not cause (me) to wait...'
(67) na-mi-la pu-lu 'I am not going to get it'
(68) na-mi-e pua-wa 'I did not get it and I went'
(69) na-méa-no pua-a 'I did not get it and he went'
(70) na-méa-no na-púu-a 'I did not get it and he did not go'

In example (64), na- negates an imperative action; in (65) an action to be carried out in the future; in (66) also a future action, but one which will be caused; in (67) and (68) the use of the negative reveals two different structures and the fact that na- is a pre-clitic rather than a prefix.

In (67) it negates a verb phrase of purpose while in (68) it
negates only the first action of two successive actions by the same person. Thus, in order to negate both of two successive actions, the negator must occur twice, as in (70), or:

(68a) na-aw- a na-nda-aw 'I did not get it and I did not go'

However, there is no counterpart to the verb phrase of (67):

(*67a) na-mi-la na-pu-1u ‘Not in order to get it, I am not going’

In other words, na- always moves to the beginning of the constituent which it negates; in the case of (67) a verb phrase (§5.41,42). Example (69) is parallel to (68), but the identity of the actors change. The actors are again different in (70) (1 sg and then 3 sg), but na- occurs twice and negates both actions.

3.24.2 Causative

As indicated in the formula, if the causative pre-clitic occurs, Terminal or Non-Terminal suffixes of Set-II must occur in the Periphery. The causative also changes a clause syntagmeme to transitive, if it is not already transitive (Cf., §4.23).

(71) pfre-pe (sit-imp 1mm sg = 'sit down')
(71a) ma-pfre-1e (cas-sit-al 1mm sg = 'Cause (someone) to sit down')
(72) pfre-1u (sit-1 sg Pa = 'I sat down')
(72a) ma-pfre-1u (cas-sit-1 sg Pa alo = 'I caused (someone) to sit down')
(73) **ma-r'kqaa** 'Cause it to stand up for someone'

(74) **ma-fras-to** 'I am causing it to be cooked on behalf of someone'

(75) **ma-mi'kq-saa-tpe'aa-pe** 'You all cause it to be lifted upwards right now'

3.24.3 Aspect

Many of the co-occurrence restrictions of aspects are outlined in the tagmemic rewrite rules suggested in Chapter 7. Here, the forms of the various aspect markers and examples are given:

(1) **-ba(A)** '(inceptive)' specifies action that has begun at some point in time. It is one of the few affixes where morphophonemic rules outlined earlier apply; it belongs to pattern A and co-occurs with Set I or Set II, Terminal or N-Terminal suffixes.

(76) **fra** 'to cook' + **-ba** + vstMP-R4 + **-a** (consec sp) = **fra-bo-a**... 'having begun to cook it and...'

(77) **fra-baa-ru-de** 'I started to cook it once'

If **-ba(A)** interrupts a morphophonemic tense alternant which co-occurs with a base pattern other thanXA, the tense is always from those which co-occur with pattern A:

(78) **fra** 'to cook' + 1 sg Pf = **fra-tu** 'I have cooked it'

(79) **fra** + **-ba** + 1 sg Pf = **fra-be** 'I have begun cooking it'

In other words MP rules apply now to **-ba(A)**, not the verb base.
(2) \(-\text{pa}.'(completive)\) specifies action completed with altro-
centric benefaction, sometime in the past. That is, it
co-occurs only with past tense suffixes of Set II. Sim-
larly to the 'inceptive' aspect marker, vstMP-R1 applies
to this suffix, which optionally interrupts the vbase
and tense suffix:

(80) \(\text{fra} + -\text{pa} + 1 \text{ sg Pa alo} = \text{fra-paa-ru} \ 'I finished
cooking it (for someone)'\)

(3) \(-\text{la} \text{ and } -\text{ta} \ '(prolongation)\) are forms which mark ego-
centric and altrocentric benefaction respectively. They
occur only with N-Terminal suffixes which mark different
persons:

(81) \(\text{fra} + \text{la} + 1 \text{ sg dp} = \text{fra-la-no} \ 'I continue cooking
it for sometime and then...'\)

(81a) \(\text{fra} + -\text{ta} + 1 \text{ sg dp} = \text{fra-taa-no} \ '(\text{alo})
'I continue
cooking it for someone for some time and then...'\)

These suffixes also give some idea of simultaneous actions by
different persons, but the first action is prolonged (Cf.
also \(\S6.14.1\)).

(4) \(-\text{wa} \ '(residual)\) specifies that some part of the action
remains to be completed. It co-occurs only with Set II
Terminal suffixes: 18

(82) \(\text{fra} + -\text{wa} + 1 \text{ sg Pa alo} = \text{fra-waa-ru} \ 'I cooked
part of it (for someone)'\)
3.24.4 Aspect

The two aspect markers in this set function as directional aspects and co-occur only with suffixes of Set II.

(1) **-nisa** '(downward motion)' specifies action performed upon something in a downward fashion:

(83) *fra* + **-nisa** + 1 sg Pa alo = *fra-nisa-ru* 'I burned it downward' (as a hill)

(2) **-saa** '(upward motion)' specifies action performed upon something in an upward fashion:

(84) *fra* + **-saa** + 1 sg Pa alo = *fra-saa-ru* 'I burned it upward' (as a hill)

3.24.5 Aspect

Several aspect markers only follow Terminal or N-Terminal suffixes. These are:

(1) **-de** '(punctiliar)' specifies action performed at a point in time; it occurs with a slightly different function with other word classes and constructions.

(85) *fra* + 1 sg Pa + **-de** = *fra-na-de* 'I cooked it'

(2) **-na** '(reported seen action)' occurs only with past actions of Set I suffixes. It is also used for reported speech (§6.26).

(86) *fra* + 3 sg Pa + **-na** = *fra-na* 'He was seen to cook it'
(3) -ya 'reported unseen action' occurs parallel to the form above:

(87) fra + 3 sg Pa + -ya = fra-a-ya 'He is said to have cooked it'

(4) -lo 'desiderative' expresses a desire that an action take place. It mainly follows only N-Terminal dp suffixes or suffixes which indicate purpose (§5.42):

(88) fra + Pur + -lo = fra-ia-lo 'I want to cook it'

(89) fra + 3 dp + -lo = fra-na-lo 'He wants to cook it and...'

(5) -loa 'serialisation' indicates that the action is completed as one in a series of actions. It follows only N-Terminal dp suffixes (Cf. §6.14.2).

(90) fra + 3 dp + -loa = fra-na-loa 'After he cooks it, then...'

(6) -paa 'exclusive' indicates that the action is exclusive in nature (Cf. §6.14.5):

(91) fra + 1 pl dp + -paa = fra-mina-paa 'We all (alone) should cook it'

Because all other clitics that occur with verbs mark a grammatical function which can better be described on the clause or sentence level, these are described in later chapters. In the following section suffixes and clitics occurring with nouns and other word classes are described.
3.25 Noun Syntagmes

Noun stems consist of bases which are either Simple or Compound. Compounds are combinations of general nouns which function as a semantic unit and which have the properties of a singular general noun (i.e. occur with the usual clitics, have the same syntactic settings, perturbation patterns with tone, and so on). Compounds often appear to be derived from other noun phrase patterns. For example, one possible underlying pattern for compounds is based on N-\(\text{né} \) N, where -né in a full phrase type marks the item-as-possessor.

Examples such as:

(92) répêna-\(\text{d}n\)i (tree bone = 'sticks')
(93) yâgâ-\(\text{fr}t\) (chin hair = 'whiskers')
(94) pôré-rdum (mountain knee = 'ridge')
(95) pôrâ-\(\text{d}n\)i (road bone = 'trail'),

appear to be derived from répêna-nâ \(\text{d}n\)i, yâgâ-nâ \(\text{fr}t\), and so on.

A further type of noun compound can be recognised often by the fact that the first noun specifies a generic property for the compound as a whole:

(96) râf-kutu (axe, bamboo knife = 'bush knife')
(97) aapu-asâla (tanket asâla = 'asâla [cordyline] leaves')
(98) kâbê-lapô (pit-pit lapô = 'hardened lapo type of cane')
(99) **vágł-putf**  (kumai grass, aggregate = 'grass-land')

(100) **kif-katlí**  (hair grey = 'elderly')

Two nouns which share the same semantic characteristics and which can be counted collectively as a unit, can be considered as derived from a noun which contains lápo 'both' as the *qan* exponent. For example, compounds such as:

(101) **oná-áá**  (woman, man = 'people')

(102) **nogó-naakt**  (girl, boy = 'children')

(103) **kif-ágga**  (eyes, mouth = 'face')

(104) **kf-k'dmaa**  (hand, upper arm = 'whole arm')

(105) **nádi-rááni**  (edible pit-pit, cress = 'vegetables')

(106) **mená-rikíla**  (pig, dog = 'animals')

appear to be derived from **oná áá lápo, nogó naakt lápo**, and so on.

Body parts are most frequently in a part-whole kind of relationship and it is important to note that subordinate semantic relationships are often due to physiological function (K. Franklin 1963). Thus the form *kf dipaa* must be glossed simply 'nails', but the compounds based upon the form are either *sa-kf dipaa* (foot nails = 'toenails') or *kif- kf dipaa* (hand nails = 'fingernails').
Other compounds which appear similar in form may be derived from quite different sources:

(107) oná-ada (woman house = 'women's house')
(108) tána-ada (platform house = 'men's house')
(109) kábe-ada (pit-pit house = 'menstrual hit')
(110) kiku-ada (cook [Pidgin Eng.] house = 'kitchen')
(111) répena-ága (fire mouth = 'headlights')
(112) répena-réke (wood stairs = 'ladder')
(113) répena-káapu (wood dry = 'firewood')

Examples (108-110) are derived from a common Modifier-Head functional phrase pattern, but (107) is more similar to (93-96), based on the pattern of N-ná N. Likewise (111-113), although similar in form, appear to be derived from different patterns.

There are no other characteristics which would serve to distinguish separate types of nouns. There are also no clitics or suffixes which occur solely with nouns. There are, however, four which function on the word-level and which may be considered together because none of them occur with verbs. 19

3.25.1 Word-Level Clitics

Clitics which primarily attach to word-level tagmemes and which therefore show no phrase or clause relationships are:
aa- 'information question': aa-šá (ques-man = 'what man?'); aa-rabu (ques-time = 'what time?'); aa-paró (ques-loc = 'where?'); aa-maaphú-nú (ques-garden-collect. = 'what gardens'?).

-si 'diminutive quality': yómgae-si (old man-dim. = 'a slightly old man'); laápo-si 'two little ones'; adaa-si 'a slightly big one'.

-nu 'collective': yómgae-nú 'all of the old men'; ékéráá-nú (tomorrow-all = 'in the future'); nimí-nú 'all of them'.

-lu 'durative quality': aaréá-lu (father-dur. = 'a family'); perna-lu (road-dur. = 'a long ways')

Combinations of word-level clitics which are permissible are:

(114) mená-si-nú 'all of the little pigs'
(115) adaa-lu-nú 'all of the long ones'

Because -nu specifies an aggregate, it cannot co-occur with an adjective such as: *mená-nú laápo 'all the pigs, two'.

3.26 Other Word Patterns

The three word-level clitics which have been described combine freely with stems of other non-verb word classes. Each word class will now be discussed individually.
3.26.1 Adjectival

In addition to the basic class of adjectives described (§3.1.3), other adjectives may be derived from verbs. Such forms expound the Modification function of a noun, most often occurring as the relator of an embedded clause. The derivational clitic is of two basic forms: egocentric, where the shape of the clitic is determined according to the underlying morphophonemic pattern of the verb base; and altrocentric, which is invariably the clitic -e. Examples for each verb pattern are (Cf. also vstMP-R5):

(a) XL → Xne, e.g. yaw → yane ‘the yelling (one)’
(b) Xe → Xe, e.g. aaw → awé ‘the digging (one)’
(c) Xe → Xni, e.g. aia → am ‘the carrying (one)’
(d) Xaaa → Xaane, e.g. ni’amaa → ni’amaa ‘the understanding (one)’

In example (c), because XE is also XH (includes a high vowel), ne → ni.

Although word-level clitics may attach to the derived adjective, the preferred pattern attaches the clitic to the noun expounding the Head:

(116) rini 44-nu, rather than rini-nu 44 ‘all of the men who carry’

(117) yane 46-st, rather than yane-st 44 ‘the smallest men who yells out’
If the adjective is a cardinal number such as padîne 'one', lâgo 'two', reço 'three' and mîlîk 'four', all additional cardinal numbers are based on multiples of four (Franklin and Franklin 1962a; Cf. also §8.5.2). Structurally the forms are numerical noun phrases and possessive noun phrases, and these are described in Chapter 5. However, body parts may also be named as ordinal numbers and the base cardinal numbers may become ordinal. To do this the numerical derivational clitic -pû 'quantifier' is added. It may be added to stems of certain other word classes as well:

(118) lâgo-pû \(\text{'two of them'}\)

(119) ekâta-pû \(\text{(little finger-quant. = 'the first of them')}\)

(120) adâa-pû \(\text{(big-quant. = 'plenty of them')}\)

(121) ake-pû \(\text{(what-quant. = 'how many of them')}\)

3.26.2 Adverbials

Derived adverbs have already been mentioned in §3.1.4. They consist of a syntagmeme marked by -rupa. Adverbial clauses and adverbs which function as clause modifiers are described in the next chapter.

3.26.3 Deictics

Personal and interrogative pronouns combine with all word-level clitics except -ly:
(122) **ne-si**  
'little you'

(123) **n ráa-nu**  
'all of us'

(124) **áapf-nu**  
'who all?'

(125) **ake-si**  
'the little what?'

Interrogative pronouns combine with clitics which function at various levels of the grammar. In Chart 9 these are outlined and the clitic is given a very general gloss. In two instances **ake** adds the vowel /a/ before a clitic and in one instance the final vowel of **ake** changes in a manner apparently following vstMP-85b.

<table>
<thead>
<tr>
<th>Clitics</th>
<th>Animate (áapf) 'who'</th>
<th>Inanimate (ake) 'what'</th>
</tr>
</thead>
<tbody>
<tr>
<td>-nu 'coll'</td>
<td><strong>áapf-nu</strong> 'who all'</td>
<td><strong>ake-nu</strong> 'what all'</td>
</tr>
<tr>
<td>-ná 'poss'</td>
<td><strong>áapf-ná</strong> 'whose'</td>
<td><strong>ake-ná</strong> 'what'</td>
</tr>
<tr>
<td>-mé 'agn'</td>
<td><strong>áapf-mé</strong> 'who'</td>
<td><strong>ake-mé</strong> 'what'</td>
</tr>
<tr>
<td>-para 'ben'</td>
<td><strong>áapf-para</strong> 'to whom'</td>
<td><strong>ake-para</strong> 'about what'</td>
</tr>
<tr>
<td>-ne 'adjz'</td>
<td><strong>áapf-para</strong> 'to whom'</td>
<td><strong>ake-ne</strong> 'due to what'</td>
</tr>
<tr>
<td>-daa 'obj'</td>
<td><strong>áapf-daa</strong> 'due to whom'</td>
<td><strong>ake-daa</strong> 'for what desire (or purpose)'</td>
</tr>
<tr>
<td>-lo 'desr'</td>
<td><strong>áapf-lo</strong> 'for what desire (or purpose)'</td>
<td><strong>ake-lo</strong> 'for what desire (or purpose)'</td>
</tr>
</tbody>
</table>

Chart 9: Interrogatives
Demonstratives, on the other hand, may combine with not only word-level clitics but also with themselves. Examples with clitics are:

(126) go-sî  'those little ones'
(127) sd-nu  'all those up there'
(128) âpo-sî-nu  'all those little ones somewhere over there'

Examples of demonstrative compounds are:

(129) mō–go  'over there (seen)'
(130) sō–go  'up there (seen)'
(131) no–go  'down there (seen)'
(129a) mō–po  'over there (unseen)'
(130a) sō–po  'up there (unseen)'
(131a) no–po  'down there (unseen)'

But not forms such as *mō–so,*mō–no,*mō–po. In demonstrative compounds comprising âpo, the initial vowel of the stem is lost.
NOTES

1. Matthews (1966:156) notes that exhaustiveness is only required when word classes are conceived as a taxonomic system. He also makes two further relevant observations about the notion of word classes: (1) definitions can naturally be heterogeneous, i.e. employ 'notional' as well as 'formal' evidence, 'morphological' as well as 'syntactic' criteria; (2) at least some of the definitions should refer to universal properties of grammars (ibid., pp. 156-9).

2. In other Highland languages possessive suffixes often divide noun stems into such categories as kinship and kin or body parts and functions on the one hand, and animate-inanimate nouns on the other. Cf. for example, D. Bee (1965, to appear) on Usarufa for the former, or F. Healey (1965a:6) for the latter.

3. In E. Kewa names given to females are optionally suffixed by -nyu or -me: Rum̃̃nyu 'the woman' Rum̃̃nyu', Warũ̃me 'the woman' Warũ̃me'. In addition, any name may be suffixed to show the parentage: Rum̃̃nyu-rḗanging; the father of Rum̃̃nyu', Warũ̃me-re 'the mother of Warũ̃me', where the suffixes -rḗanging and -re are contractions of the kinship terms of reference sārḗanging 'father' and sē 'mother'. (Cf. K. Franklin 1967a:78). Although both types of suffixation occur in W. Kewa, the system appears to be less developed. In W. Kewa female names are frequently formed by compounds employing nṓd 'woman' e.g. Kāripnṓd, Atēma-nṓd, Apēripnṓd.

4. It is interesting to note that F. Healey (1965a:15-18) describes four sub-classes of qualifier ['adjectives'] which are very similar: colour, size, quality and quantifiers. The latter is subdivided into general and kin types.

5. See K. and J. Franklin (1962a) and also 8.5.3 for a description on how body parts are used as a system of counting in Kewa.

6. Categories of benefaction are described in the section on verb affixation. Certain morphophonemic rules outlined there also apply when adjectives are derived from verbs.

7. See Jakobson (1957), especially his discussion of shifters and their semantic components.

8. In some cases if an alveopalatal or dental consonant occurs a high vowel preceding it may be absent in present day Kewa. However, forms such as ̃ita 'to hit' can be reconstructed.
9. In KVM the altrocentric Set is called Non-Personal Benefactive. EOM introduces the terms altrocentric and ego-centric but applies them only to tense. In this thesis altrocentric and ego-centric apply to either terminal or non-terminal suffixes. Typologically, the specification of ego-centric or altrocentric benefaction in verbal categories is a distinctive characteristic of Kewa in particular, and the West-Central Family in general. Wurm (1962:117) cites what he calls the use of "applicative verb forms", i.e. "action for the sake or benefit of, a person other than the one speaking, spoken to, or spoken about", as a typical feature of the West-Central Family. In Telefol, of the Ok Family, F. Healey (1965a:6ff) describes a general dichotomy between benefactive and non-benefactive stems. On the other hand, languages of the Eastern Family have a benefactive morpheme which must be preceded by an indirect object marker. (For Awa, see R. Loving and McKeown 1964:19; for Gadsup, C. Frantz and McKeown 1964:86; for Usarufa, D. Bee 1965:96.) In Benabena, a language of the East Central Family, benefactive verbs take indirect object prefixes but are part of a compound unit (R. A. Young 1964:65n and 74ff). The category of benefaction appears to be an important universal and how it is formed could well be added to Wurm's typological features for Highland languages (1964b, et seq).

10. For example, consider the following as morphs which mark only tense: -te-(Pr), -ti- (Pa), -ti- (RP), -ti- (Pu), and -e- (Pf). Basic person-number-forms are:

<table>
<thead>
<tr>
<th>Sg</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-e</td>
<td>-e</td>
<td>-e</td>
</tr>
<tr>
<td>Pl</td>
<td>-ea</td>
<td>-pe</td>
<td>-pe</td>
</tr>
</tbody>
</table>

Morphophonemic rules provide surface representations:

\[
\begin{align*}
\text{[te]} + \text{Pr} \rightarrow [\text{to}] + \text{Pa} \rightarrow [\text{ti}\rightarrow \text{a}]
\end{align*}
\]

and so on, where vowel harmony rules convert \(e \rightarrow u / -\text{r} \). There seems to be little to be gained by such an exercise: person-number-tense always occur together (or person-number-time relationship) and must ultimately be rejoined and specified as co-occurring obligatorily.
18. Unless the form which marks permission with N-Terminal suffixes is considered the same (Cf. § 6.14.3), if so, a transformation rule is required to place it following N-Terminal suffixes.

19. A further qualification is necessary here. Phrases such as *dām-mu-nu* (to die non-coll-AGN = 'those who are dying') are common, but the full phrase can always be supplied:

*dam* onā-ānu-nu-mt 'the people who are dying'.

I consider the use of the collective clitic -nu in *dām-nu-* (mt) as a contraction of the full phrase.
### Appendix A: Verb Paradigms

<table>
<thead>
<tr>
<th>Root</th>
<th>'to go'</th>
<th>'to come'</th>
</tr>
</thead>
<tbody>
<tr>
<td>pulu</td>
<td>'I am...'</td>
<td>pulu</td>
</tr>
<tr>
<td>polì</td>
<td>'you are...'</td>
<td>polì</td>
</tr>
<tr>
<td>polu</td>
<td>'he is...'</td>
<td>polu</td>
</tr>
<tr>
<td>polupa</td>
<td>'we two are...'</td>
<td>polupa</td>
</tr>
<tr>
<td>polupi</td>
<td>'you two are...'</td>
<td>polupi</td>
</tr>
<tr>
<td>poluma</td>
<td>'we all are...'</td>
<td>poluma</td>
</tr>
<tr>
<td>polumì</td>
<td>'you all/they are...'</td>
<td>polumì</td>
</tr>
<tr>
<td>polawa</td>
<td>'I ... recently'</td>
<td>polawa</td>
</tr>
<tr>
<td>polae</td>
<td>'you ... recently'</td>
<td>polae</td>
</tr>
<tr>
<td>pola</td>
<td>'he ... recently'</td>
<td>pola</td>
</tr>
<tr>
<td>polane</td>
<td>'we two ... recently'</td>
<td>polane</td>
</tr>
<tr>
<td>polapi</td>
<td>'you two ... recently'</td>
<td>polapi</td>
</tr>
<tr>
<td>polama</td>
<td>'we all ... recently'</td>
<td>polama</td>
</tr>
<tr>
<td>polamì</td>
<td>'you all/they ... recently'</td>
<td>polamì</td>
</tr>
<tr>
<td>polu</td>
<td>'I will...'</td>
<td>polu</td>
</tr>
<tr>
<td>polì</td>
<td>'you will...'</td>
<td>polì</td>
</tr>
<tr>
<td>poli</td>
<td>'he will...'</td>
<td>poli</td>
</tr>
<tr>
<td>polipa</td>
<td>'we two will...'</td>
<td>polipa</td>
</tr>
<tr>
<td>polipi</td>
<td>'you two will...'</td>
<td>polipi</td>
</tr>
<tr>
<td>polima</td>
<td>'we all will...'</td>
<td>polima</td>
</tr>
<tr>
<td>polimì</td>
<td>'you all/they will...'</td>
<td>polimì</td>
</tr>
<tr>
<td>pol</td>
<td>'I ... sometime ago'</td>
<td>pol</td>
</tr>
<tr>
<td>polsi</td>
<td>'you ... sometime ago'</td>
<td>polsi</td>
</tr>
<tr>
<td>polsì</td>
<td>'he ... sometime ago'</td>
<td>polsì</td>
</tr>
<tr>
<td>pòlina</td>
<td>'we two ... sometime ago'</td>
<td>pòlina</td>
</tr>
<tr>
<td>pòlina</td>
<td>'you two ... sometime ago'</td>
<td>pòlina</td>
</tr>
<tr>
<td>pòlima</td>
<td>'we all ... sometime ago'</td>
<td>pòlima</td>
</tr>
<tr>
<td>pòlìmì</td>
<td>'you all/they ... sometime ago'</td>
<td>pòlìmì</td>
</tr>
<tr>
<td>pò</td>
<td>'I have...'</td>
<td>pò</td>
</tr>
<tr>
<td>pòe</td>
<td>'you have...'</td>
<td>pòe</td>
</tr>
<tr>
<td>pòe</td>
<td>'he has...'</td>
<td>pòe</td>
</tr>
<tr>
<td>pòpe</td>
<td>'we two have...'</td>
<td>pòpe</td>
</tr>
<tr>
<td>pòpe</td>
<td>'you two have...'</td>
<td>pòpe</td>
</tr>
<tr>
<td>pòme</td>
<td>'we all have...'</td>
<td>pòme</td>
</tr>
<tr>
<td>pòme</td>
<td>'you all/they have...'</td>
<td>pòme</td>
</tr>
</tbody>
</table>
Chapter 4

CLAUSES

4.0 Introduction

The structure of clauses, with obligatory Predicate functions, is given before the description of phrases following in Chapter 5. This is because clauses follow more naturally the previous description of verbs, which serve as exponents of the Predicate.

Clauses consist of a limited number of grammatical functions with a correspondingly greater variety of semantic co-functions. Certain clause-level functions, such as Subject-as-Agent, Object-as-Location, or Object-as-Recipient are marked by clitics which are analogous to case markers.¹

The functional characteristics of clause patterns, as well as the exponential set of the Predicate tagmemes, distinguish three main types of clauses: Intransitive, Transitive and Complementive; each also have certain sub-types. Each clause type is described in terms of its constituent tagmemes and functional pattern. The rules given for clauses are not complete, but the general format which more complete ones would follow is given in Chapter 7. The distribution of clauses in sentences is described later in Chapter 6, specifically the conjoining of clauses. Chapter 4 has already presented the morphological characteristics of the grammatical categories which serve as ultimate exponents of
clause-level tagmemes. The structure of embedded clauses is also covered in this chapter.

4.1 Clause-Level Tagmemes

Before turning to the individual clause types, the grammatical functions which occur in them are briefly reviewed. These grammatical functions are Subject, Object, Complement, Predicate and Adjunct. The latter tagmeme corresponds most closely to what is often called sentence adverbials; they function as various kinds of modifiers at the clause-level. Except for Adjunct, these tagmemes are most often what Longacre (1964a:35) has called plot and dramatis personae. Other non-diagnostic tagmemes, which Longacre has also called props, scenery and local color, are expressed as semantic co-functions of the grammatical functions.2

4.1.1 Subject Tagmemes

Subject tagmemes function semantically as Agent, Actor, Topic, Goal, Instrument, Action, Location and perhaps others.3 According to the format proposed earlier each of these will be subscripted to the Subject tagmeme notationally as: SAGN, SATR, SIN, SATN, and so on, where capital letters indicate the functional status. Examples of each of these now follows:
S_AGN: [áá-mé] répena péá-a ([man-AGN], tree, cut-he did = 'The man cut the tree')
S_ATR: [áá] ada péá-a ([man ATR], house, go-he did = 'The man went home')
S_TOP: [áá-re] rai na dána-a ([man-TOP] sick, die-he did = 'The man was sick')
S_GOL: [ada] dá-a ([house GOL], burn-it did = 'The house burned')
S_IN: [rá-má] tá-a ([axe-IN], hit-he did = 'The axe hit it')
S_ATN: [má-pa] é pé ta ([eat-for ATN], good, it says = 'Eating is good')
S_LOC: [Puti] é pé ta ([Puti LOC], good, it says = 'Puti is a good place')

Becker (1967b) has suggested certain discovery procedures for establishing what is called in this grammar semantic functions. One apparently quite general restraint is that identical functions are conjoinable. This condition is met in such examples as the following where the tagmeme S_AGN includes two conjoined Heads:

(1) áá-pa para naka laláro-mé mf gé-pe 'The man and the boy gave it to me'
áá 'man' and naka 'boy' are conjoined by -para within a phrase which is marked by laláro-mé 'two-AGN'. The dual nature of the exponents of the phrase is supported by the verb gé-pe
'give-they two did', which occurs in cross-reference with the person of the Subject. The semantic function of AGN is thus conjoinable.

Another way of contrasting such functions is in terms of their interrogative substitutes, or what Becker (1967b:84) calls "category words". Thus in a clause such as:

(2) āā-para raf ládpo-nd nǐ tā-pe 'The man and the axe hit me',

there is but one Subject, corresponding to HACN on the one hand, and HIN on the other. This can be demonstrated in the following paired sentences where S:prointer:

(2a) raf-mf nǐ tā-a 'Who hit me?'
(2b) āke-md nǐ tā-a 'What hit me?'

The correct answers āke-md 'the man' and raf-mf 'the axe' indicate the functions SAGN and SIN respectively. However, such pairs may simply show that the categories of animate vs. inanimate are properly those inherent in lexical forms, rather than being specified by functional markers. Either way the information must be supplied in the grammar, and if they are specified by functions of AGN vs. IN they need not redundantly be specified by categories of animate vs. inanimate.5

If conjoining cannot occur within a particular tagmemes position according to regular rules, the function of the conjoined Heads is obviously different:
(3) *Puti-para ná-pe láápo éná tā 'Puti and something to eat are good'

Such restrictions in conjoining underscore the need to specify the semantic co-functions of grammatical functions in formulae. Some examples of conjoined Heads within a Subject tagmemes are:

(4) 'A-para nāa' láápo épa-pe (man-AND, boy, two, come-they did = 'The men and the boy came')

(5) 'A-para nāa' láápo-mé ni éja-pe (man-AND, boy, two-AGN, I, give-they did = 'The men and boy gave (it) to me')

(6) né-me mené répêna-para raf láápo-mé tá-wa (I-AGN, pig, stick-AND, axe two-IN, hit-I did = 'I hit the pig with a stick and with an axe')

(7) ada-para 'A láápo répêna-mé rā-a (house-AND, man, two, fire-IN, burn-it did = 'The house and man were burned by the fire')

(8) ná-pe éra-pe láápo éná tā (eat-for, cook-for, two, good, it says = '(Things) for eating and cooking are good')

(9) Putí-para Usa láápo-re7 éná su (Putí-AND, Usa, two-TOP, good, place = 'Putí and Usa are good places')

Each of the above sentences illustrates conjoining of 8 tagmemes with various semantic co-functions. The functions are:
SATR: aá-para naak’ láápo ‘the man and boy’ (4);
SAGN: aá-para naak’ láápo-mdé ‘the man and boy’ (5);
: nd-mé ‘I’ (6);
SCOL: ada-para aá láápo ‘the house and man’ (7);
SAIN: ná-de tsa-de láápo ‘eating and cooking’ (8);
SLOC: Patí-para Usá láápo-re ‘Putí and Usa’ (9);
SIN: répena-para raí láápo-mdé ‘the stick and axe’ (6);
: répena-mdé ‘fire’ (7);

Other functions and their exponents are:
OREC: na ‘me’ (5);
OGOL: mend ‘pig’ (6);
PATN: épa-de ‘they two came’ (4);
PGD: gfa-pe ‘they two gave it (to me)’ (5);
: tá-wa ‘I hit (it)’ (6);
PSTA: ra-a ‘it burned’ (7);
: ta ‘it says’ (7);
CQAL: énd ‘good’ (8);
COMP: énd su ‘a good place’ or ‘good places’ (9).

There are other permissible structures for K-equivalent
Subject tagmemes which need to be included in a rule-schemata
for conjoining. These are:

(a) simple juxtaposition of Heads within the Subject:
aá naak’ épa-pe ‘the man and boy came’; Patí Usá énd ta
‘Putí and Usa are good (places)’.
(b) adding the conjoining marker *-para* to either Head or
to *lápó* 'two': *áá-para naak†-para épà-pe* or *áá-para naak†-
lápó-para épà-pe*.

(c) if *-para* is used twice, then *-mê* (*AGN*) can be added
twice: *áá-para-mê naak†-para-mê tê-pe* 'The man and the boy
hit it'; the same holds for an *SIN*: réepéna-para rák-para-mê
tê-wá.

(d) the use of *pàge* 'also', rather than *-para*: *áá pàge*
naak† pàge épà-pe* 'A man and also a boy came'. In this case
two *SACT* tagmemes occur on the clause-level and are con-
joined by *pàge* 'also', rather than two Heads on the phrase-
level. The form *pàge* is also used for conjoining Object-of-
Location, if *-para* would be ambiguous.

4.12 **Object Tagmemes**

Object tagmemes function semantically as *Goal*, *Recipient*,
*Action*, *Location*, *Beneficiary* or *Direction*. An example of
each is:

**OGOL**: *áá-mê [menê] tê-a* (man-*AGN*, [pig], hit-he did =
'The man hit the pig')

**OREC**: *né-mê [áá] kála-wa* (I-*AGN*, [man], gave him-I
did = 'I gave it to the man')

**OATN**: *né-mê [nà-ne] kála-wa* (I-*AGN*, [eat-for], gave
him-I did = 'I gave him something for eating')
LOC: [ada-para] pá-lua ([house-LOC], go-I will = 'I will go home')

OBJ: [ni-ná] mada-ria ([I-POSS], get-he did (alo) = 'He got it for me')

DIR: [go-nane] pá-lua ([this-DIR], go-I will = 'I will go this way').

By specifying Objects in this manner there is no need to postulate a separate Indirect Object tagmeme. Its equivalent is specified by OBEC or OBEN which are governed by the exponent of the Predicate. These will be dealt with in § 4.3 on transitive clauses.

Some examples of conjoined Heads within an Object tagmeme are:

(10) né-mé sáp-para méné lââpo kâla-lo (I-AGN, sweet potato-AND, pig, two, give (3rd person)-I am = 'I am giving sweet potato and pig (to someone)')

(11) né-mé sáp-para méné lââpo kâla-lo (I-AGN, sweet potato, man-AND, pig, two, give-I am = 'I am giving sweet potato to the man and pig')

(12) né-mé á-para naak-f-para méné-para lâ-lo (I-AGN, man-and, boy-and, pig-REC, talk-I am = 'I am talking to the man, boy and pig')

(13) né-mé maan-para moa kâla-lo (I-AGN, garden-LOC, money, give-I am = 'I am giving (him) money in the garden')
(13a) né-mé maapu-para ada-para lââpo môni kâla-ya
   (I-AGN, garden-LOC, house-LOC, two, money, give
   (him)-I did = 'I gave him money in the garden
   and in the house')

The functions to be identified are:

SAGN : né-mé 'I-AGN' (10-13);
PGD : kâla-lo 'I am giving (him)' (10, 11, 13);
OGOL : sâp-para menê lââpo 'sweet potato and pig' (10);
OREC : ââ-para naâkî-para menê-para 'to the man, boy
   and pig' (12);
OGOL : sâp 'sweet potato' (11); môni 'money' (13);
OREC : ââ-para menê lââpo 'to the man and pig' (11);
OLOC : maapu-para 'in the garden' (13).
   : maapu-para ada-para lââpo 'in the garden and
   house' (13a).

The general pattern for coordinated Heads within the
Object is again the same as within the Subject, except that
Objects never co-function as Actor, Agent or Instrument.
The clitic -para also occurs optionally as a simple marker
of OLOC, as well as specifying conjoining, or it may function
as both (13a). If the functions OREN are indicated, the
benefactive set of terminal suffixes is used:

(13b) né-mé maapu-para môni kâla-to
   (him) money for the garden',
where *maapu-para* is now *OPEN* rather than *LOC*. This is further confirmed by the following paired questions:

(14) *aa-para məni kəla-e* (ques-LOC, money, give (him)-you did (alo) = 'Where did you give (him) money?')

(14') *maapu-para* 'in the garden'

(15) *ake-para məni kəlaa-ri* (what-BEN, money, give (him)-you did (alo) = 'What did you give (him) money for?')

(15') *maapu* or *maapu-ná* 'garden' or (garden-POSS = 'for the garden')

The form *aa-para* is the category word specifying *LOC*, while *ake-para* specifies *OPEN*.

4.13 Complement Tagmemes

Complement tagmemes function semantically as *Instrument*, *Location*, *Quality*, *Size*, *Colour*, and *Negative*.

The Complement is in a close relationship with the Predicate and the exponents of the P are verbs which can be sub-categorised as verbs-of-existence, i.e. giving some expression of a verb 'to be'. The function of the P is therefore one which expresses a state, e.g. it is not primarily directed toward a goal or oriented toward a location.

Some examples of Complements are:

*CIN*: *ni [paald-má] dəá-lo* (I, fright-AGN, die-I am = 'I am afraid!')
CLOC: ada [tapa-par] as-nya (house, [water-LOC], stand-it does = 'The house is in the water')

CQAL: nf [sma] nh (I, [good], sit-I = 'I am good')

CSZ: maky [adza] to (boy, [big], say-he does = 'The boy is big')

COOL: mnd-mä to [aba] pta (he-POSS, body, [yellow], sit-it does = 'His body is yellow' [= he has hepatitis])

CNEG: gäny [dya] to (sweet potato, [no], say-it is = 'There isn't any sweet potato')

Conjoined Heads in the Complement tagmeme follow earlier patterns specified. Notice the function CAGN:

(16) nf vaina-para sqd-par-jaq sqm-lo (I, sick-AND, cough-AND-AGN, die-I am = 'I am both sick and have a cold')

\[\text{clmp} \rightarrow \text{SACT} + C_{\text{AGN}} + P_{\text{STA}}\]

with the functional pattern of [H-par + H-par]-jaq. The C is not considered a Subject-as-Instrument tagmeme because nf 'I' cannot become the Agent, i.e. it belongs to a different clause type. The difference between transitive and complementative clauses is outlined in §.4.2.

To indicate that one's sickness is a cold, vaina 'sick' must become the Topic:

(17) nf-na vaina-re sqd-mä sqm-lo (I-POS, sick-TOP, cough-AGN, die-I am = 'My sickness is due to a cold')
In other instances the functions of CQL are repeated in the conjoined Heads:

(18) ni paalá-para yaina-para dmo-lo (I, fright-AND, sick-AND, die-I am = 'I am both afraid and sick')

Because of the close relationship between Complement and Predicate, the effect of conjoining Complements can also be accomplished by conjoining clauses. Notice the following sentence where the Predicate exponent represented by dmo 'to die' is repeated twice in two separate clauses. Predicate conjoining is considered a feature of clause-level exponents and is dealt with in detail in Chapter 6. The following example is for comparison with (16):

(19) ni paalá dmo-a yaina dmo-lo (I, fright, die-AND, sick, die-I am = 'I am afraid and I am sick')

4.14 Predicate Tagmemes

As indicated earlier (4.1.5) the semantic co-functions of a Predicate are in part supplied if other tagmemes are also present in a clause. For example, if a tagmeme OLOC occurs the P is most often a PMOT:

(20) ni maaph-para ma-wa (I, garden-LOC, go-I did = 'I went to the garden'), where the functional pattern is: SACT + OLOC + PMOT.

However, in other instances there seems to be a rank in the functions of P. This is apparent if a Complement
occurs as well as OLOC. In such cases the P is then a PSTA rather than a PMOT:

(21) ni mwepu-pare vaine cswa (I, garden-LOC, sick, die-I did = 'I was sick in the garden')

SGOL + OLOC + GOAL + PSTA

Although Predicate tagmemes can be shown to function semantically as: Motion, Goal-Direction, State, Benefaction, these functions are determined from other tagmemes which occur optionally in a clause. An example of just the P for each is:

PMOT : ni [dika-wa] (I, [sit-I did] = 'I sat down')

PGD : ni [kala-wa] (I, [give them-I did] = 'I gave it to (them)'

PSTA : ni go [pni] (I, here, [sit-I am] = 'I am here')

PBN : ni [kila-ru] (I, [give them-I did (alo) = 'I gave it to (them) on someone's behalf')

Because the exponents of any P are obligatory in a clause and are in fact the diagnostic criteria for establishing a clause, it follows that conjoining exponents of any P also conjoin clauses and is a sentence-level operation. When the exponents of any two or more Predicates are conjoined, regardless of whether or not other tagmemes occur, such conjoining is described at the sentence-level. The particular affixual exponents which occur with the verbs
most often mark the kind of clause coordination which takes place.

4.15 Adjunct Tagmemes
Adjunct tagmemes function semantically as Time, Manner, Degree, Irrealis:

Adjunct tagmemes function semantically as Time, Manner, Degree, Irrealis:

_Aux_ : [ékéré] na pālua ([tomorrow], I, go-I will =
'Tomorrow I will go')

_Aman_ : [pamā] pā-lua ([slow], go-I will = 'I will go
slowly')

_Advec_ : [ora] pā-lua ([really], go-I will = 'I will
really go')

_Arep_ : nipit-at [pa] tēa (he-AGN, [just], talk-he will =
'He will just talk')

One characteristic of an Adjunct tagmem is its free
permutation in the clause and the fact that any _Aman_ may be
marked by the clitic _-urma_. For example, sentences such as
the following, where a nt expounds an _Aman_, are common:

_Aba-urma_ pā-lua (before-MAN, go-I will = 'I will go like I
did before') (Cf. also §3.1.4 on its use to derive adverbials)

The exponents _ora_ 'truly' and _waru_ 'really' occur fre-
quently and often, it appears, interchangeably with the
function of Adjunct. They may also be conjoined:

(22) _nipit_ ora waru tā-a (he, truly, really, hit-he
did = 'He really did hit it')
However, only ora is used as a tag question:

(23) ogé naakt réá-para ná-tea ora (little, boy, bush-
LOC, sleep-he does, true = 'The little boy sleeps
in the bush, doesn't he?')

4.2 Clause Syntagmes

The only obligatory tagmeme in a clause is the Predi-
cate. The exponents of the Predicate alone are therefore
often diagnostic of a clause type. For example, piíra 'to
sit' as an intransitive verb expounds a P àOT in an intransi-
tive clause type. However, in other instances such verbs may
become derived transitives, especially when used in a bene-
factive sense where an ÖOB is implied or stated. Basic
clause types are therefore described first and derived transi-
tives are based upon them. In a complementive clause such
as ni fi nde na 'I am good', the verb ni which expounds the
PSTA is also apparently based on piíra 'to sit' as a form of
the verb 'to be'. So it can be seen that at least one verb
expounding the PSTA in a complementive clause can also be
considered as basically an intransitive verb. Categories
such as intransitive verbs, transitive verbs, and verbs of
existence are considered semantic sub-categories of the
grammatical category "verb".

4.21 Intransitive Clauses

Intransitive clauses are characterised by:

(1) the obligatory occurrence of a Predicate-as-Motion function expounded by verbs sub-categorised as intransitive;

(2) the obligatory absence of an Object-as-Goal tagmeme which corresponds to the optional presence of an Object-as-Location tagmeme marked (optionally) by the clitic -para;

(3) the obligatory absence of the clitic -me with the Subject tagmeme.

Some examples of intransitive clauses are:

(24) *nqra-*wa (sit-I did = 'I sat down')
    \[\text{clint} \rightarrow \text{PNOT}, \text{where PNOT} : \text{Vint}\]

(25) *nq nqra-*wa (I, sit-I did = 'I sat down')
    \[\text{clint} \rightarrow \text{SACT} + \text{PNOT}, \text{where SACT} : \text{proper}\]

(26) *nq ada nqra-*wa (I, house, sit-I did = 'I sat in the house')
    \[\text{clint} \rightarrow \text{SACT} + \text{OLOC} + \text{PNOT}, \text{where OLOC} : \text{ng}\.

The OLOC may also be marked with -para:

(26a) *nq ada-para nqra-*wa 'I sat in the house'

The exponent of SACT always occurs in cross-reference to the suffix of the verb, i.e. *nq 'I' and -wa '(1 sg Pe)' to both include the categories of 1st person singular. Cross-reference is a general feature of the exponents of any SACT and P.
4.22 Transitive Clauses

Clauses which are transitive are distinguished by:

(1) the obligatory occurrence of a Predicate-as-Goal

Directed function manifested by verbs sub-categorised as
transitive;

(2) the optional presence of a Subject-as-Agent tagmeme
marked obligatorily by the clitic -md.

(3) the optional presence of an Object-as-Goal tagmeme.

These distinguishing characteristics may be noted in the
following examples:

(27) tå-wa (hit-I did = 'I hit it')

\[ clr \rightarrow PGD \] where PGD \( \vdash \text{vtr} \)

(27a) nå-md tå-wa (I-AGN, hit-I did = 'I hit it')

\[ clr \rightarrow S_{AGN} + PGD \] where \( S_{AGN} \) : proper + -md

(28) nå-md irikal tå-wa (I-AGN, dog, hit-I did = 'I
hit the dog')

\[ clr \rightarrow S_{AGN} + O_{GOL} + PGD \] where \( O_{GOL} \) : ng which
is unmarked.

(28a) irikal tå-wa 'I hit the dog'

Following standard tagmemic heuristic procedures it
would be necessary to distinguish a further clause type
called ditransitive in Kewa. The contrastive features be-
tween it and the transitive are: (1) different verb ex-
ponents; (2) ditransitives have (optionally) an Object-as-
Recipient tagmeme, which may be marked (also optionally) by
-para. In other respects the two clause types are alike:

(3) both have the Subject-as-Agent marked by -mé; (4) both include an optional Object-as-Goal tagmeme. However, because only the verb exponents of the Predicate tagmeme are obligatory, i.e. the only obligatory difference is one involving a sub-categorisation of verbs, and because the functions of the Predicate in both cases are Goal Directed, ditransitives are considered simply as a further degree of expansion of basic transitive clauses. Examples are:

(29) kála-wa (give to him-I did = 'I gave it (to him)'

(29a) né-mé kála-wa 'I gave it (to him)'

(30) né-mé sápr kála-wa 'I gave the sweet potato (to him)'

(31) né-mé mené sápr kála-wa 'I gave the sweet potato to the pig'

(31a) né-mé mené-para sápr kála-wa 'I gave the sweet potato to the pig'

(32) né-mé mené kála-wa 'I gave the pig (to him)'

(32a) né-mé mené-para kála-wa 'I gave (it) to the pig'

The most typical formula for such a transitive clause, based upon the above examples is:

\[ \text{clr} \rightarrow S_{AGN} + O_{GOL} + O_{REC} + P_{GD} \]

The choice of the exponent of \( P_{GD} \) allows the interpretation of \( O_{GOL} \) in (28) and (30-32); of Object-as-RECipient in (31) and (32a); or as both \( O_{GOL} \) and \( O_{REC} \) as in (31). This can
be expressed in context sensitive exponent rules as follows:

\[ FG = v_{tr} / 0_{GOL} \]
\[ v_{ditr} / 0_{REC(-para)} + (0_{GOL}) \]

In examples (29-32) other exponents are:

\[ SAGN : \text{proper } + -\text{mē}, \text{i.e. a personal pronoun marked} \]
\[ 0_{GOL} : \text{ng} \]
\[ 0_{REC} : \text{ng (-para)} \]

The functions of clitics such as -mē and -para suggest that these are surface case markers for certain tagsmemes.

The exponents of the tagsmemes marked by -mē and -para are very general: any syntagmeme marked by -mē which is also in cross-reference with the exponent of P can be an exponent of SAGN. Note (33) where a clint embedded in the SAGN is marked by -mē. The same clause may be embedded in the OLOC --note (34):

(33) אָדָא עָמָה דָּאָ-מֶ dēre kālā-a (man, house, 
sit-he did-punt, man-AGN, wife, give-he did =
'The man who sat in the house gave it to his
wife')

(34) מֶ-מֶ אָדָא עָמָה דָּאָ-פֶרֶש-דֶּאָ-פֶרֶש הָרָא שֶׁ-מֶ (it) to the man who sat in the house

Such characteristics of embedded clauses are discussed later in §4.4.
be expressed in context sensitive exponent rules as follows:

\[ \text{PGD : } v_{tr} / \text{OGOL} \]
\[ v_{ditr} / \text{OREC (-para)} + (\text{OGOL}) \]

In examples (29-32) other exponents are:

\[ S_{AGN} : \text{proper } + -mê, \text{ i.e. a personal pronoun marked for the function Subject-as-Agent by } -mê. \]

\[ \text{OGOL : } ng \]
\[ \text{OREC : } ng (-para) \]

The functions of clitics such as -mê and -para suggest that these are surface case markers for certain tagmemes.

The exponents of the tagmemes marked by -mê and -para are very general; any syntagmeme marked by -mê which is also in cross-reference with the exponent of P can be an exponent of \( S_{AGN} \). Note (33) where a client embedded in the \( S_{AGN} \) is marked by -mê. The same clause may be embedded in the OLOC --note (34):

(33) \( \text{ų+a pfrases-de ą-s-mê sre k4l-a-e} \) (man, house, sit-he did-punt, man-\( S_{AGN} \), wife, give-he did = 'The man who sat in the house gave it to his wife'.

(34) \( \text{mê-mê ą+a pfrases-de ą-s-para k4l-a-wa} \) 'I gave (it) to the man who sat in the house'.

Such characteristics of embedded clauses are discussed later in §4.4.
4.23 Derived Transitive Clauses

Transitive clauses may be derived from any clause type by the causative clitic ma-. This results in the S
AGN tag

meme being obligatorily marked by -mé and the selection of
Set II altracentric suffixes (Cf. §3.22.1): 9

(35) né-mé áá ma-pee-ru (I-AGN, man, cas-come-I did
(alô) = 'I made the man come')

(36) nípy-mé oná mó-pyra-ría (he-AGN, people, cas-
sit-he did (alô) = 'He made the people sit down')

Transitives which are derived from complem entary
clauses (§4.3) also are formed with the causative clitic ma-
and accompanying suffixes of Set II. However, in such cases
ma-
may precede the exponent of the Complement tagmemes:

(37) né-mé ma-yainá áá-tó (I-ACT, cas-sick, put-I
am (alô) = 'I am causing the sickness, i.e.
spreading a disease')

(38) né-mé ma-épe yaa-tó (I-ACT, cas-good, affirm-I
am (alô) = 'I am causing the goodness')

(39) né-mé ma-keda paa-tó (I-ACT, cas-heavy, make-I
am (alô) = 'I am causing the heaviness')

The formula for a derived transitive is:

old-tr → SACT -mé + OGR + P , where the

semantic function of P is determined by the verb exponents
such that:
P → \{\begin{align*}
&P_{\text{INT}} / _{-} : v_{\text{INT}} \\
&P_{\text{STA}} / _{-} : v_{\text{AMA}}, \text{and the clitic ma-}
\end{align*}\}

precedes the verb if the function of P is \text{MDT}, but may pre-
cede the exponent of the Complement if the function of P is
\text{STA}. This must be represented by an optional transformation
rule:

C + ma- + P_{\text{STA}} \rightarrow ma- + C + P_{\text{STA}}, \text{where}

the exponents of C and P_{\text{STA}} co-occur in particular sets as
outlined later.

4.24 Complementive Clauses

Clauses which are complementive are determined by: (1).

the obligatory presence of a Complement tagmeme; (2) the

optional presence of a Subject-as-Topic tagmeme; (3) the

obligatory occurrence of a Predicate-as-State tagmeme.

These distinguishing characteristics are illustrated in the

following clauses:

(40) săpř o ta (sweet potato, bad, affirm-it is =

'The sweet potato is bad')

\text{clmp} \rightarrow \text{STOP} + C_{\text{QAL}} + P_{\text{STA}}

(41) go ovæd keda pra (this, something, heavy, sit-it

has = 'This thing is heavy')

\text{clmp} \rightarrow \text{STOP} + C_{\text{QAL}} + P_{\text{STA}}
(42) naeēt adas va-a (boy, big, affirm-he was = 'The boy grew large')

\[\text{compl} \rightarrow \text{STOP} + \text{CSZ} + \text{PSTA}\]

(43) mif kōne ad-lo (I, behaviour, put-I am = 'I am thinking')

\[\text{compl} \rightarrow \text{STOP} + \text{CIN} + \text{PSTA}\]

In each case the STOP may be marked by the clitic -te.

The verb expounding the Predicate tagmeme in complementive clauses can often be recognised as a form of the verb 'to be' which is based, e.g., upon such verbs as: prfə 'to sit', add 'to put', ad 'to stand' and ad 'to affirm'. When these verbs expound the PSTA they most often occur in some form of the Perfect tense. Previous examples in this section are based upon some of these verbs.

In other cases, the verb expounding the Predicate in a complement clause co-occurs according to the exponent of the Complement tagmeme. The following give an indication of the range of such paired exponents:

1. [a] 'to speak': kunad [a] 'to court'; sōv [a] 'to argue'; kiri [a] 'to laugh'; rūdu [a] 'to stretch'.
2. [a] 'to bring': kād [a] 'to smell'; adas mād 'to ask'.
3. [a] 'to eat': adu [a] 'to suckle'; sōv [a] 'to commit suicide'; pāne [a] 'to steal'.
(4) ra 'to emit'; 1 ra 'to defecate'; nōbe ra 'to spit';
   ndāre ra 'to wilt'; 1pe ra 'to flood'.
(5) tā 'to hit'; cīrā tā 'to sneeze'; mitēn tā 'to
dance'; ōrī tā 'to thunder'.
(6) pa 'to make'; nēge pa 'to file'; kiru pa 'to itch';
   nēge pa 'to decorate'; puri pa 'to be strong'.

The verb ḍam 'to die' is used to expound the PSTA if the
C is intensified, or marked as Instrument.

The functional pattern of C + P often comprises an
idiom. Notice, for example, the following two clauses, the
first a simple transitive, the second a complementive:

(44) nīpī-mī rōbād nā-la (he-MN, stomach, eat-he is
      = 'He is eating stomach' (as of a pig))

(45) nīpī rōbād nā-la 'He has a stomachache'

In (44) rōbād 'stomach' is the exponent of an OQOL and
nā 'to eat' expounds a PGD. In (45) rōbād expounds a CN and
nā expounds a PSTA. Thus neither of the following inter-
pretations occurs:

(44a) nīpī rōbād-mā nā-la 'He is eating with his
    stomach'

(44b) nīpī-mī rōbād nā-la 'He is aching his stomach'
    i.e. the meaning must be the same as in (44).

However, such clauses as the following may occur:
(46) nind-nə ataa-mɛ na-la 'He is eating with his teeth'

(47) nə rəbəd na-la 'I have a stomachache'

(48) nə rəbəd-mɛ dəm-la (dəm-la = die-it is) 'I have an intense stomachache'

In other words, although both a S_AGN and S_IN may occur in a transitive clause, only the latter may occur in a comple-
mentive clause.

4.3 So-Called Equational Clauses

It is convenient to postulate equational clauses for at least two reasons. First of all, tagmemic studies frequent-
ly set-up Predicate tagmeme which have exponents that are not verbs. In such cases it is not difficult to find at least two structural differences which would separate equa-
tional clauses from other clauses.10 Secondly, in tagmemics the function of Predicate is obligatory to the definition of a clause. In Kwa, however, so-called equational clauses are simply based upon underlying Complementive clauses, or are not clauses at all. Rather, their equivalents are sen-
tences, in which case the function of Predicate is not rele-
vant. In other words, there is no reason why sentence-level tagmeme have to be expounded by a lower-level syntagmeme which must include a Predicate. Note the following sen-
tences, which are called thematic:
(49) wad kône-re bâli-ná kône (bad, behaviour-TOP, red man-POS, behaviour = 'The bad behaviour is the European's')

(50) go ââ-re irikai-rupa (that man-TOP, dog-MAN = 'That man acts like a dog')

(51) ni ââ (I, man = 'I am a man')

The final Stop ni could also be ni-rl (I-TOP), and in each example the Topic can be permuted:

(49') bâli-ná kône-re wad kône 'The European's behaviour is bad'

(50') irikai-rupa-re go ââ 'The one like a dog is that man'

(51') ââ-re ni 'Concerning men, I am one'

In each example the structure is considered:

\[ \text{them} \rightarrow \text{TOP} + \text{COM} \]

Such grammatical functions as Topic and Comment are most relevant on the sentence-level. It may, however, be necessary later to specify semantic co-functions of T and C, in the same manner as such co-functions have been specified on the clause-level.

In other instances, however, so-called equational clauses are clearly a reduction of either complementive clauses where the predicate is not expounded, or are similar to embedded clauses. Notice, for example, the following:
(52) adaalu ona (tall, woman = 'The woman is tall' or
'It is a tall woman')

(53) ad ruddu (man, short = 'It is a short man' or
'He is a man who is short')

(54) mena (pig = 'It is a pig')

Rather than postulate a structure:

cl_eq → (s) + P, where P : n, aj, or even:

s_them → (t) + C, the examples can be considered:

cl_omp → s + (P), where P is a PSHA such as pfa 'to
be' which is in these instances deleted. The structure of
the STOP is then expounded by either an np or an n. The
permutation of the exponents n + aj rather than the expected
aj + n also suggests that (53) is based on an embedded
cl_omp such as:

(53') ad ruddu pf ad pfa-ë (man, short, sit-ADJZ, man,
go-he did = 'The man who is short went')

This leads to the structure of embedded clauses.

4.4 Embedded Clauses

Embedded clauses are exponents which function as Modifi-
ers on the phrase-level, i.e. they are in an attributive
grammatical relationship to either a Head tagmeme or an Axis
tagmeme.
4.41 Clauses Embedded in Subject Position

Clauses which are embedded in the Subject have a shared noun with the noun expounding the Head. In most instances either one or the other of the shared nouns may optionally be deleted.

(55) [méd mena ká-ne] ḍa pu-a ([men-AGN, pig, give (him),-ADJZ], men, so-he did = 'The man who gives him pig, went')

\[ \text{clint} \rightarrow S\text{ACT} + \text{PNST}, \quad \text{where } S\text{ACT} : nP\text{des}, \text{ and} \]
\[ nP\text{des} \rightarrow M\text{ATN} + H\text{ACT}. \quad \text{The } M\text{ATN} : c\text{lin}_t, \text{ i.e.} \]

an embedded transitive clause. The ng expounding the H\text{ACT} is the shared noun with the noun expounding the S\text{AGN} of the embedded clause, but only the noun of the embedded S\text{AGN} can be marked with -mé (AGN). The Adjectivizer -me is optional; any permitted morphological structure may be represented in this position, e.g.:

(55a) [méd mé mena kála-e] ḍa 'The men who gave the pig'

(55b) [méd mé mena kála-e] ḍa 'The men who gave the pig on (his) behalf'

(55c) [méd mé mena ká-tea] ḍa 'The men who will give the pig'

However, if the adjectivised form is used the shared noun expounding the Head is most often deleted:

(55') [méd mé mena ká-ne] pu-a 'The men who gives pig went'
Some examples of other clause types embedded in the S of an intransitive clause are:

(56) [co ada ptk-1] as pu-a ([man, house, sit-ADVZ],
men, go-he did = 'The man who sits at home went')
\[\text{clint} \rightarrow S_{ACT} + P_{HOT}, \text{where } S_{ACT} : n_{des} \text{ and} \]
\[n_{des} \rightarrow M_{STA} + H_{ACT} \text{ and } M : e_{clint} \]

(57) [ââ ââd-frt yââko pf] ââ pu-a ([man, hair, white, to be-ADVZ], men, go-he did = 'The man who is elderly went')
\[\text{clint} \rightarrow S_{ACT} + P_{HOT}, \text{where } S_{ACT} : n_{des} \text{ and} \]
\[n_{des} \rightarrow M_{STA} + H_{ACT} \text{ and } M_{STA} : e_{clomp} \]

In examples (56-57) either shared noun may be deleted. The structure of the embedded complement clause is:

\[\text{clomp} \rightarrow S_{STOP} : ââd-frt + COOL : yââko + P_{STA} : \]
\[p_{fa}, \text{where } p_{fa} \rightarrow \text{pf} / M : - + (H) \]

If the main clause is transitive the S may be marked by -md to co-function as agent:

(58) [ââ-me mend kâ-ne] ââ-mé nî pf-e = 'The man who
gives (him) pig gave it to me'
\[\text{cltr} \rightarrow S_{AGN} + O_{REC} + P_{GD}, \text{where} \]
\[S_{AGN} : n_{des} \text{ and} \]
\[n_{des} \rightarrow M_{ATN} + H_{AGN} \]

Again, either of the shared nouns may be deleted with no change in the meaning:
Some further examples of clauses embedded in the Subject tagmeme are:

(59) [métan épo-rupe tr] àá pda-e ([dance, good-manner, hit-ADJZ], man, go-he did = 'The man who dances well went')
    clintr → $ACT + FMDT ;$
    coltr → $GOL + A_{MAN} + P_{GD}$

(60) [ní sukulu maláá-e] àá rnu-la ([I, school, teach-ADJZ (loc)] man, come-he is = 'The man who teaches me school is coming')
    clintr → $ACT + FMDT ;$
    coltr → $OPEN + GOL + P_{GD}$

(61) [mené adaanu pun] àá ogá-a ([pig, many, shepherd -ADJZ], man, die-he did = 'The man who shepherds many pigs died')
    clintr → $ACT + FMDT ;$
    coltr → $GOL + P_{GD}$, where
    $GOL : n_{NUM}$

(62) [épé kóne 1] àá-mé ní tá-a ([good, behaviour, put-ADJZ], man-AGN, me, hit-he did = 'The man with the good thoughts hit me')
    cltr → $AGN + GOL + P_{GD} ;$
    colomp → $ABS + STA$ , where $QUAL : n_{PDES}$
(63) pé pédáne [rubf-ny] kála-wa (container, one,
[overflow-ADVZ], give him-I did = 'I gave him a
container which was overflowing')
\[
\begin{align*}
\text{cltr} & \rightarrow \text{OGL + FGD} \\
\text{eclint} & \rightarrow \text{FIND}, \text{and pé pédáne 'one container'}
\end{align*}
\]
is the exponent of the OGL of the main
clause.

(64) [sápt na-be] mená ná-lo ([sweet potato, eat-
continue ADVZ], pig, eat-I am = 'I am eating the
pig which continuously ate sweet potato')
\[
\begin{align*}
\text{cltr} & \rightarrow \text{OGL + FGD} \\
\text{cltr} & \rightarrow \text{OGL + FGD}, \text{where FGD : vst + aspcont}
\end{align*}
\]

(65) [má ada pišra-a-de] má-má ká-tea ([man, house,
sit-he did-pum ], man-AGN, give him-he will =
'The man who was in the house will give it to
him')
\[
\begin{align*}
\text{cltr} & \rightarrow \text{SAGN + FGD} \\
\text{eclint} & \rightarrow \text{SINT + LOC + FSTA}, \text{where}
\text{FSTA : vs + tensepa + aspcont}
\end{align*}
\]

(66) [mána kedá pr] lópa-a ([stone, heavy sit-ADVZ],
fail-it did = 'The stone which is heavy fell
down')
\[
\begin{align*}
\text{clintr} & \rightarrow \text{STOP + PAIN} \\
\text{oclmp} & \rightarrow \text{STOP + QUAL + FSTA}
\end{align*}
\]
4.42 Clauses Embedded in Object Position

If the Object is specified as an OLOC the elitic -para marks the embedded clause:

(67) nñt [nîmt-ñfr māanp sā-mē]-para nū-a (he, [they-AGN, garden, put-they did]-LOC, go-he did = 'He went to the place where they planted the garden')

\[ c_{\text{int}} \rightarrow S_{\text{ACT}} + O_{\text{LOC}} + P_{\text{DRT}}, \text{ where} \]

\[ O_{\text{LOC}} : \text{AR (Axis Relator phrase) in} \]

[which the A: c_{\text{tr}} + R: -para]

(68) nā-mē [sā-pā gīmā lā-pa]-para əs kāla-wa (I-AGN, [we two, likewise, say-we did]-LOC, men,give him -I did = 'I gave (it) to the man at the specified place')

\[ c_{\text{tr}} \rightarrow S_{\text{SNOC}} + O_{\text{LOC}} + P_{\text{REC}} + P_{\text{GD}}, \text{ where} \]

\[ \text{AR}_{\text{LOC}} \rightarrow A : c_{\text{tr}} + R : -\text{para}. \text{ The ARLOC is} \]

layered within the Modification tagmem which is in turn in an attributive relationship with the Head tagmem, expounded by əs 'man'. Layering in phrases will be described in Chapter 5.

(69) nā [māanp māsō əs pī]-para nū-lu (I, [garden, that, men, sits]-LOC, go-I am = 'I am going to the garden where the man is')

\[ c_{\text{int}} \rightarrow S_{\text{ACT}} + F_{\text{LOC}} + P_{\text{DRT}}, \text{ where} O : \text{ARLOC and} \]

\[ \text{ARLOC} \rightarrow A : c_{\text{int}} + R : -\text{para}. \]
If the Object is an OGO, the clitic -\textit{daa} marks the embedded clause:

\begin{align*}
\text{(70)} \quad & \text{[mená-mé náa maapi maráa-ria]-daa mená ñáa-ña} \\
& \quad \text{[pig-AGN, my garden, destroy-it did]-GO, pig,} \\
& \quad \text{get-I did = 'I got the pig which destroyed my} \\
& \quad \text{garden']} \\
\end{align*}

\text{cltr} \rightarrow \text{OGO + PGD}, \text{where the AR phrase is} \\
\text{again, as in (61), attributive to the Head, expounded by} \\
\text{mená 'pig'. The structure of the AR is:} \\
\text{ARGO} \rightarrow \text{A : ecltr + R : -daa}

\begin{align*}
\text{(71)} \quad & \text{nñ [oná mená mar-ña]-daa ñáa pt} \\
& \quad \text{(I, [woman,} \\
& \quad \text{pig, cares for-she does]-GO, happy, I am = 'I} \\
& \quad \text{am happy about the woman who cares for the pigs')} \\
\end{align*}

\text{clomp} \rightarrow \text{SACT + ORC + CQAL + PSTA}, \text{where} \\
\text{ORC : ARC and} \\
\text{ARC} \rightarrow \text{A : ecltr + R : -daa}

The clitic -\textit{daa} marks the ORC as well as the OGO of 
\text{an embedded clause, as seen in the above examples, as well} 
\text{as the following:}

\begin{align*}
\text{(72) \text{nñ-mé [ná-nu-ññ nñ raba nñ-ññ]-daa mená kála-ña} \\
& \quad \text{(I-AGN, [man-coll-AGN, I help, get-they did]-REC,} \\
& \quad \text{pig, give them-I did = 'I gave pig to the men} \\
& \quad \text{who helped me')}
\end{align*}
(73) nê-mê [mêng-mê maa-pâ meâd-rîa]-daâ ad-nû kîla-wa
  (I-AGN, [pig-AGN, garden, destroy-it did]-GOL,
   man-colL, give them-I did = 'I gave the pig
   which destroyed the garden to the men')

In both cases the structure of the main clause is:

\[ S_{AGN} + O_{GOL} + O_{REC} + P_{GD} \],

where

\[ O_{GOL} \] : edlr -daâ, i.e. an embedded transitive

\[ O_{REC} \] clause marked as Object of the main clause by the olitic -daâ.

4.43 **Clauses Embedded in Complement Position**

Because the Complement must co-occur with a particular
Predicate exponent, it is not possible for embedding to take
place within the Complement. However, given two complemen-
tive clauses such as:

(74) go âd adaa te (that, men, big, he is = 'That is
   a big man')

(75) go âd tê pia (that, men, good, sits-he is =
   'That man is good')

it is possible to derive such clauses as the following:

(76) go tê pî adâ adaa te 'That man who is good
   is big'

(76a) go adaa ne âd tê pia 'That man who is big
   is good'

However, in both (76) and (76a) one of the complementive
clauses is embedded in the subject position (indicated by square brackets).

4.44 Clauses Embedded in Adjunct Position

The most frequent embedded clause in Adjunct position functions as time clause or manner clause. Some examples of each are:

(77) [nimp-ná ikikat ní ná-a] rúbú ní ní su-de ([he- pos, dog, me, eat-he did], TIME, I tears, say-I did-once = 'When his dog bit me, I cried')

(78) [nimp noqé-naqí] rúbú báli-nú fpi-simt ([they, girl-boy], TIME, red man-coal, come-they did = 'When they were children, the Europeans came')

(79) [ne éná pt'] rúbú óva-né gú-la-lía ([you, good, sit- you have], TIME, something, give-he will = 'When you are good, he will give you something')

(80) [ná pu'a-wa] rúbú ámú-rí ne dí-sa ([I, go-I did], TIME, who-AGN, you, saw-he did = 'When I went, who saw you?')

In each case ATM: e'ol rábu 'when'. The embedded structures are a transitive clause (77), a complementative clause (79), a thematic sentence (78), and an intransitive clause (80).
Examples of clauses embedded in an $A_{M A N}$ are:

(81) ona nipa kiri [Ad-me ma-me-de]-rupa ta (woman, she, laugh [man-AGN, says-they have-pun']-MAN, say-she does = 'That woman laughs like a men')

\[
\text{clomp} \rightarrow S_{ACT} + C_{QAL} + A_{MAN} + P_{STA}, \quad \text{where}
\]

\[
A_{MAN} = e^c_{itr} + -\text{rupa}
\]

(82) [ama la-wo]-rune toa ([mother, say-I did]-MAN, say-I will = 'I will tell it like I told mother')

\[
\text{cltr} \rightarrow A_{MAN} + P_{GD}, \quad \text{where}
\]

\[
A_{MAN} = e^c_{itr} + -\text{rupa}
\]

4.5 Clause Permutations

Regardless of the particular clause type being expounded, there is a preferred order in the arrangement of functional points. Usually they are:

\[
\text{clint} \rightarrow S_{ACT} + C_{LOC} + P_{NOT}
\]

\[
\text{cltr} \rightarrow S_{AGN} + (O_{REC}) + O_{COL} + P_{GD}
\]

\[
\text{clomp} \rightarrow S_{TOP} + C_{QAL} + P_{STA}
\]

Other rules for functional points are:

1. For any $ATM$, the preferred order is pre-$S$; for any $AMAN$, pre-$P$.

2. If any $S_{IN}$ occurs, it always occurs pre-$P$ unless an $AMAN$ intervenes.

3. In any clause the $O_{LOC}$ follows the $S$, if an $S$ occurs.
(4) Any tagmeme can be brought into focus or emphasis by its permutation to the first position of a clause, even the predicate:

(83) pâlu na (go I will, I = 'I will go')

In such cases there is a marked intonational juncture following the P exponent.

(5) A passive semantic interpretation can be rendered by permitting the S_ACT or S_AGN to pre-P position; or if a S_IN co-occurs, preceding it:

(84) ndé-mé naa k tawade (I-AGN, boy, I hit = 'I hit the boy')

\[ \text{cl}_{tr} \rightarrow S_{AGN} + O_{GOL} + P_{GD} \]

\[ \rightarrow O_{GOL} + S_{AGN} + P_{GD} \quad \text{'The boy was hit by me'} \]

\[ \text{cl}_{tr} \rightarrow S_{AGN} + O_{GOL} + S_{IN} + P_{GD} \quad \text{(where S_IN = naa with an axe',}

\[ \rightarrow O_{GOL} + S_{AGN} + S_{IN} + P_{GD} \quad \text{'The boy was hit by me with an axe'} \]

Such permutations may also simply demonstrate how the item in clause initial position receives emphasis.

(6) If the S_AGN is emphasised as also being the S_ACT or the initiator of the action the S_AGN is not repeated twice, each time marked by -ndé. Instead the pre-P Subject is marked by -ndé, the possessive clitic. This will be described in Chapter 5 of Possessive Phrases. An example is:
(85) ṣẹmẹ ona nipd-na tāila (men-AGN, woman, he-POS,
he will hit = 'The man himself will hit the
woman' or 'The man will hit the woman himself')
The phrase nipd-na tāila represents a vPOS, which allows
a verb exponent as the Head, rather than the more normal
noun Head.

(7) Permutations and deletions within an embedded clause
have already been noted.
NOTES

1. Case grammars and the possible conversion of their diagrams to tagmemic formulas is mentioned by Fillmore (1968: 87-8, quoted in Becker 1967b:160). It is important to note that I describe case markers in Kewa according to their function at various grammatical levels, e.g. what would correspond to the genitive case is described in Chapter 5 on Phrases.

2. In other New Guinea languages the variables, which I list as semantic co-functions of grammatical functions, commonly consist of such tagmemes as location, time, instrument, accompaniment, referent-reason, and topic (for example see Bee 1965:143). P. Healey (1965c:3) describes clause-level units (= tagmemes which include beneficiary, time, accompaniment, quote, location, and manner, as well as the main tagmemes of subject, object and predicate.

3. My attempt to identify such semantic functions in this grammar has benefitted from Becker’s work on English (1967b). He outlines a great many more for English than I do for Kewa and many of his would appear to be universal features.

4. Fillmore (1968:22) makes the same point, but in English Agentive and Instrument Subjects are not conjoinable. Dik (1968:200ff) points out that coordinated constructions occur on any level of the grammatical hierarchy, but that in each case it is the coordination of functions that is specified, not simply the categories. Becker (1967a) calls tagmemes which are conjoinable “K-equivalent” and introduces K rules for conjoining them (see also §1.3). I have not formally outlined a schema for coordination, but that proposed by Dik would appear to be the most logical to adopt in a tagmemic grammar.

5. Becker (1967b:85-7; 149-51) feels that features of lexical sub-categorisation can be supplied by the functional labels rather than by sub-categorisation according to semantic features, as done, for example, in transformational grammars.

6. Note that the conjoining clitic -Para is identical in form to the clitic which specifies, for example, Object-as-Location. To say that ‘the fire burned two men in the house’ a clause is embedded in the Modification tagmem of the np which expounds the Subject.
(?') ada-para piri di lambo repena-na ra-a, where the noun phrase ada-para piri di lambo (house-LOC, sit-ADJZ, men, two = 'two men who were in the house') contains a clause embedded in the Modification tagmem. Other examples are given later.

7. The clitic -re is considered primarily a marker on the sentence-level, so that Puti and Usua are the TOpIC-es-LOCATION of a simple thematic sentence (66.25). In other words, the role of Topic, although a sentence-level function (due to reasons discussed later in Chapter 6) often has its functional role carry through to the clause-level.

8. In our E. Kewa text concordence ora occurs 171 times; waru only 26 times; in W. Kewa ora is again much more frequent: 100 vs. 28 times.

9. In Chapter 4 me- was discussed only in relation to its function on the word-level, i.e. how stative stems are derived.

10. See, for example, P. Healey (1965b:20-21) on Telefol. Her Equational clauses have fewer optional units; their exponents are General Noun Phrases, a type of accompaniment Phrase, or negative Phrases. She does, however, state that the Equational is most similar to the Complementary Clause (ibid. p. 20). Bee (1965:150) contrasts transitive, intransitive, and equational clauses in Usarupa.

11. -pare is an alternant of -para. In E. Kewa its equivalent is -jena. There is no apparent difference in meaning between the two clitics.
Chapter 5

PHRASES

5.0 Introduction

Kewa phrases are either central, i.e. consist of a Head which is in a syntactic and semantic relationship with one or more Modification tagmemes, or they are in an Agent-Relator relationship. Within these two main types there are two main exponential sets: attributive phrases with either a noun or noun phrase expounding the Head are Nominal; those with a verb or verb phrase expounding the Head are Verbal.

5.1 Noun Phrases

Noun phrases are of two broad types: Descriptive and Possessive. The former have (typically) adjectives as exponents of the Modification functions and have (typically) nouns as exponents of the Head. Descriptive noun phrases may also be marked by clitics which specify the functional role of the phrase as a clause-level exponent. Possessive phrases are marked by the clitic -ná occurring in the pre-Head position, i.e. -ná marks the Possessor tagmemes.

5.12 Descriptive Noun Phrases (npdes)

The generalised formula for a npdes consists of the following function points:
\[ \text{npdes} \rightarrow (\text{NQAL}) + (\text{N} \text{SZ}) + (\text{N} \text{COL}) + \text{H} + (\text{N} \text{QAN}) , \]

where typical exponents are:

- \text{NQAL}: adj (êpê 'good', wadé 'bad', ...)
- \text{N} \text{SZ}: adj (ogé 'small', adan 'big', ...)
- \text{N} \text{COL}: adj (kôbere 'dark', abû 'yellow', ...)
- \text{N} \text{QAN}: adj (lââpo 'two', meda 'another', ...)

The Head of an npdes may be expounded by any general noun (ng), but there are collocational restrictions (not stated here) between the noun and certain adj exponents. Some examples of npdes are:

1. ogé àâ 'little man'
2. rââu àâ 'short man'
3. kôbere àâ 'dark (=black) man'
4. àâ lââpo 'two men'
5. ogé kôbere àâ lââpo 'two little dark men'
6. rââu kôbere àâ lââpo 'two short dark men'
7. ëpê rââu kôbere àâ lââpo 'two good short dark men'

In each example the Head is expounded by the noun àâ 'man'. The selection of ogé 'small' is frequently accompanied by the clitic -si (diminutive) on the ng exponent:

(1') ogé àâ-si 'very small man'

Permutations of the sequence of pre-Head Modifier tagsmemes are permissible. In such cases the first tagmeme receives the emphasis or focus:
(7a) ṭʃu oʃé kɔbɛre 44 144po 'two short little dark men'
(7b) kɔbɛre oʃé ṭʃu 44 144po 'two dark little short men'

These examples also illustrate how M tagmemes with the same semantic co-functions may sometimes be conjoined by juxtaposition:

Mɔz : oʃé 'little' + Mɔz : ṭʃu 'short'.

Adjectives which expound the M of an npdes may also expound the C of a clomp (Cr. § 4.24), so that embedded adjectival clauses such as the following occur:

(7') kɔbɛre pt 44 'a man who is dark' from:
(7'') 44 kɔbɛre pt 'the man is dark', where
clomp → STOP + COL + STA allows
npdes → N : colomp + H : n, with deletion of the shared noun 44 'man'.

There are certain characteristics of the MQAN function which suggest that noun phrases containing a MQAN should be treated as a sub-type of the npdes. Any npnum has 'two main restrictions: (1) deictics can occur as exponents; (2) names of body parts and certain other forms (when suffixed with -pt; Cr. § 3.13; 3.26.1) may expound the MQAN.'

When substitutes occur as exponents the following are all acceptable (where the structure is H : dei + M : adjnum):

(8) *npiŋ 144po 'the two of them'
(9) *go 144po 'those two'
(10) 44pt 144po 'what two?' (literally, 'who two?')
Any of the following are not acceptable (where the proposed structure is $M : \text{adj} \{QAL, SZ, COL\} + \text{H : de}l$):

(*11) $\text{ IPv } \text{ nim}$ 'good he'

(*12) $\text{ reddu nim}$ 'short he'

(*13) $\text{ kàbare go}$ 'dark that'

(*14) $\text{ abu dado}$ 'yellow who?'

When body parts occur as exponents longer numerals may be complicated and represent other conjoined or embedded phrases:

(15) $\text{ mi su-pd}$ (man, thumb-qan = 'five men')

(16) $\text{ kà 144po e 144po pàge-pd}$ (man, hand, two, foot, two, doubled-qan = 'twenty men')

Examples such as (16) must include a conjoining rule within the M point of an $\text{nPnum}$ where the exponent of the Head ($\text{Mi 'men'}$) is modified by the string of forms expounding the $\text{MQAN}$ ($\text{kà...pàge-pd} = '20'$), which is marked by -pd.

The marker -pd is a quantity specifier for any given $np$:

(17) $\text{ onàà sake-pd}$ (people, how-qan = 'how many people?')

(18) $\text{ onàà sere-pd}$ (people, big-qan = 'plenty of people')

(19) $\text{ pàpànea kegea-pd}$ (fire, hot-qan = 'plenty of heat')

An $\text{nPdes}$ may therefore be read specifically as an $\text{nPnum}$ by the following rule:

$\text{nPdes} \rightarrow \text{nPnum} / (N) \ldots + \text{H} + \text{MQAN(-pd)}$
Example (20) is a simple instance of \( \text{POS} + H \), where the exponents are respectively, a pronoun (which is a sub-class of deictics) marked by \(-\text{m}\) and a general noun. In (21) two POSR function points occur. The \( K \) 'tagmeme' specifies that the marker \(-\text{m}\) may re-occur (in example (25) three times) marking the Possessor tagmeme. A condition is that the exponent of any Potential \( H \) cannot be a deictic. Examples (22) and (23) illustrate nppos which also include the characteristic adj exponents of an npdes. It is therefore necessary to simply specify that the exponent of any POSR may be an npdes. In such cases the nppos is embedded within the Head tagmeme of an npdes.

Some of the apparent complexity of embedded nppos is probably due to the fact that deletions of shared noun Heads take place. Such deletions would most easily be accounted for by transformational rules. An example with considerable embedding will illustrate the structures which apparently underly them:

\[(26) \text{go} \text{ èkìna mìsì-nà ìà pòpò} \quad \text{'the two houses belonging to that man's elder brother'}\]

The main phrase can then be considered to consist of three function points:

\[\text{npdes} \rightarrow \text{Mdes} + H + \text{M\_an} \], where \( \text{Mdes} \) is a cover symbol specifying a function point with an embedded phrase. The \( \text{Mdes} + \text{nppos} \) which also consists of a conjoined nppos, i.e.:
\[ \text{enp}_{\text{pos}} \rightarrow \text{POS}_{-nd} + \text{POS}_{-nd} + H. \]

However, the exponent of the H of the \text{enp}_{\text{pos}} is the same as the H of the \text{np}_{\text{des}}, i.e. \text{ada} 'house' expounds the H of the \text{enp}_{\text{pos}} \ldots \text{mipa-nd ada} 'elder's house' as well as the H of the \text{np}_{\text{des}} \text{ada} \text{144po} 'two houses', so the exponent of one H is deleted. In addition the exponent of one H in the conjoined \text{np}_{\text{pos}} must also be considered deleted, i.e. \text{ame} 'brother' underlies \text{ame} \text{mipa-nd} 'elder brother's' as well as \text{44-nd ame} 'the men's brother'.

In such cases the deletion of the exponent of one Head is obligatory, whereas in conjoined clause-level tagmemes (\S 4.1ff), it is optional. This leads to further comments on conjoining.

5.14 Conjoined Noun Phrases

The conjoining of noun phrases as exponents of clause-level tagmemes has already been dealt with in some detail. By way of review, there are two main methods of conjoining noun phrases: (1) by the attachment of the clitic -\text{para} to the exponents of the conjoined tagmemes; (2) by simple juxtaposition, accompanied by appropriate intonation patterns.

In both instances the structure can be considered a simple case of repetition of adjacent tagmemes. Note the following phrase:
(27) yōmaga ekẹ para ogé naakö repo (old man, another
-conj, little, boy, three = 'an old man and three
small boys')

This is an instance of np⁰num + -para + np⁰num, where the
marker -para specifies that the three boys are accompanying
the old man. Both structures of the np⁰num are full: no
transformational rules are necessary to account for shared
nouns or deleted numerals. As indicated, other markers,
such as the following where -më marks the s⁻AGN, may follow
-para:

(28) tinìi-në kône épé-para-më kọgóna-para-më (3 sg-
POS,R,behaviour, good-AND-AGN, work-AND-AGN = 'by
means of his good thoughts and work')

\[ S_{AGN} : e^{np_{des}} \]
\[ e^{np_{pos}} \rightarrow \text{POS,R} + H : n + M_{QAL} + K \]

K specifies: H-para + H(-para) and the first Head (kône)
is followed by a M_{QAL} : aj. In example (28) -para still
marks the conjoining of the Head functions, even though the
first H is followed by a M_{QAL}.

Noun phrases which consist of a series of nouns are
therefore also considered to be naturally derived from con-
joined exponents of the Head tagmemes. Note the following
examples:
(29) *At ond naeKt mena rëvo lpu-lum* 'the man, woman, boy and pig are coming'

(30) *Kirapeaasi Abali Uri rëpo lpu-lum* 'Kirapeaasi, Abali and Uri are coming'

The first consideration might be to derive such phrases from several underlying clauses, each with the shared verb deleted. However, the (optional) insertion of rëvo 'all' in (32) and rëpo 'three' in (33), with corresponding cross-reference to plural number in the verb suffix confirms that this is a simple conjoining of Heads, similar to those treated earlier in §4. The forms rëpo 'three' and rëvo 'all' expound the Mqan, exactly as in:

(29') *At pâdâne ond pâdâne...* 'one man, one woman...

(30') *Kirapeaasi pâge Abali pâge Uri pâge...* 'Kirapeaasi also, Abali also, Uri also...

This is further confirmed by such instances as:

(29'') *At meda ond meda...* 'man another, woman another...

in which meda 'another of the same', pâge 'also the same as' and pâdâne 'one of the same' are all exponents of the Mqan function point. Structures such as (28) are considerably more complicated than, for instance, (27) because they share the recursive properties of an np-pos (with accompanying deletion, and so on) as well as the conjoining of embedded np-des. In addition the occurrence of the total structure
marked as agent allows the permutation of $M : aj + H : n$
($ένε kόνε 'good behaviour') to $H + M / _{-}-\text{md} + P$.

Examples of conjoining within the Modification tagmeme
may be quite complex:

(31) ada adaa-pe-para énε ada-para pάđéne pfa-ne 'It is
a house which is at once big and good'.

(32) abu pí-para kææne-para gí pfa-ne lāđpo yad 'It is
something which is both yellow and red'.

In examples (31-32) -para again marks the boundaries of the
conjoined nps, whether it is np$_{des}$ : énε ada-para 'the good
house', an embedded nominal as modifier; adaa-pe-para 'for
(being) big' and abu pí-para 'which is yellow'. In these
examples the conjoining is within a Modification tagmeme
represented by everything which follows ada 'house' (31) and
precedes yad 'something' (32), both which are exponents of
the $H$.

In a long string of juxtaposed phrases the exponent of
the Head may be repeated:

(33) kánaka-nu-mt kóbá-pe yad, báli-mt kóbá-pe, énε-pe
yad, kánaka-nu étaa, báli-mt étaa, rāyo la 'There,
are things there which are bought by the natives,
things bought by the white men, good things to buy,
native's food, and white men's food'
While (33) is admittedly complex, it illustrates the stringing together of five phrases by simple juxtaposition. In this instance the Head of the phrases vary from *nad* 'something' (present in the first and third phrase, but deleted in the second), to *staa* 'food' in the fourth and fifth phrases. The whole phrase is an example of a very complex descriptive noun phrase. The numerical exponent *raya* 'all' functions as a Modifier to each of the conjoined phrases.

5.2 Nominalisations

In the previous chapter examples of clauses embedded as exponents of various clause-level tags were given. Such embedded clauses expound the Modification tagname in a np or the Axis of an Axis-Relator functional pattern, and are either adjectival or full clauses. Thus there are embedded clauses in the Modification tagname in the following:

(34) [sogo *nā*] 44 *ftp*-*la* 'The man [who smokes] is coming'

(35) [sogo *nisa*] 44 *ftp*-*la* 'The man [who used to smoke] is coming'

(36) [sogo *ndialo* *pf*] 44 *ftp*-*la* 'The man [who wants to smoke] is coming'

Whenever the verb which expounds the Predicate of the embedded clause is marked according to regular rules for tense, the clause is simply based (except for the optional deletion of shared noun Heads) upon a full clause, e.g. *nisa* 'He ate
sometime ago' is a full verb form. In cases of derived
adjectivals (4.23.1) however, there is no tense, person or
number designated, e.g. nd 'one who eats' and pt 'one who
is' (i.e. 'one who sits') are no longer basic verb forms.
In the latter case, the underlying clause expounding the
Modification tagmemes can be given the interpretation of a
nominal. The kind of nominalisation expressed depends upon
the function of the constituent tagmemes of the underlying
clause and not simply upon the function of the main phrase.
For example, in (34) and (35) the deleted noun of (34') and
(35') functions as Agent:

(34') ̀ǹd-ǹd sọgo nọa  'the man smokes'
(35') ̀ǹd-ǹd sọgo nọsa  'the man smoked'

*tr * SAGN + C GOL + PCD, where PCD: nda = nd 'to
eat + (3 sg Pf); and ndsa = nd 'to eat' + (3 sg EP). As a
nominal exponent the Head of the main phrase must be recog-
nised functionally as an Agentive Nominal, e.g. 'the smoker',
'the former smoker', 'the would-be smoker', and so on. It is
on the basis of such underlying clause functions that the
interpretation of nominals such as the following can be
proposed:

(37) ǹtẹ̀s ɗ ǹd  (dance, hit-ADJZ, man = 'a dancer')
(38) ǹtẹ̀s ɗ ńa  (dance, hit-ADJZ, something = decor-
ations')
In (37) the Head is expounded by Ḟa 'man' and is thus agentive; in (38) Ḟe 'something' is inanimate and must be interpreted as instrumental.

In addition to the use of the adjectival forms so far described, there are two other main ways of forming nominals: (1) by the use of the clitic -pe which in general suggests that the meaning of the nominal is 'destined for', 'meant for', or 'capable of' the Head which it modifies; (2) by the use of the aspectual suffix -de which in general means a punctiliar action. Some examples of the first type are:

(39) Ḟra-pe Ḟe (to sit-FOR, something = 'something for sitting on', i.e. 'a chair')

(40) ṡáːr ná-pe (sweet potato, to eat-FOR = 'edible sweet potato')

(41) Ḟón̄o na-pe  ámbi (work, to do-FOR, day = 'a working day')

(42) Ḟá-pe oná (man-FOR, woman = 'a married woman')

(43) Ḟáa-pe (sugar cane-FOR = 'a sugar cane pole')

(44) Ḟaːnd-pe (to put on-FOR = 'for wearing', i.e. 'a coat')

(45) ṡaːnd-sj áda-pe Ḟéki (slow-dim, to look-FOR, book. = 'difficult primer')

The usual structure is:

M-pe + Ḟ, although in (40) the order is reversed and in (43) and (44) there is no Ḟ given. The embedded struc-
tures are:

(39) \text{vint} \, -\text{pe}; \quad (40) \text{vtr} \, -\text{pe}; \quad (41) \text{e} \text{cltr} \to \text{OGOL};

(42) \text{kogo} + \text{P} \to \text{vtr} \, -\text{pe}; \quad (43) \text{ng} \, -\text{pe}; \quad (44) \text{ng} \, -\text{pe};

(44) \text{vtr} \, -\text{pe}; \quad \text{and} \quad (45) \text{e} \text{cltr} \to \text{AMAN} \, + \text{P} \to \text{vtr} \, -\text{pe}.

Examples of nominals marked with \(-\text{de}\) are:

(46) \text{radpara as-ta-de kaane} (bush, it stands-WH, pandanus = 'wild pandanus')

(47) \text{mk} \, \text{reme} \, \text{paha-ma-de ya} \text{a} (nose, stick, they hide it-WH, something = 'sticks for putting in the nose' i.e. 'noseplugs')

(48) \text{ya} \text{a}-\text{mate} \text{a} \text{pokaa} \text{ara} \text{dala-de yadira} (cassowarie's, in the wing, it comes up-WH, quill = 'cassowary-wing quills')

(49) \text{kdi} \text{ara} \text{awili} \text{ara} \text{dala-de} (nails, if it will go inside, they die-WH = 'claws which cause death', or 'fatal claws')

The structure of such embedded nominals is typically much more complex; in (46-48) clauses are embedded; in (49) a sentence is embedded. The suffix \(-\text{de}\) not only retains its usual aspectual meaning but also functions as a type of relative marker—which is glossed in the examples above simply as WH. Embedded constructions of this type expounding the Modification tagmème of an \(\text{np}_{\text{des}}\) are very similar to many of those outlined in §4.4.
5.3 *Axis-Relator Phrases*

Phrases which consist of an *Axis* expounded by a phrase (e.g. a *npdes*, *nppos*, etc.) marked by a function specifying clitic are, in tagmemic terms, *Axis-Relator phrases*. For example, notice the following:

\[(50) \text{épé at láápo-para} \text{ (good, man, two-LOC = 'to the two good men') where,} \]

\[\text{AR} \rightarrow A : \text{np}_\text{num} + R : -\text{para} \text{ (locator)} \]

\[(51) \text{diší náddéne-mé} \text{ (jeep, one-IN = 'by means of a jeep')} \]

\[\text{AR} \rightarrow A : \text{np}_\text{num} + R : -\text{mé} \text{ (specifier or instrument)} \]

\[(52) \text{adan maařd-sale} \text{ (big, garden-DIR = 'toward the big garden')} \]

\[\text{AR} \rightarrow A : \text{np}_\text{des} + R : -\text{sale} \text{ (director)} \]

In examples (50-52) the Relators of AR phrase types are the same as those which relate embedded clauses (4.4). In other words, they function the same but are attached to exponents of any grammatical level. It seems that such 'Relators' are more analogous to case markers. They occur attached to exponents of a particular tagmeme and mark a syntactic function. The functional notions of $S_{ACT}$, $S_{AGN}$, $S_{COL}$ are often formally marked by clitics which include within their grammatical function the tagmemic notion of Relator. Such "case" markers in Kewe would be:
Agentive or Instrumentive (-md), according to the ex-
ponents and clause type.

Genitive (-md), including what we have called Possessive
or Allocative.

Locative (-pare), which includes the features of Abla-
tive and Benefactive.

Accusative (-daa), except that this form often marks
the Object-as-Referent, rather than simply as Goal.

Directive (-nana, etc.), depending upon the kinds of
direction and other semantic considerations.

Free pronouns are often used as relators and as such
bear no other functional role in a phrase. In such cases
the pronoun (enclosed in brackets) relates a clause which is
restrictive in interpretation:

(53) onā [nina] kfrī waḏ-rupa ta (woman, [3 sg pro],
lauh, bad-MAN, she says = 'the woman is one who
is laughing in a bad manner')

by omitting nina the meaning is: 'the woman is laughing in
a bad manner'. Rather than introducing a special Apposi-
tional type of phrase, it is simply noted that pronouns which
immediately follow an np function as relators to the remain-
der of the clause. The function of such pronouns is thus
similar to clitics which mark embedded clauses, except that
nina (and other pronouns) disjoins the Head and the tagmeme
which follow to specify that they do not modify the Head.
5.4 Verb Phrases

The tagmemic notion of a vp is different than that described in transformational grammars. In the latter, a verb phrase may either dominate a noun phrase (and thus signal the function of Object) or it may dominate a verb (and thus, in their terms, signal the function of a Main Verb). In tagmemics a vp generally includes an adverbial exponent which functions, for example, as Manner.

In this grammar adverbs are generally exponents of clause-level Adjunct tagmemes with co-functions of Manner, Time, Degree and so on (see § 4.15). This is because such adverb exponents do not uniquely occur in an attributive relationship with main verbs or verbal constructions. Therefore the verb phrases given here do not include adverb functions. However, verb phrases are necessary for the same reason as noun phrases: in each case there is a main verb which expounds the Head and there are subsidiary exponents which function attributively. The verb phrases which occur are: Possessive (vp_os); Purposive (vp_pur); Gerundive (vp_ger). Each vp expounds the Predicate function of any clause type except the complementsive. Such verb phrases as the latter two could possibly be called pheriphrastic verbs, which are not uncommon in New Guinea languages.
5.41 Possessive Verb Phrases (vp\textsubscript{pos})

Phrases marked by the clitic -\textsubscript{\text{m\text{g}}}, as already mentioned (see \S 5.13), have inclusion or possession specified between the Head and Modification tagsemes. There are two important differences between a vp\textsubscript{pos} and an np\textsubscript{pos}: (1) only verbs expound the H of a vp\textsubscript{pos}; (2) the exponents cannot be conjoined, as is the case with any vp\textsubscript{pos}. For example, notice -\textsubscript{\text{m\text{g}}} in the following:

(54) nɪpɪ-n\textsubscript{\text{g}} tɛa (he-POS, he will say = 'it is up to him', or (literally) 'it is his to say')

In such instances the -\textsubscript{\text{m\text{g}}} form does not seem to alter the meaning from such clauses as:

(55) nɪpɪ-\textsubscript{\text{m\text{g}}} tɛa (he-AGN, he will say = 'He will tell it')

\[
\text{cl}_\text{tr} \rightarrow \text{S}_{\text{AGN-\text{m\text{g}}} + \text{P}_{\text{GD}}} : \text{v}_\text{tr}
\]

However, both -\textsubscript{\text{m\text{g}}} and -\textsubscript{\text{m\text{g}}} may mark functions in a clause such as:

(56) nɪpɪ-\textsubscript{\text{m\text{g}}} nɪpɪ-n\textsubscript{\text{g}} tɛa 'He will tell what is his to say'

\[
\text{cl}_\text{tr} \rightarrow \text{S}_{\text{AGN-\text{m\text{g}}} + \text{P}_{\text{GD}}} : \text{v}_{\text{pos}}
\]

When the verb suffixes expounding benefaction are chosen -\textsubscript{\text{m\text{g}}} may also mark the OPEN:

(57) nɪpɪ-\textsubscript{\text{m\text{g}}} nɪpɪ-n\textsubscript{\text{g}} mɛɛɛɛɛ (mɛɛɛɛɛ 'to get' + -\textsubscript{\text{m\text{g}}} (3 sg Pa a\textsubscript{lo}) = 'He got something for someone else')

\[
\text{cl}_\text{tr} \rightarrow \text{S}_{\text{AGN-\text{m\text{g}}} + \text{OPEN} + \text{P}_{\text{GD}}}
\]
It is possible to also say:

(54a) nimp-na șgaa tea 'He will tell his talk'

(55a) nimp-nt șgaa tea 'He will talk',

suggesting that some vp\textsubscript{pos} may be in fact surface representatives of clauses with deleted exponents which functioned as complements or quotes. When a vp\textsubscript{pos} expounds a Possessor-as-Beneficiary tagmem, it is not as easy to find examples to suggest underlying np\textsubscript{pos} forms. This can usually only be done by postulating pro-forms to expound the assumed np\textsubscript{pos} Head:

(57a) nimp-nt nimp-na OYAG  madría 'He got SOMETHING for him'

c\textsubscript{tr} \rightarrow S\textsubscript{AGN-PR} + O\textsubscript{GOL} : np\textsubscript{pos} + P\textsubscript{GD}

although it is, of course, possible to find sentences such as:

(57c) nimp-nt nimp-na sàkere madría 'He got the pearl shell for him'.

It seems reasonable to suggest that a vp\textsubscript{pos} may be simply a surface representation of an np\textsubscript{pos} expounding an O\textsubscript{BEN}, O\textsubscript{GOL} or even O\textsubscript{LOC} tagmem.

5.42 Purposive Verb Phrases (vp\textsubscript{pur})

The most general formula for a vp\textsubscript{pur} is characterised by the following function points:
\[ \text{\textit{VP}}_{\text{pur}} \rightarrow \text{PUR + (DES) + (}k) + H, \text{ where} \]

\[ \text{PUR : vs + sufpur + (suf}_{\text{des}}) \]
\[ H : vs + \{ \text{terminal, non-terminal} \} + \text{suffix} \]

The combination of verb stems and suffixes of purpose follows morphophonemic rules outlined in §3.21.2 (vstMP-R5b). Some examples (omitting the desiderative suffix -lo) are:

(58) [mi-la] pā-lua 'I will go [to get it]'
(59) [ādo-la] pā-lua 'I will go [to see it]'
(60) [kē-ta] pā-lua 'I will go [to give it to him]'

In every \textit{VP}_{\text{pur}} the first verb is suffixed by -la~ta; the form of the verb stem and the pur suffix in (60) being regulated by MP rules. The restrictions on the \textit{v}p are: (1) it is negated as a unit by the pre-clitic na-; (2) no adv or other grammatical category may disjoin the two verbs, i.e., the verb of purpose and the final verb. On the former, contrast the following forms:

(58') na-mi-la pā-lua 'I will not go to get it', not *mi-la na-pā-lua or *na-mi-la na-pā-lua.

Benefaction for someone other than the speaker may be signalled by the pur suffix:

(58a) [mādā-ta] pā-lua 'I will go and [get it for someone]'
(59a) [ādāa-ta] pā-lua 'I will go and [look for someone]'
(60a) [kāīa-ta] pā-lua 'I will go and [give it to him for someone]'
There are at least two alternate analyses to any vPpur:
(1) to consider a purposive suffix as a kind of conjoining of successive actions by the same person; (2) to consider verbs of purpose as a special set of Complement exponents. Both of these possibilities are for the present disregarded; in the first case because of the obvious absence of a similar set of suffixes which would signal successive actions of purpose by different persons. Thus in a sentence such as

(61) mi-la rd-no mi-la pa-lia 'I will go to get it and he will go to get it',

the purpose is in each instance marked by -la which signals a vPpur, but the different persons and coordination of the action are marked by regular coordination suffixes (§6.2). 9

To consider the function of PUR as a co-function of the Complement is only feasible because semantically the PUR is part of the total action and when the desiderative suffix -lo is also used, verbs of existence commonly expound the PSTA:

(62) nf mi-la-lo nf 'I want to get (it)'.

However, -lo is clearly an aspect marker and can also be used following coordination suffixes such as:

(63) nf mā-a-no-lo nipa špas 'I wanted to get it and he came'.

The desiderative aspect suffix often co-occurs with the purposive suffix and is also often used in a vPpur if the main
verb is one of existence.

Conjoining vpur is by simple repetition of the PUA function:

\[(64) \text{na mi-la ado-la spa-wa} \quad (I, \text{get-pur, look-pur, come-}
\quad \text{I did = 'I came to get it and to see it'})\]

5.43 Gerundive Verb Phrases (vpger)

The structure of a vpger can be summarised by the following formula:

\[\text{vpger} \rightarrow \text{GER + (K) + H, where}
\]

\[\text{GER} : \text{vs + vest-MP-R5b}
\]

\[\text{H} : \text{vs + \{terminal\} suffix non-terminal}\]

The similarity of forms denoting gerunds with those denoting purpose can be seen in Chart 10. In Chart 10 forms representing three basic verb stems are given: tå to hit, lå to speak and ro to break off.

<table>
<thead>
<tr>
<th>Ego</th>
<th>Alo</th>
</tr>
</thead>
<tbody>
<tr>
<td>'hit'</td>
<td>'talk'</td>
</tr>
<tr>
<td>Ger</td>
<td>tu</td>
</tr>
<tr>
<td>Pur</td>
<td>tu-la</td>
</tr>
<tr>
<td>Des</td>
<td>tu-la-lo</td>
</tr>
</tbody>
</table>

Chart 10: Verb Phrase Forms
Some examples of gerundive phrases are:

(65) nif pu dira-wa (I, hitting, sit-I did = 'I sat hitting it')

(66) nif lep 'I am talking'

(67) nif madda spa-lua (I, bringing (alo), come-I will = 'I will come bringing it (for someone)')

(68) nif pu su pa-wa (I, hitting, putting, make-I did = 'I, hitting and putting, made it')

The gerundive function is expounded by the following categories:

1. egocentric by pu 'hitting' in (65) and (68); lep 'talking' and su 'putting' in (66) and (68) respectively;

2. altrocentric by madda 'bringing (for someone)' in (67).
1. Longacre (1964:a;74) notes that phrases may also be double-centred, e.g. John and Mary. I have considered such constructions as simple conjoining of clause-level tagsmemes and have discussed them in Chapter 4. Axis-Relator is a phrase type which usually has some other construction type layered within the Axis.

2. Becker (1967b) uses the term Subjunct rather than Modifier to point out parallel features with Adjunct, which is a clause-level function. Demonstratives function on the phrase-level in a manner which is parallel to certain Adjunct tagsmemes on the clause-level, e.g. adverbs which permute freely such as those expounding Ampc or Ampy. It seems plausible to postulate a Subjunct function which is expounded by demonstratives. Typically they modify the chain of a discourse or co-occur with any other Modification exponent, as well as the Head exponent of phrases. However, details are not clear so I have not set up an additional phrase-level grammatical function here.

3. See also §8.5.2 and Franklin and Franklin (1962a) for a discussion on Kowa counting systems.

4. Example (16) also illustrates how the conjoined -para (§4.1) may not occur, i.e. the conjoining is indicated by juxtaposition.

5. As indicated earlier in Chapter 1, Becker (1967:a:113-4) suggests Kn as a tagsmem symbol which defines such an operation. Although his proposal is specifically to conjoin clauses in terms of semantic equivalence classes, the symbol K can conveniently be used as a 'dummy' tagsmem symbol for repeating function points within a phrase. Formally, K rules and symbols in clause and sentence formulae might be noted a K' and K''. I have already mentioned in §1.5 that the concept of an "empty slot" in tagsmemics is not new.

6. This is perhaps why P. Healey (1965a) describes as periphrastic phrases or as adjunct plus auxiliary verbs what I have most often described as a Complement + Predicate function combination. Some of the VP structures I treat here are similar to those given as compound verb units by R.A. Young (1964:71).
7. R.A. Young (1964) and P. Healey (1965c) treat such forms in Benabena and Telefol respectively. In general they define a phrase as a stem followed by a special set of verbs which together form a complex verb. The meaning is derived from the unit, but only the special set is marked by normal verb affixation. In the following description none of the verb phrases are exactly parallel (except in the semantic or total meaning sense) with those of either Young or Healey.

8. For additional examples, see §3.21.3.

9. In the following chapter I discuss the characteristics of conjoining clauses and how the exponents of shared Subject tagmemes (for example) are often deleted. If the person of the Subject is different between two clauses, the exponent of the Subject in the second clause would, of course, have to be given; this is done with a different set of suffixes. Example (61) could alternately be described as a series of four clauses. However, this would be a much more complicated solution.
6.0 Introduction

A sentence consists of main functional points such as Base, Antecedent, Seque, Protagos, Apodosis, Thesis, Antithesis, Topic, Comment, Quote, as well as others.¹ The name of the sentence-type described in each section corresponds most often to the function of the particle, clitic, or (in coordinate sentences) the suffix which signals the relationship between expounded units. Sentences in Kewa are thus Simple, Coordinate, Reason, Antithetical, Alternative, Result, Thematic, and Quotative. In addition, several of the major sentence-types have sub-types, particularly coordinate and quotative sentences.

In tagmemic descriptions any sentence with the overall structure of a single clause (which may include embedded syntagmeme) and which has appropriate sentence final intonation (Cf. 4.2.4) is generally considered a simple sentence. The nuclear constituent is:

\[ S_{simp} \rightarrow \text{Base: clause}, \]

where clause represents any syntagmeme exponent of that level. It is unclear if the notion of a simple sentence is more than a descriptive convenience, i.e. no new functional notion is introduced. The clause exponent, not the simple sentence, defines the function. While in every other sen-
sentence type there are markers which indicate the function of
the sentence tagmeme, in simple sentences only the intona-
tion can be thought of as in any way signalling a function,
and this is true of any sentence type. The notion of a
simple sentence is therefore not used again in this chapter.

6.1 Coordinate Sentences (sco)

Sentences which are coordinate consist of at least two
conjoined bases expounded by clauses. Although in practice
certain kinds of coordination may be signalled by simple
juxtaposition of clauses, there are always overt coordinators
which can mark coordinate sentences. Semantically the coor-
dinators most often indicate successive actions or simul-
taneous actions. However, these two main features may be modi-
fied in some other way.

Generally speaking, in New Guinea languages such time
relationships have not been described as coordinate clauses.
They have, rather, been described as dependent and independent
clauses within a sentence. The dependent clauses which in-
volve time relationships are marked by "medial" verbs, some-
times also called non-final, non-terminal, secondary, or
non-finite. The co-occurring independent clauses, on the
other hand, are marked by "final" verbs called also by ant-
omeys such as terminal, primary or finite. The clauses (or
in some cases the verbs) in turn have also been called depen-
dent or subordinate on the one hand vs. independent, superordinate or principal on the other hand, according to their syntactic setting.\(^2\)

It seems more appropriate in Kswa to consider certain medial-final distinctions as properties of coordinate sentences and the clauses which expound the Bases as interdependent. The important feature is that clause coordination is often marked by special sets of suffixes which also distinguish other categories, such as the identity or non-identity of the person of the actors. Coordination, therefore, often involves same or different person categories between the coordinated Bases. The same person (sp) or different person (dp) markers are of two sets.\(^3\)

In addition, certain other markers may modify the relative timing of the coordinated clauses. For example, the successive or simultaneous dp coordinators may have co-occurring suffixes which indicate such features as prolonged action for either of two conjoined clauses, or the first clause action may be interrupted before the second one takes place. Such variations of coordinate sentences will also be discussed.

6.11 Sequential Coordination

Sequential sentences (\(s_{seq}\)) consist of the following function points:
In this section only C0s which are expounded by suffixes indicating the same person are given. The following sentences are paired, the first with a CO expounded by spęgo, the second by spålō (the CO is enclosed in square brackets):

1) **nf ręko-[a] ágas 1ā-lo** (I, stand-[CO sp.ego], talk, say-I am = 'I stood up and am speaking')

1a) **nf rękke-[wa] ágas 1ā-lo** (I, stand-[CO sp alo], talk, say-I am = 'I stood up on account of something and am speaking')

2) **sad fńru-[a] ágas 1ā-pa** (we two, sat down-[CO sp ego], talk, say-we are = 'We two sat down and talked')

2a) **sad fńra-[wa] ágas 1ā-pa** 'We two sat down for something and talked'

3) **ńdū zo-[a] mādā na-rīa** (short, affirm-[CO sp ego], enough, neg-it carried = 'It was short and didn't reach')

3a) **nf na-saadaalý yaa-[wa] kedá ma-paa-ru** (I, cas-long, affirm-[CO sp alo], heavy, cas-make-I did alo = 'I made it long and heavy')

The exponents are as follows:

ANTE : clint (1, 2) 'I stand'

: cldmp (3) 'It is short'

: cld-tr (3a) 'I make it long'
CO SUC: \( s^e_{ego} \) (1,2,3) (-a)
  \( s^e_{alc} \) (1a,2a,3a) (-na)
SEQL: cl\_tr (1,2) 'I am talking'
  cl\_comp (3) 'It was short'
  cl\_d-tr (3a) 'I made it (be) heavy'

In the formula given, the Antecedent tagmeme may be repeated
several times, as long as it is marked each time with the
successive coordinator (CO SUC). 4

Examples where the person of the actor remains the same
in the ANTE and SEQL, but where number varies will be given
in §6.13.

Transformational rules operate when clauses of different
types are conjoined. Thus in two underlying clauses:

(4) \( d^d \) pi\_ra-a 'The man sat down'

(5) \( d^d-md \) etan na\_a 'The man ate the food',

both an intransitive and transitive clause are involved.

When the clauses are conjoined, the S may be repeated or de-
leted in the second clause, but it must function the same
throughout the sentence, i.e. as either \( S_{ACT} (d^d) \) or \( S_{AGN}
(d^d-md) \). In other words, just as in clauses which are em-
bedded in the S, one of the shared nouns may be deleted (see
§4.4ff), so in clauses which are conjoined, one of the shared
Ss may be deleted. For example, any of the following are
acceptable, and all mean 'The man sat down and ate the
food':
(6) ḥ-ḥé pfru-a ḍtaa ná-a (man-AGN, sit-CO sp, food, eat-he did)

(6a) ḥ-ḥé ḍtaa (ḥ-ḥé) pfru-a ná-a (man, AGN, food, (man-AGN), sit-CO sp, eat-he did)

(6b) ḥ ḍ pfru-a (ḥ ḍ) ḍtaa ná-a (man, sit-CO sp, (men), food, eat-he did)

(6c) ḥ ḍ ḍtaa pfru-a ná-a (man, food, sit-CO sp, eat-he did)

However, the following are not permissible:

(*6d) ḥ ḍ pfru-a ḥ-ḥé ḍtaa ná-a

(*6e) ḥ-ḥé ḍtaa pfru-a ḥ ḍ ná-a , and so on,

because the functions of S in the shared clauses are contrastive. It is therefore necessary to have rules such as (based on (4) and (5));

\[ \text{cl}_\text{int} \rightarrow S_{\text{ACT}} + F_{\text{MT}} \]

\[ \text{cl}_\text{tr} \rightarrow S_{\text{AGN}} + O_{\text{GEL}} + P_{\text{GD}} \Rightarrow \]

\[ S_{\text{seq}} \rightarrow \begin{cases} 1/3 + 4 + 2 - \text{CO} + 5 \\ 1/3 + 2 - \text{CO} + 4 + 5 \end{cases} \]

, and so on, where 1/3 indicates that the S may be either unmarked by -ḥé and thus ACT, or marked as AGN. Further rules would be necessary to account for the optional reoccurrence of the S (as in 6a and 6b).

Because of such examples as (6c) coordination might be considered on two different levels: on the one hand, as be-
tween the Predicates only, not between whole clauses. Any
time the coordination involves same-person/number identity
it would be considered as between Predicate functions; on the
other hand, when different-person/number identity is involved,
the coordination might be considered as between total clauses
with functions of Antecedent, Sequel and so on. Neither
solution would eliminate the necessity for transformational
rules involving Subject deletions.

6.12 Simultaneous Coordination

Simultaneous sentences (s_sim) consist of the following
functional points:

\[ \text{s_sim} \rightarrow \text{COTM} + \text{CO} \text{SIM} + \text{SEQL} \]

Again the illustrations are paired, the first with a CO
expounded by sp_ego, the second by sp_alo:

(7) špo là-ri špa-we (whistle, say-CO sp ego, come-
I did = 'I whistled while I came')

(7a) špo là-d-ša špa-we 'I whistled (for him) while I
came'

(8) nǖp tā-ri pāmu-ša (he, hit-CO sp ego, walk-he
is = 'He is hitting it while he is walking')

(8a) nǖp tā-p-ša pāmu-ša 'He is hitting it (for some-
one) while he is walking'

The exponents are:

\[ \text{COTM} : \text{clmp} \quad (7) \quad \text{'I whistle'} \]
\[ \quad : \text{cltr} \quad (8) \quad \text{'He hits'} \]
COSIM : spego (7,8) (-ri)
       : spalo (7a,8a) (-ma)
SEQL : clint (7) 'I came'
       : clint (8) 'He walks'

In a s_sim the clause action which expounds the Contemp-
poraneous tagmeme goes on for some time while the second ac-
tion, which expounds the Sequel tagmeme, takes place. The
notion of absolute simultaneity, that is two actions abso-
lutely at the same point in time can only be performed by
the same actor and is provided for by the gerundive verb
phrase construction (§5.43).

There are many (semantic) restrictions on the tagmeme
which may be represented in conjoined clauses of a s_sim. For
example, sentences like the following cannot occur:

(*9) nd-em maapu-para irikal tá-ri étas ada-para na-lo
    'I am hitting the dog in the garden while I am
eating the food in the house',
simply because the OLOC would have to be expounded identically.
Also, there are many actions which (semantically) cannot
occur simultaneously. Such restrictions have not been ac-
counted for in this grammar.

Because the verb or verb phrase is the only obligatory
exponent in a clause, several clauses may be conjoined with
only the P expounded. For example, note the following:
\[(10) \text{addirr} \ tpa-pa \ ldpaa-wa \ grdpeaa-me \ pu-a \ rub\-la \ pi-sim} \ (\text{hair, water-LOC, fall} - \text{CO sp alo, turn} - \text{CO sp alo, make} - \text{CO sp ego, throw-pur, make-
they did} = '\text{They put (their) hair in the water, while they made it turn over in order to comb it}')

Structurally this may be represented as:

\((1) \ s_{\text{Seq}} \rightarrow \text{ANTE} + \text{CO}_{\text{SUC}} + \text{SEQL}, \text{where the final } \text{SEQ:}

\text{VP}_{\text{pur}} \rightarrow \text{PUR} : \text{rub\-la} '\text{in order to throw'} + \text{H} :

\text{pisimi} '\text{they did it}'

However, the sentence displays considerable embedding
which is bracketed in Chart 11:

\[
\begin{align*}
\text{addirr} & \ tpa-pa \ ldpaa-wa \ grdpeaa-me \ pu-a \ rub\-la \ pisimi \\
(1) & \left[ \begin{array}{l} \text{ANTE}_1 \\ \end{array} \right] + [\text{CO}_1] + [\text{SEQL}_1] \\
(2) & \left[ \begin{array}{l} \text{CONTM}_1 \\ \end{array} \right] + [\text{CO}_2] + [\text{SEQL}_2] \\
(3) & \left[ \begin{array}{l} \text{ANTE}_2 \\ \end{array} \right] + [\text{CO}_3] + [\text{SEQL}_3] \\
\end{align*}
\]

Chart 11: Sentence-Level Recursiveness

The exponents of the function points given in Chart 11 are:

\(\text{ANTE}_1 : s_{\text{sim}} - \text{ma}, \text{i.e. a simultaneous sentence marked}
by \text{-ma, a sp alo coordinator. This is represented in the second bracketing:}

(2) \ s_{\text{sim}} \rightarrow \text{CONTM} + \text{CO}_2 + \text{SEQL}_2, \text{where}

CONTM : \( s_{seq} \cdot \text{-wa}, \) i.e. an additional sequential sentence marked by \(-\text{wa}\), a special coordinator. This is represented in the third bracketing:

\[
(3) \quad s_{seq} \rightarrow \text{ANTE}_2 + \text{CO}_3 + \text{SEQ}_2 , \text{ where}
\]

\[
\text{ANTE}_2 : \text{clint} \rightarrow \text{O}_\text{GOL} + \text{O}_\text{LOC} + \text{P}_\text{GD}.
\]

It is important to note that none of the above derivations involve sentences with K-equivalent functions, i.e. there is no conjoining of sentence-level tagmemes. Examples of such conjoining (based on example 10) would be either of the following:

(10a) \( \text{ádi} \text{úrf } \text{ipapara } \text{lópaama } \text{grópeaama } \text{puu rúḅ} \text{abla } \text{pisim} \)

They put the hair in the water and turned it and did this in order to comb it

(10b) \( \text{ádi} \text{úrf } \text{ipapara } \text{lópaama } \text{grópeaama } \text{pari rúḅ} \text{abla } \text{pisim} \)

While they put the hair in the water (for someone) and while they turned it over (for someone), they did this in order to comb it

The functions represented are, respectively:

(10a) \( s_{seq} \rightarrow \text{ANTE} + \text{CO} + \text{SUC} + \text{K}_2 + \text{SEQ} \)

(10b) \( s_{sim} \rightarrow \text{CONTM} + \text{CO} + \text{SIM} + \text{K}_2 + \text{SEQ} \)

However, in introducing a K-equivalent operation in a coordinate sentence it must be stipulated that both the Coordinator and the tagmemes preceding are repeated, i.e. not simply the coordinator. This is true of any function marking suffix, particle or clitic; they mark a function which
may be repeated, but the marker cannot follow itself.

6.13 Coordination Involving Different Persons (dp)

The functional points in sequential and simultaneous sentences with different person-actor identity between clauses is the same as in sentences with the same person-actor identity. However, the semantic co-functions of the sentence-level tagmemes is of a greater variety if dp are involved between clauses. Before illustrating these variations, examples of simple coordination between clauses with dp are given. These are again paired, egocentric benefaction signalled by the verb on the one hand, altrocentric on the other:6

(11) ni rek-a-[no] ągaa la-ą (I, stand-[CO dp ego 1 sg], talk, say-he did = 'I stood up and he talked')
(11a) ni rek-a-no ągaa la-ą 'I stood up (for something and he talked')
(12) ągą pirá-[pona] ągaa la-ą (we two, sit-[CO dp ego 1 dl], talk, say-he did = 'We two sat down and he talked')
(12a) ągą píraa-pona ągaa la-ą 'We two sat down (on account of something) and he talked'
(13) nipî ma-rddu ąsa-nie ni ma-adaalu ąsa-ru (he, cas-short, affirm-[CO dp aloc 3], I, cas-long, make-I did = 'He made it short and I made it long')
The exponents are:

ANTE: clint (11,12) 'I stand'; 'we two sit'
     old-tr (13) 'he shortened it'

COSUC: dpago (11,12) (-no '1 sg'); (-pome '1 dl)
     dpalo (11a,12a,13), + vstNT-RI

SEQL: cldr (11,12) 'he talked'
     old-tr (13) 'I lengthened it'

Whenever successive coordination involving a dp is used the
category of the person of the first verb is signalled by
-no (1 sg), -pome (1 dl), and so on (Cf.§3.22.2, Chart 8,
for the whole set. Occasionally the variants -pama and
-pena, or even -puma and -puna are heard for the 1 dl and 1
pl.forms.)

Examples of person agreement between actions, but where
the number of the actor varies, are provided in the follow-
ing coordinated clauses:

(14) nifdd puma-ni wald dpal-le (we all, go-CC sp, I,
    again, come-I will = 'We all go and I will return')

(15) nimm pim-wald dpal-le 'They all go and he
    will return'

(16) mmu-puma nifdd wald dpal-le 'We two go and all
    of us will return'

(17) nimm pim-ne wald dpal-le 'You two go and you alone
    will return'
If the first free pronoun were not supplied in each sentence the person of the actor would be interpreted as identical in both of the conjoined clauses: (14) 'I go and will return'; (15) 'he goes and will return'; (16) 'we all go and will return'; (17) 'you go and will return'. The free pronoun in each second clause is optional, regardless of the interpretation. A further example of different clause subjects conjoined, but identical person categories can be seen in the following:

(18) yaf na-fnu-a fipu na-dpea (rain, neg-come-CO sp, grass, neg-appear-it has = 'It did not rain and the grass has not come up')

Very few suffixes may co-occur with sequential coordination markers if such same persons are involved. Examples (14-18) can also optionally have CO dp suffixes, so that the v + CO dp would be: pd-gona rather than pd-a in (14); pd-na rather than pd-a in (15) and (17); pd-gona in (16).

It is re-emphasised here that it is the function of coordination which applies between two or more clauses, and not simply a time relationship. In the case of coordinate sentences involving at least one tagmeme expounded by an imperative clause, the time relationship is not necessarily in the order of the expounded clauses:
(19) `pa-no sa (do-I CO dp 1 sg, give it-immed = 'Give it to me to do', or 'I (should) do it and you give it')

(20) `ne sa-fi na-ina ga-no: (you, sweet potato, eat-CO dp 2 sg, give (to you)-CO dp 1 sg = 'I am giving you sweet potato to eat', or (literally) 'You (should) eat sweet potato and I give it to you')

(21) `go re-fi ma-ina lu (this, axe, get-CO dp 2 sg, come-immed = 'Come and get this axe')

In each sentence the action of the second clause logically precedes the first. The feature of coordination thus does not always specify the sequence of the actions; this must be a semantic interpretation derived from the particular type of clause exponents which are coordinated. In most cases the action of the first clause as an exponent of the ANTE tag-meme will logically precede the action of the second clause.

Although (20) appears to have two CO dp markers (-ina (2 sg) and -no (1 sg)), the second is affixed to a clause which occurs alone so that neither clause has a verb which specifies the person-number-tense of the action. The result in such cases is a semantic interpretation much like a future subjunctive. This is a regular feature of any clause which is marked in the same manner as a clause + CO dp, but which occurs alone.
6.14 Other Time Relationships

There are several suffixes which may co-occur with CO dp markers to modify the temporal-spatial relationships between adjacent clauses. The suffixes express Prolongation, Serialisation, Permission, Disassociation and Exclusion.

6.14.1 Prolongation

When two clauses are coordinated and the action of the first clause is prolonged so that the action of the second clause is completed first, the suffix -la co-occurs with the CO dp marker:

(22) *tra-la-nia épo-pe (cook-prol-CO dp 3, come-imper = 'While they (or he) cook it, you come')
(23) *ëpu-la-pona ph-a (come-prol-CO dp 2 dl, go-he did = 'While we two were coming he went')

The prolongation marker -la contrasts clearly with the homophones -la (purpose), in that the latter is never followed by a CO dp marker:

(22') *tra-la épo-pe (cook-pur, come-imp = 'Come in order to cook it')

The coordinate sentences in (22) and (23) consist of:

\[ s_{aim} \rightarrow CO_{cont} + CO_{dp} + SEQL, \]

where:

ANTE: clint
CO: dp (-nía '3'; -pona '2 dl')
SEQL: climp (22); clint (23)
The Contemporaneous tagmeme is marked by -la, an exponent of ASPECT on the word-level.

6.14.2 Serialisation

When two clauses are coordinated and the action of the second clause is specified as beginning just as the action of the first clause is complete, the suffix -loa co-occurs immediately following the CO dp marker:

(24) pé-no-loa ena-a (go-CO dp l sg-ser, come-he did = 'I went and after that he came')
(25) ne rffna-ina-loa mf tê-lua (you, grasp-CO dp 2 sg-ser, I, hit-I will = 'You grab him and then I will hit him')

Combinations of serialisation and prolongation are acceptable:

(26). tâ-la-na-loa ena-wa 'After he had cooked it awhile, then I came'

Two clauses, one with a CO dp marker and with serialisation specified, followed by a subjunctive clause, may occur:

(27) kâ-na-loa mogo wârî-na (give to him-CO dp 1 sg-ser, try, make-3 dp = 'After I give it to him he can (or should) try to make it')

The same interpretation can be provided by simply juxtaposing two clauses which are specified for person-number-tense, as long as the tense is future and the person-number is not identical;
(27a) *ki-toe mohe wāfī-līa* (give to him-I will, try, make-he will = 'I will give it to him; he will try to make it')

Such paraphrases may in fact indicate that two coordinate clauses with dp specified (where the second action is interpreted subjunctively) may be based upon the future tense.

6.14.3 Permission

When two clauses are coordinated and one action is specified as allowed or permitted, the suffix *wa* co-occurs following the CO dp marker:

(28) *go Ḟa iṣu ni kābū-no-wa* (that, men, something, put-he has, I buy-CO dp 1 sg = 'That man has something and I should be allowed to buy it')

(29) *add nīnd tā-pone-wa nīnd nānā* (we two, he, hit-CO dp 2 dl-perm, he, go-CO dp 3 = 'Allow us to hit him and he might go')

6.14.4 Disassociation

When two clauses are in a time relationship such that the first clause action can only take place if the second action does not, the first clause is marked with *nānā*. The meaning implies a negative reason and two separate morphemes may actually be involved: *nā* 'inceptive aspect', followed by *nā* 'CO dp 3'. The inclusion of the examples which follow are tentative. It may prove more accurate to consider *nānā*
as a sentence connector, parallel to others described later (cf. 6.2ff).

(30) lêpa-pana pana ñó-de-ä pé-pe (fall-disas CO dp 3, slow, look-CO sp, go-imper = 'So that it does not fall, look and go slowly')

(31) re-pana pâ-li rébd rebd-e ne-nâ âââli tâ-pana (close-loc, go-you will, time, break-CO sp, you-poss, head, hit-disas CO dp 3 = 'When you go close, it could fall and hit your head')

6.14.5 Exclusion

As indicated, clauses which occur in isolation with CO dp markers imply a future subjunctive mode. In addition, any 1st person non-singular CO dp suffix may be followed by -paa signalling that the actor is excluding anyone except himself and the addressee(s):

(32) nà-mina-paa (eat-CO dp l pl-exol = 'We all should eat it')

(33) nà-pana-paa (eat-CO dp l dl-exol = 'We two should eat it')

If two CO dp clauses occur only one of them needs to be marked for exclusion and the interpretation will be the same for both:

(34) ro-gaa-mina tâpa pa-mina-paa (bind-CO dp l pl, platform, make-CO dp l pl = 'We two (only) can make a platform and bind [=bury] him')
6.14.6 Other Observations

Markers which are CO dp commonly co-occur with -lo which signals 'desire' or 'to want to':

(35) sukulu poae-nu-at ade-na-lo pea (school, boy-collegiate, look-CO dp 3-des, do-he has = 'The school boys want to see and he is doing it')

(36) staa na-na-lo ma-nagola-nu sada-to (food, eat-CO dp 3-des, cause-set out-CO sp alo, put-I am alo = 'He wants to eat and I am preparing (the table for him')

One verb form *ba* 'to start to go' occurs in a very restricted paradigmatic set; the suffixes which occur with it are in some cases obviously based upon ones already described. The full set is:

(37) *ba* 'Let we 2 (exclusive) go'
(37a) *ba*1 'Let we 2 (inclusive) go,'
(38) *bêna* 'Let we all (exclusive) go'
(38a) *bêna* 'Let we all (inclusive) go'
(39) *balepan* 'Let us go (imperative)

The suffix in (39) -lepan is from the imperative set given in Chart 6 of Chapter 3; -na in (38) and (38a) appears to be from the Non-Terminal set given in Chart 8 of Chapter 3.

The verb form is similar in semantic effect to the 'inceptive' suffix -ba with the same form.'
6.2 Sentence Connectors

The difference between a sentence coordinator (in usual terms, a conjunction) and a sentence connector is often one of freedom of placement: coordinators conjoin clauses and in so doing impose constraints upon the functional nature of the shared exponents; the clause exponents in turn may be permuted as a whole, but the coordinators alone cannot be. Connectors, on the other hand, relate other sentence-level functions and, in relation to clause exponents, move about quite freely.

6.21 Reason Sentences ($s_{re}$)

Reason sentences consist of two nuclear function points or tagmemes: the Reason (RE) which is marked by the general clitic -$\text{ga}$\textsuperscript{16}, and the Result (RS). The RS tagmem is often expounded by imperative or subjunctive clauses:

(40) $dd$ pd-$\text{lupa-}\text{ga}$ $\text{pfa-}\text{lupa-}\text{pa}$ (we two, so-we two are-RE, sit-imp pl-immed = 'Because we two are going, you all sit down')

$s_{re} \rightarrow$ RE : cl\text{int-}ga + RS : cl\text{imp}$
(41) ng rains ite-ge re-pas na-epo -pe (I, sick, put-
it has-RE, base-loc, neg-come-imm imp = 'Since
I am sick, do not come close (to me)')

sre → RE : cl Kemp + RS : cl imp

(42) epo i-le-lo-ge nipu nde-na (whistle, say-I am-RE,
he, come-CO dp 3 = 'Because I am whistling, he
should come')

sre → RE : cl Kemp + RS : cl intr(subjunct)

(43) lópa-wa-ge he nde i-le-no (fall-I did-compl
sun -RE, you, cross, say-CO dp 1 sg = 'Because
I fell down, I should be cross with you')

The last two sentences are also further examples of how sub-
jective clauses are a semantic interpretation of any depen-
dent clause which occurs final. Permutations may occur,
where the Reason tagmeme may occur finally in the sentence:

(44) poro ndé miru rd-name ipu-la-ge (door, strike
imp, smoke, inside-dir, come-it-is-RE = 'Close-
the door because the smoke is coming inside')

sre → RS : cl imp + RE : cl int-ka

Because of such permutations -ka is not considered as simply
a disjunctive marker between juxtaposed clauses.

In other examples considerable embedding may occur with-
in the RE tagmeme:
(45) [44 ma-1646 paq-ge 44 adaa-pa] ko-44 se-lo (man, neck, cut, make-RE, man, big-for) behaviour, put-I am = 'I think that because it is a man who has been cut off, at the neck he is a big man'.

The part of the sentence included within square brackets is the Q tagmeme of a Quotative sentence (Cr. § 6.26). This Q tagmeme is expounded by a s-re, in which the RE is marked by -ga and the RS is expounded by a nominalised phrase. Note also the following example:

(46) [ne-44 abu pia-wa] ne kia-lo-ge ne fri pida ([CAHN, before, shoot-I did] you give you-I am-RE, you, feathers, pluck-imp) 'I am giving you that which I shot before so that you can pluck its feathers'.

In this case the RE is expounded by a claff which contains an embedded clause abu pia-wa 'I shot it before' with the object deleted (in this case obviously "bird").

6.22 Antithetical Sentences (S-ant)

Sentences which are antithetical consist of a Thesis tagmeme (THS) and an Antithesis (ANT) tagmeme, which are most frequently connected by pare, or by yapare if the previous clauses exponent is complementive.
(47) *nipi lwa pare of paalé na-pla* (he, come-he is, but, afraid, neg-it-is = 'He is coming but I am not afraid')

Sant → THS : clintr + pare + ANT : clmp

(48) *wet kome ya-pare of na-wa* (bad, behaviour, but, I, do-I did = 'It is bad behaviour but I did it')

Sant → THS : clmp + yapare + ANT : clinr

Two independent clauses may be juxtaposed in an antithetical sentence which is begun with pare, but the first clause must still be interpreted as the Thesis:

(49) *pare kádári ñrampúli paë 44-re pawáli pękáma* (but, car, quickly, make-it does, man-TOP, slowly, travel-we do = 'A car goes quickly but a man travels slowly')

Sant → pare + THS : clintr + ANT : clintr

The above sentence also illustrates the use of antonyms in antithetical sentences, where ñrampúli 'quickly' occurs in the THE and pawáli 'slowly' in the ANT. The same meaning also occurs when the THS and ANT are juxtaposed with both pare and the shared verb deleted:

(47a) *kádári ñrampúli pëmesa 44-re pawáli* 'A car goes quickly but a man is slow'

In other instances, if the THS is negated, only the antonym need remain in the ANT:
(50)  ora koko na-rin pare na eagd kegaam pea
(really, cold, neg-emits-it does, but, just,
little, hot, makes-it does ≠ 'It is not really
cold but (rather) just a little bit hot!')

(50a)  ora koko na-rin pare ririnu 'It is not cold but
hot.'

In (50a) pare can also be deleted so that only the antonym
remains in the ANT.

A reversal of the THS-ANT is not normally permissible
unless the negative remains in the THS (i.e. the ANT already
implies negation):

(*50b)  na eagd ririnu pea pare koko na-rin 'It is
just a little hot but it is not cold'

(50c)  na eagd ririnu na-pea. ora koko rea. 'It is
not just (even) a little hot. It is really
cold.'

Comparative sentences are therefore in every instance easily
formulated within the framework of an sant such as (50).19

In other examples of sant only the ANT tagname may be
signalled:

(51)  pare mend-me rea-me cun-e saept na-la (but, pig-
AGN, hunger-AGN, die-CO sp, sweet potato, eat-
it is = 'However, the pig is hungry and is eat-
ing sweet potato')

sant → pare + ANT : sseq

sseq → ANTE : clomp + COSUC : -s + SEQL : cltr,