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

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

The combination of active verb bases and the immediate imperative suffixes follows the general pattern of $\sim$stMP-R2:

XL → X / __ Imp.

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

XL + $\underline{\text{-le-}}$ → $\underline{\text{-te-}}$

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

(33) $\underline{\text{yólá}}$ 'to pull' + n-imm n-sg → $\underline{\text{yó-tepaa}}$
   'You all pull it'

(33a) $\underline{\text{yólá}}$ + n-imm n-sg (Alo) → $\underline{\text{yóláá-tepaa}}$
   'You all pull it on behalf of someone'

(34) $\underline{\text{ria}}$ 'to carry' + n-imm n-sg → $\underline{\text{ria-lepaa}}$
   'You all carry it'

(34a) $\underline{\text{ria}}$ + n-imm n-sg (Alo) → $\underline{\text{riaa-tepaa}}$
   'You all carry it on behalf of someone'

(35) $\underline{\text{tá}}$ 'to hit' + n-imm n-sg → $\underline{\text{tá-lepaa}}$
   'You all hit it'

(35a) $\underline{\text{tá}}$ + n-imm n-sg (Alo) → $\underline{\text{táá-tepaa}}$
   '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:

$$\text{vstMP-R4} \quad \begin{bmatrix} XL \\ XA \end{bmatrix} \rightarrow \begin{bmatrix} Xlo \\ X\underline{o} \end{bmatrix} \quad / \underline{\quad} \text{ N-Term (suc-sp),}$$

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. -$\underline{a}$ becomes -$\underline{u}$:

(36) péla 'to pull out' + -$\underline{a}$ → pélo-a pǐra-wa
     'I pulled it out and sat down'

(37) ráképéá 'to husk' + -$\underline{a}$ → ráképéá-a pǐra-wa
     'I husked it and sat down'

(38) roá(E) 'to pluck' + -$\underline{a}$ → roá-a pǐra-wa
     'I plucked it and sat down'

(39) póná 'to sharpen' + -$\underline{a}$ → pónó-a pǐra-wa
     'I sharpened it and sat down'

(40) rǐpǐna 'to grasp' + -$\underline{a}$ → rǐpǐnu-a pǐra-wa
     'I grasped it and sat down'

(41) sá[16] 'to put' + -$\underline{a}$ → sú-a pǐra-wa
     'I placed it and sat down'

(41a) sáá-wa pǐra-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:

vstMP-R5
$$\begin{bmatrix} XL \\ \begin{Bmatrix} XA \\ XE \end{Bmatrix} \end{bmatrix} \longrightarrow \begin{bmatrix} X \\ X\underline{e} \end{bmatrix} \quad / \underline{\hspace{1em}} \begin{array}{l} \text{3rd person} \\ \text{(any number)} \end{array}$$

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

$$L + \begin{bmatrix} \text{-lipi} \\ \text{-limi} \end{bmatrix} \longrightarrow \begin{bmatrix} \text{-tepe} \\ \text{-teme} \end{bmatrix} \quad / \underline{\hspace{1em}} \text{2 dl, pl}$$

Some examples are:

(42) áwá 'to dig' + -na → áwé-na píra-wa
'He dug it and I sat down'

(43) ádíá 'to fasten' + -na → ádí-na píra-wa
'He fastened it and I sat down'

(44) yólá 'to pull' + -na → yó-na píra-wa
'He pulled it and I sat down'

(45) ródópea 'to break' + -na → ródópo-na píra-wa
'He broke it and I sat down'

(46) ábúlá 'to compensate' + -na → ábú-na píra-wa
'He compensated and I sat down'

(47) ípu 'to come' + -na → épe-na píra-wa
'He came and I sat down'[17]

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 altrocentric (note the contrast in (51) and (51a) below. Some examples are:

(48) ádo-la pú-lu   'I am going to see it'

(49) ri-ta pú-a   'He went to carry it'

(50) ráképé-ta pá-limi   'They will go to husk it'

(51) pógo-ta ép-eme   'They have come to jump'

(51a) pógolaa-ta ép-eme   'They have come to jump on behalf of someone else'

(52) rúmaa-ta yalá-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:

vstMP-5b

$$\text{vstMP-5b} \quad \begin{bmatrix} XE \\ XL \\ XA \end{bmatrix} \rightarrow \begin{bmatrix} XV \\ X \\ X\underline{o} \end{bmatrix} \quad / \underline{} \text{ Pur },$$

where V is the penultimate of an XE pattern. If any pattern is also H, then $\underline{o} \rightarrow \underline{u}/H\underline{}$ according to regular vowel harmony rules. Additionally, the purpose suffix variation follows vafMP-R1 such that:

VB-L,E + -la → -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) pú pǐra-wa   'Going on, I sat down'

(54) ló pǐra-wa   'Talking, I sat down'

(55) íru pǐra-wa   'Cooking, I sat down'

(56) sú pǐra-wa   'Placing it, I sat down'

(57) ráképé pǐra-wa 'Husking it, I sat down'

(58) ábúló pǐra-wa   '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 altrocentric simultaneous actions by the same person or by different persons are marked by the suffixes indicated in Chart 8 and by the accompanying vstMP-R1:

(59) láá-ma pǐra-wa '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 syntagmeme. 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 suffixes and clitics are optional to any verb syntagmeme:

$$\text{NUC} \quad : va \; / \; \underline{\quad} + (\text{ASP}^1) + \text{SET I}$$

$$\left. \begin{array}{l} : vs \\ : dvs \end{array} \right\} \quad (\text{CAS}) + \underline{\quad} + (\text{ASP}^2) + \text{SET II}$$

The Pheriphery can be expounded as follows:

$$\text{PHERI:} \quad \left\{ \begin{array}{l} \text{Term I} \\ \text{N-Term I} \end{array} \right\} \quad / \; \text{ABASE} + (\text{ASP}^1) + \underline{\quad}$$

$$\left\{ \begin{array}{l} \text{Term II} \\ \text{N-Term II} \end{array} \right\} \quad / \; (\text{CAS}) + \left\{ \begin{array}{l} \text{ABASE} \\ \text{SBASE} \end{array} \right\} + (\text{ASP}^2) + \underline{\quad},$$

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

The remaining functional points for any verb syntagmeme are:

$$v \longrightarrow (\text{NEG}) + \text{NUC} + \text{PHERI} + (\text{ASP}^3) + (\left\{ \begin{array}{l} \text{CON} \\ \text{MOD} \end{array} \right\}),$$

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^1, ASP^2, and ASP^3. Each of these will now be dealt with.

3.24.1 Negative

The pre-clitic na-negates the action signalled by certain verb phrases (see § 5.42 and 5.43), the complemented action of certain clauses (see § 4.24), or simply the verbal ac-

tion of verb syntagmemes.   Some examples are:

(60) <u>na-pálua</u>   (neg-go I will = 'I will not go')

(61) <u>na-ádo-la</u> <u>pálua</u>   (neg-see-pur, go I will = 'I will
not go to see it')

(62) <u>adaalu</u> <u>na-ya-lia</u>   (long, neg-affirm-he will='He will
not grow tall')

(63) <u>na-ma-adaalu</u> <u>yaa-lia</u>   (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 <u>na-</u> follow:

(64) <u>na-pú-lupaa-pe</u>   'Don't all of you go now'

(65) <u>na-toa</u>   'I will not talk'

(66) <u>na-ma-adóaa-lia</u>   'He should not cause (me) to
wait...'

(67) <u>na-mí-la</u> <u>pú-lu</u>   'I am not going to get it'

(68) <u>na-mí-a</u> <u>púa-wa</u>   'I did not get it and I went'

(69) <u>na-méá-no</u> <u>púa-a</u>   'I did not get it and he went'

(70) <u>na-méá-no</u> <u>na-púa-a</u> 'I did not get it and he did
not go'

In example (64), <u>na-</u> 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 <u>na-</u> 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-mí-a na-púa-wa 'I did not get it and I did not
go'

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

(*67a) na-mí-la na-pú-lu '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 Pheriphery. The causative also changes a clause syntagmeme to transitive, if it is not already transitive (Cf.§4.23).

(71) píra-pe (sit-imp imm sg = 'Sit down')

(71a) ma-píraa-pe (cas-sit-alo imp imm sg = 'Cause
(someone) to sit down')

(72) píra-wa (sit-1 sg Pa = 'I sat down')

(72a) ma-píraa-ru (cas-sit-1 sg Pa alo = 'I caused
(someone) to sit down')

(73) <u>ma-rékaa</u> 'Cause it to stand up for someone'

(74) <u>ma-fraa-to</u> 'I am causing it to be cooked on behalf
of someone'

(75) <u>ma-mináá-saa-tepaa-pe</u> 'You all cause it to be
lifted upwards right now'

3.24.3 Aspect[1]

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 exam-
ples are given:

(1) -<u>ba</u>(Λ) '(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) <u>fra</u> 'to cook' + -<u>ba</u> + vstMP-R4 + -<u>a</u> (consec sp) =
<u>fra-bo-a</u>... 'having begun to cook it and ...'

(77) <u>fra-baa-ru-de</u> 'I started to cook it once'

If -<u>ba</u>(Λ) interrupts a morphophonemic tense alternant
which co-occurs with a base pattern other than XA, the tense
is always from those which co-occur with pattern A:

(78) <u>fra</u> 'to cook' + 1 sg Pf = <u>fri-tu</u> 'I have cooked it'

(79) <u>fra</u> + -<u>ba</u> + 1 sg Pf = <u>fra-be</u> 'I have begun cooking
it'

In other words MP rules apply now to -<u>ba</u>(Λ), not the verb
base.

(2) -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-
ilarly to the 'inceptive' aspect marker, vstMP-R1 applies
to this suffix, which optionally interrupts the vbase
and tense suffix:

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

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

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

    (81a) fra + -ta + 1 sg dp = fra-taa-no 'I continue
        (alo)
        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 §6.14.1).

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

    (82) fra + -wa + 1 sg Pa alo = fra-waa-ru 'I cooked
        part of it (for someone)'

3.24.4 Aspect[2]

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

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

    (83) ɍra + -niaa + 1 sg Pa alo = ɍra-niaa-ru 'I burned it downward' (as a hill)

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

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

3.24.5 Aspect[3]

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) ɍra + 1 sg Pa + -de = ɍra-wa-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) ɍra + 3 sg Pa + -na = ɍra-a-na 'He was seen to cook it'

(3) -<u>ya</u> '(reported unseen action)' occurs parallel to the form above:

(87) <u>ĩra</u> + 3 sg Pa + -<u>ya</u> = <u>ĩra-a-ya</u> 'He is said to have cooked it'

(4) -<u>lo</u> '(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) <u>ĩra</u> + Pur + -<u>lo</u> = <u>ĩru-la-lo</u> '[I] want to cook it'

(89) <u>ĩra</u> + 3 dp + -<u>lo</u> = <u>ĩri-na-lo</u> 'He wants to cook it and...'

(5) -<u>loa</u> '(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) <u>ĩra</u> + 3 dp + -<u>loa</u> = <u>ĩri-na-loa</u> 'After he cooks it, then...'

(6) -<u>paa</u> '(exlusive)' indicates that the action is exclusive in nature (Cf. §6.14.5):

(91) <u>ĩra</u> + 1 pl dp + -<u>paa</u> = <u>ĩra-mina-paa</u> '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 <u>Noun Syntagmemes</u>

Noun stems consist of bases which are either <u>Simple</u> or
<u>Compound</u>. 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-<u>ná</u> N, where
-<u>ná</u> in a full phrase type marks the item-as-possessor.
Examples such as:

    (92)   <u>répena-úni</u>   (tree bone = 'sticks')

    (93)   <u>yágáá-írí</u>   (chin hair = 'whiskers')

    (94)   <u>póré-rúmu</u>   (mountain knee = 'ridge')

    (95)   <u>pora-úni</u>   (road bone = 'trail'),

appear to be derived from <u>répena-ná</u> <u>úni</u>, <u>yágáá-ná</u> <u>írí</u>, 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)   <u>raí-kutu</u>   (axe,bamboo knife = 'bush knife')

    (97)   <u>aapu-ásála</u>   (tanket <u>asala</u> = 'asala [cordyline] leaves')

    (98)   <u>kábe-lápo</u>   (pit-pit <u>lapo</u> = 'hardened lapo type of cane')

(99) yági-putí   (kunai grass, aggregate = 'grass-land')

(100) írí-kati   (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 np_{num} which contains lápo 'both' as the M_{qan} exponent. For example, compounds such as:

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

(102) nogó-naakí   (girl, boy = 'children')

(103) íní-ágaa   (eyes, mouth = 'face')

(104) kí-kómaa   (hand, upper arm = 'whole arm')

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

(106) mená-irikai   (pig, dog = 'animals')

appear to be derived from oná áá lápo, nogó naakí 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 kídipaa must be glossed simply 'nails', but the compounds based upon the form are either aa-kídipaa (foot nails = 'toenails') cr kí-kídipaa (hand nails = 'fingernails').

Other compounds which appear similar in form may be
derived from quite different sources:

(107) oná-ada   (woman house = 'woman's house')

(108) tápa-ada   (platform house = 'men's house')

(109) kábe-ada   (pit-pit house = 'menstrual hit')

(110) kúku-ada   (cook [Pidgin Eng.] house = 'kitchen')

(111) répena-ágaa   (fire mouth = 'headlights')

(112) répena-réke   (wood stairs = 'ladder')

(113) répena-káápu   (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': <u>aa-áá</u> (ques-man = 'what man?'); <u>aa-rabu</u> (ques-time = 'what time?'); <u>aa-parọ</u> (ques-loc = 'where?'); <u>aa-maapú-nu</u> (ques-garden-coll. = 'what gardens?').

-<u>si</u> 'diminuative quality': <u>yómagae-si</u> (old man-dim. = 'a slightly old man'); <u>láápo-si</u> 'two little ones'; <u>adaa-si</u> 'a slightly big one'.

-<u>nu</u> 'collective': <u>yómagae-nu</u> 'all of the old men'; <u>ékéráá-nu</u> (tomorrow-all = 'in the future'); <u>nimí-nu</u> 'all of them'.

-<u>lu</u> 'durative quality': <u>aaráá-lu</u> (father-dur. = 'a family'); <u>pora-lu</u> (road-dur. = 'a long ways')

Combinations of word-level clitics which are permissible are:

(114) <u>mená-si-nu</u>   'all of the little pigs'

(115) <u>adaa-lu-nu</u>   'all of the long ones'

Because -<u>nu</u> specifies an aggregate, it cannot co-occur with an aj$_{nm}$ such as: *<u>mená-nu</u> <u>láápo</u> '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 Adjectivals

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 np_{des}, 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. yalá ⟶ yané 'the yelling (one)'

(b) Xa ⟶ Xe , e.g. áwá ⟶ áwé 'the digging (one)'

(c) XE ⟶ Xni, e.g. ria ⟶ rini 'the carrying (one)'

(d) Xaa ⟶ Xaae, e.g. nímínaa ⟶ nímínaae '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 áá-nu, rather than rini-nu áá 'all of the men who carry'

(117) yané áá-si, rather than yané-si áá 'the smallest man who yells out'

If the adjective is a cardinal number such as <u>pádáne</u>
'one', <u>láápo</u> 'two', <u>repo</u> 'three' and <u>máálá</u> 'four', all addi-
tional 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 -<u>pú</u> 'quantifier' is added. It may be
added to stems of certain other word classes as well:

(118) <u>láápo-pú</u>   'two of them'

(119) <u>ekáta-pú</u>   (little finger-quan. = 'the first of
                   them')

(120) <u>adaa-pú</u>   (big-quan. = 'plenty of them')

(121) <u>ake-pú</u>   (what-quan. = 'how many of them?')

3.26.2 <u>Adverbials</u>

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

3.26.3 <u>Deictics</u>

Personal and interrogative pronouns combine with all
word-level clitics except -<u>lu</u>:

(122)	<u>ne-si</u>	'little you'
(123)	<u>níáá-nu</u>	'all of us'
(124)	<u>áápí-nu</u>	'who all?'
(125)	<u>ake-si</u>	'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 <u>ake</u> adds the vowel /a/ before a clitic and in one instance the final vowel of <u>ake</u> changes in a manner apparently following vstMP-R5b.

Clitics	Animate <u>áápí</u> 'who'	Inanimate <u>ake</u> 'what'
-<u>nu</u> 'coll'	<u>áápí-nu</u> 'who all'	<u>ake-nu</u> 'what all'
-<u>ná</u> 'poss'	<u>áápí-ná</u> 'whose'	--
-<u>mé</u> 'agn'	<u>áápí-mí</u> 'who'	<u>ake-mé</u> 'what'
-<u>para</u> 'ben'	<u>áápí-para</u> 'to whom'	<u>ake-para</u> 'about what'
-<u>ne</u> 'adjz'	--	<u>akea-ne</u> 'due to what'
-<u>daa</u> 'obj'	<u>áápí-daa</u> 'due to whom'	--
-<u>lo</u> 'desr'	--	<u>ako-lo</u> 'for what desire (or purpose)'

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-si   'those little ones'

(127) só-nu   'all those up there'

(128) ápo-si-nu   'all those little ones somewhere over there'

Examples of demonstrative compounds are:

(129) mó-go   'over there (seen)'

(130) só-go   'up there (seen)'

(131) no-go   'down there (seen)'

(129a) mó-po   'over there (unseen)'

(130a) só-po   'up there (unseen)'

(131a) no-po   'down there (unseen)'

but not forms such as *mo-so, *mo-no, *go-po. In demonstrative compounds comprising ápo, 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 toxonomic 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 P. Healey (1965a:6) for the latter.

3. In E. Kewa names given to females are optionally suffixed by -nyu or -me: Rumí-nyu '(the woman) Rumínyu', Waruá-me '(the woman) Waruame'. In addition, any name may be suffixed to show the parentage: Rumínyu-ráá 'the father of Rumínyu', Waruáme-gi 'the mother of Waruáme', where the suffixes -ráá and -gi are contractions of the kinship terms of reference aaráá 'father' and ági '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 nogó 'girl' e.g. Kádípí-nogó, Amala-nogó, Ipare-nogó.

4. It is interesting to note that P. 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 Bene-factive. KCM introduces the terms altrocentric and ego-centric but applies them only to tense. In this thesis altrocentric and egocentric 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, P. Healey (1965c: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 McKaughan 1964:19; for Gadsup, C. Frantz and McKaughan 1964:86; for Usarufa, D. Bee 1965:46.) In Benabena, a language of the East Central Family, benefac-tive 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 fea-tures for Highland languages (1964b, et seq).

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

	1	2	3
Sg	-o	-e	-a
Dl	-pa	-pe	-pe
Pl	-ma	-me	-me

Morphophonemic rules provide surface representations:

$$\begin{bmatrix} -o \\ -e \\ -a \end{bmatrix} + Pr \rightarrow \begin{bmatrix} -to \\ -te \\ -ta \end{bmatrix} ; + Pa \rightarrow \begin{bmatrix} -ru \\ -ri \\ -ria \end{bmatrix}_9$$

and so on, where vowel harmony rules convert $o \rightarrow u$ / -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 spec-ified 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 ómé-nu-mɪ̀ (to die nom-coll-AGN = 'those who are dying') are common, but the full phrase can always be supplied:

ómé onáá-nu-mɪ̀ 'the people who are dying'.
I consider the use of the collective clitic -nu in ómé-nu-(mɪ̀) as a contraction of the full phrase.

APPENDIX A: VERB PARADIGMS

<u>pú</u> 'to go'

		<u>ípu</u> 'to come'
<u>púlu</u>	'I am ...'	
<u>púi</u>	'you are...'	<u>ípulu</u>
<u>púla</u>	'he is...'	<u>ípui</u>
<u>púlupa</u>	'we two are...'	<u>ípula</u>
<u>púlupi</u>	'you two are...'	<u>ípulupa</u>
<u>púluma</u>	'we all are...'	<u>ípulupi</u>
<u>púlumi</u>	'you all/they are...'	<u>ípuluma</u>
		<u>ípulumi</u>
<u>púawa</u>	'I ... recently'	
<u>púae</u>	'you ... recently'	<u>épawa</u>
<u>púaa</u>	'he ... recently'	<u>épae</u>
<u>púapa</u>	'we two ... recently'	<u>épaa</u>
<u>púape</u>	'you two ... recently'	<u>épapa</u>
<u>púama</u>	'we all ... recently'	<u>épape</u>
<u>púame</u>	'you all/they ... recently'	<u>épama</u>
		<u>épame</u>
<u>pálua</u>	'I will...'	
<u>páli</u>	'you will...'	<u>épalua</u>
<u>pália</u>	'he will...'	<u>épali</u>
<u>pálipa</u>	'we two will...'	<u>épalia</u>
<u>pálipi</u>	'you two will...'	<u>épalipa</u>
<u>pálima</u>	'we all will...'	<u>épalipi</u>
<u>pálimi</u>	'you all/they will...'	<u>épalima</u>
		<u>épalimi</u>
<u>písu</u>	'I ... sometime ago'	
<u>písi</u>	'you ... sometime ago'	<u>ípisu</u>
<u>písa</u>	'he ... sometime ago'	<u>ípisi</u>
<u>písipa</u>	'we two ... sometime ago'	<u>ípisa</u>
<u>písipi</u>	'you two ... sometime ago'	<u>ípisipa</u>
<u>písima</u>	'we all ... sometime ago'	<u>ípisipi</u>
<u>písimi</u>	'you all/they ... sometime ago'	<u>ípisima</u>
		<u>ípisimi</u>
<u>pé</u>	'I have...'	
<u>pé</u>	'you have...'	<u>épe</u>
<u>péa</u>	'he has...'	<u>épe</u>
<u>pépa</u>	'we two have...'	<u>épea</u>
<u>pépe</u>	'you two have...'	<u>épepa</u>
<u>péma</u>	'we all have...'	<u>épepe</u>
<u>péme</u>	'you all/they have...'	<u>épema</u>
		<u>épeme</u>

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]

4.11 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: S_{AGN}, S_{ATR}, S_{IN}, S_{ATN}, and so on, where capital letters indicate the functional status. Examples of each of these now follows:

S_{AGN}: [áá-mé] répena póá-a ([man-AGN], tree, cut-he did
= 'The man cut the tree')

S_{ATR}: [áá] ada púa-a ([man ATR], house, go-he did =
'The man went home')

S_{TOP}: [áá-re] yaina ómá-a ([man-TOP] sick, die-he did =
'The man was sick')

S_{GOL}: [ada] rá-a ([house GOL], burn-it did = 'The house
burned')

S_{IN}: [raí-mí] tá-a ([axe-IN], hit-he did = 'The axe
hit it')

S_{ATN}: [ná-pe] épé ta ([eat-for ATN], good,it says =
'Eating is good')

S_{LOC}: [Putí] épé 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.[4] This condition is met
in such examples as the following where the tagmeme S_{AGN} in-
cludes two conjoined Heads:

(1) áá-para naakí láápo-mé ní gé-pe 'The man and the
boy gave it to me'

áá 'man' and naakí 'boy' are conjoined by -para within a
phrase which is marked by láápo-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) <u>áá-para raí láápo-mé ní tá-pe</u> 'The man and the axe hit me',

there is but one Subject, corresponding to H_{AGN} on the one hand, and H_{IN} on the other. This can be demonstrated in the following paired sentences where S:pro$_{inter}$:

(2a) <u>áápí-mí ní tá-a</u> 'Who hit me?'

(2b) <u>ake-mé ní tá-a</u> 'What hit me?'

The correct answers <u>áá-mé</u> 'the man' and <u>raí-mí</u> 'the axe' indicate the functions S_{AGN} and S_{IN} 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 tagmeme position according to regular rules, the function of the conjoined Heads is obviously different:

(*3) Putí-para ná-pe láápo épé ta   'Puti and some-
        thing 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
tagmeme are:

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

(5) áá-para naakí láápo-mé ní gía-pe (man-AND, boy,
      two-AGN, I, give-they did = 'The man and boy gave
      (it) to me')

(6) né-mé mená répena-para raí 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 áá láápo répena-mé rá-a (house-AND, man,
      two, fire-IN, burn-it did = 'The house and man
      were burned by the fire')[6]

(8) ná-pe íra-pe láápo épé ta (eat-for, cook-for, two,
      good, it says = '(Things for) eating and cooking
      are good')

(9) Putí-para Usa láápo-re[7] épé su (Puti-AND, Usa, two-
      TOP, good, place = 'Puti and Usa are good places')

Each of the above sentences illustrates conjoining of S
tagmemes with various semantic co-functions. The functions
are:

S$_{ATR}$: <u>áá-para</u> <u>naakí</u> <u>láápo</u>   'the man and boy' (4);

S$_{AGN}$: <u>áá-para</u> <u>naakí</u> <u>láápo-mé</u>   'the man and boy' (5);

: <u>né-mé</u> 'I' (6);

S$_{GOL}$: <u>ada-para</u> <u>áá</u> <u>láápo</u>   'the house and man' (7);

S$_{ATN}$: <u>ná-pe</u> <u>íra-pe</u> <u>láápo</u>   'eating and cooking' (8);

S$_{LOC}$: <u>Putí-para</u> <u>Usa</u> <u>láápo-re</u>   'Puti and Usa' (9);

S$_{IN}$: <u>répena-para</u> <u>raí</u> <u>láápo-mé</u>   'the stick and axe' (6);

: <u>répena-mé</u> 'fire' (7);

Other functions and their exponents are:

OREC: <u>ní</u> 'me' (5);

OGOL: <u>mená</u> 'pig' (6);

P$_{ATN}$: <u>épa-pe</u> 'they two came' (4);

P$_{GD}$: <u>gía-pe</u> 'they two gave it (to me)' (5);

: <u>tá-wa</u> 'I hit (it)' (6);

P$_{STA}$: <u>ra-a</u> 'it burned' (7);

: <u>ta</u> 'it says' (8);

C$_{QAL}$: <u>épé</u> 'good' (8);

CO$_{MDES}$: <u>épé</u> <u>su</u> '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: <u>áá</u> <u>naakí</u> <u>épa-pe</u> 'the man and boy came'; <u>Putí</u> <u>Usa</u> <u>épé</u> <u>ta</u> 'Puti and Usa are good (places)'.

(b) adding the conjoining marker -para to either Head or to láápo 'two': áá-para naakí-para épa-pe or áá-pará naakí láápo-para épa-pe.

(c) if -para is used twice, then -mé (AGN) can be added twice: áá-para-mé naakí-para-mé tá-pe 'The man and the boy hit it'; the same holds for an SIN: répena-para raí-para-mé tá-wa.

(d) the use of páge 'also', rather than -para: áá páge naakí páge épa-pe 'A man and also a boy came'. In this case two S_{ACT} tagmemes occur on the clause-level and are conjoined by páge 'also', rather than two Heads on the phrase-level. The form páge 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:

O_{GOL} : áá-mé [mená] tá-a (man-AGN, [pig], hit-he did = 'The man hit the pig')

O_{REC} : né-mé [áá] kála-wa (I-AGN, [man], gave him-I did = 'I gave it to the man')

O_{ATN} : né-mé [ná-pe] kála-wa (I-AGN, [eat-for], gave him-I did = 'I gave him something for eating')

OLOC : [ada-para] pá-lua ([house-LOC], go-I will = 'I
will go home')

OBEN : [ní-ná] méáá-ria ([I-POSS], get-he did (alo) =
'He got it for me')

ODIR : [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 OREC or OBEN which are governed by the expo-
nent 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 sápí-para mená láápo kála-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 sápí áá-para mená láápo kála-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 áá-para naakí-para mená-para lá-lo (I-AGN,
man-and, boy-and, pig-REC, talk-I am = 'I am
talking to the man, boy and pig')

(13) né-mé maapú-para móni kála-lo (I-AGN, garden-LOC,
money, give-I am = 'I am giving (him) money in
the garden')

(13a) né-mé maapú-para ada-para láápo móni kála-wa

(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:

S_{AGN} : né-mé 'I-AGN' (10-13);

P_{GD} : kála-lo 'I am giving (him)' (10, 11, 13);

O_{GOL} : sápí-para mená láápo 'sweet potato and pig' (10);

O_{REC} : áá-para naakí-para mená-para 'to the man, boy

and pig' (12);

O_{GOL} : sápí 'sweet potato' (11); móni 'money' (13);

O_{REC} : áá-para mená láápo 'to the man and pig' (11);

O_{LOC} : maapú-para 'in the garden' (13).

: maapú-para ada-para láápo '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 OBEN are indicated, the
benefactive set of terminal suffixes is used:

(13b) né-mé maapú-para móni kálaa-to 'I am giving

(him) money for the garden',

where <u>maapú-para</u> is now O_{BEN} rather than O_{LOC}. This is
further confirmed by the following paired questions:

    (14) <u>aa-para</u> <u>móni</u> <u>kála-e</u> (ques-LOC, money, give·(him)-
        you did (alo) = 'Where did you give (him) money?')

    (14') <u>maapú</u> -<u>para</u> 'in the garden'

    (15) <u>ake-para</u> <u>móni</u> <u>kálaa-ri</u> (what-BEN, money, give
        (him)-you did (alo) = 'What did you give (him)
        money for?')

    (15') <u>maapú</u> or <u>maapú-ná</u> 'garden' or (garden-POSS = 'for
        the garden')

The form <u>aa-para</u> is the category word specifying O_{LOC}, while
<u>ake-para</u> specifies O_{BEN}.

4.13 <u>Complement Tagmemes</u>

Complement tagmemes function semantically as <u>Instrument</u>,
<u>Location</u>, <u>Quality</u>, <u>Size</u>, <u>Colour</u>, and <u>Negative</u>.

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 ex-
pression of a verb 'to be'. The function of the P is there-
fore 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:

C_{IN} : <u>ní</u> [<u>paalá-mé</u>] <u>ómá-lo</u> (I, [fright-AGN], die-I am =
    'I am afraid')

C_{LOC} : <u>ada</u> [<u>ípa-para</u>] <u>aa-eya</u> (house, [water-LOC], stand
-it does = 'The house is in the water')

C_{QAL} : <u>ní</u> [<u>épé</u>] <u>pí</u> (I, [good], sit-I = 'I am good')

C_{SZ} : <u>naakí</u> [<u>adaa</u>] <u>ta</u> (boy, [big], say-he does = 'The
boy is big')

C_{COL} : <u>nipú-ná</u> <u>tó</u> [<u>abu</u>] <u>pía</u> (he-POSS, body, [yellow],
sit-it does = 'His body is yellow' [= he has
hepatitis])

C_{NEG} : <u>sápí</u> [<u>dia</u>] <u>ta</u> (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 C_{AGN}:

(16) <u>ní</u> <u>yaina-para</u> <u>óró-para-mé</u> <u>ómá-lo</u> (I, sick-AND,
cough-AND-AGN, die-I am = 'I am both sick and
have a cold')

$cl_{cmp} \longrightarrow S_{ACT} + C_{AGN} + P_{STA}$, where C_{AGN} = np
with the functional pattern of [H -<u>para</u> + H -<u>para</u>]-<u>mé</u>. The
C is not considered a Subject-as-Instrument tagmeme because
<u>ní</u> 'I' cannot become the Agent, i.e. it belongs to a different
clause type. The difference between transitive and complemen-
tive clauses is outlined in § 4.2.

To indicate that one's sickness is a cold, <u>yaina</u> 'sick'
must become the Topic:

(17) <u>ní-ná</u> <u>yaina-re</u> <u>óró-mé</u> <u>ómá-lo</u> (I-POS, sick-TOP,
cough-AGN, die-I am = 'My sickness is due to a cold')

In other instances the functions of C_{QAL} are repeated in the conjoined Heads:

> (18) ní <u>paalá-para</u> <u>yaina-para</u> <u>ómá-lo</u> (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 <u>ómá</u> '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) ní <u>paalá</u> <u>ómó-a</u> <u>yaina</u> <u>ómá-lo</u> (I, fright, die-AND,
>   sick, die-I am = 'I am afraid and I am sick')

4.14 Predicate Tagmemes

As indicated earlier (§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 O_{LOC} occurs the P is most often a P_{MOT}:

> (20) ní <u>maapú-para</u> <u>púa-wa</u> (I, garden-LOC, go-I did =
>   'I went to the garden'), where the functional

pattern is: $S_{ACT} + O_{LOC} + P_{MOT}$.

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 O_{LOC}. In such cases the P is then a P_{STA} rather than a P_{MOT}:

(21) ni̱ maapú-para yaina ómó-wa   (I, garden-LOC, .sick,

   die-I did = 'I was sick in the garden')

$S_{GOL} + O_{LOC} + C_{QAL} + P_{STA}$

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:

P_{MOT} : ni̱ [pi̱ra-wa] (I, [sit-I did] = 'I sat down')

P_{GD} : ni [kála-wa] (I, [give them-I did] = 'I gave it to (them)')

P_{STA} : ni̱ go [pi̱] (I, here, [sit-I am] = 'I am here')

P_{BEN} : ni̱ [kálaa-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:

A_{TM} : [ékéráá] ní pálua ([tomorrow], I, go-I will =
'Tomorrow I will go')

A_{MAN}: [pawá] pá-lua ([slow], go-I will = 'I will go
slowly')

A_{DEG}: [ora] pá-lua ([really], go-I will = 'I will
really go')

A_{IRE}: nipú-mí [pa] tea (he-AGN, [just], talk-he will =
'He will just talk')

One characteristic of an Adjunct tagmeme is its free permutation in the clause and the fact that any A_{MAN} may be marked by the clitic -rupa. For example, sentences such as the following, where a nt expounds an A_{MAN}, are common:
ába-rupa pá-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 frequently[8] and often, it appears, interchangeably with the function of Adjunct. They may also be conjoined:

(22) nipú ora waru tá-a (he, truly, really, hit-he
did = 'He really did hit it')

However, only _ora_ is used as a tag question:

(23) <u>ogé</u> <u>naakí</u> <u>ráá-para</u> <u>pá-tea</u> <u>ora</u> (little, boy, bush-
LOC, sleep-he does, true = 'The little boy sleeps
in the bush, doesn't he?')

4.2 Clause Syntagmemes

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, _píra_ 'to
sit' as an intransitive verb expounds a P_{MOT} 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 OBEN 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 <u>ní</u> <u>épé</u> <u>pí</u> 'I am good', the verb _pí_ which expounds the
P_{STA} is also apparently based on _píra_ 'to sit' as a form of
the verb 'to be'. So it can be seen that at least one verb
expounding the P_{STA} 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 -mé with the Subject tagmeme.

Some examples of intransitive clauses are:

(24) pĭra-wa (sit-I did = 'I sat down')

$cl_{int} \longrightarrow P_{MOT}$, where P_{MOT} : v_{int}

(25) nĭ pĭra-wa (I, sit-I did = 'I sat down')

$cl_{int} \longrightarrow S_{ACT} + P_{MOT}$, where S_{ACT} : pro_{pers}

(26) nĭ ada pĭra-wa (I, house, sit-I did = 'I sat in the house')

$cl_{int} \longrightarrow S_{ACT} + O_{LOC} + P_{MOT}$, where O_{LOC} : ng.

The O_{LOC} may also be marked with -para:

(26a) nĭ ada-para pĭra-wa 'I sat in the house'

The exponent of S_{ACT} always occurs in cross-reference to the suffix of the verb, i.e. nĭ 'I' and -wa '(1 sg Pa)', toth include the categories of 1st person singular. Cross-reference is a general feature of the exponents of any S_{ACT} 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 -mé.

(3) the optional presence of an Object-as-Goal tagmeme. These distinguishing characteristics may be noted in the following examples:

(27) tá-wa (hit-I did = 'I hit it')

$cl_{tr} \longrightarrow P_{GD}$, where $P_{GD} : v_{tr}$

(27a) né-mé tá-wa (I-AGN, hit-I did = 'I hit it')

$cl_{tr} \longrightarrow S_{AGN} + P_{GD}$, where $S_{AGN} : pro_{pers} + $ -mé

(28) né-mé irikai tá-wa (I-AGN, dog, hit-I did = 'I hit the dog')

$cl_{tr} \longrightarrow S_{AGN} + O_{GOL} + P_{GD}$, where $O_{GOL} : $ ng which is unmarked.

(28a) irikai tá-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 between it and the transitive are: (1) different verb exponents; (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 or 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 sápí kála-wa 'I gave the sweet potato (to him)'.

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

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

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

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

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

$$cl_{tr} \longrightarrow S_{AGN} + O_{GOL} + O_{REC} + P_{GD}$$

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 exponence rules as follows:

P_{GD} : v_{tr} / O_{GOL} __

: v_{ditr} / O_{REC}(-para) + (O_{GOL}) __

In examples (29-32) other exponents are:

S_{AGN} : pro_{per} + -mé , i.e. a personal pronoun marked for the function Subject-as-Agent by -mé.

O_{GOL} : ng

O_{REC} : ng (-para)

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

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

    (33) áá ada píraa-de áá-mé óre kála-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) né-mé áá ada píraa-de áá-para kála-wa 'I gave (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 exponence rules as follows:

$$P_{GD} : v_{tr} / O_{GOL} \underline{\quad}$$

$$: v_{ditr} / O_{REC}(\text{-}\underline{para}) + (O_{GOL}) \underline{\quad}$$

In examples (29-32) other exponents are:

$S_{AGN} : pro_{per} + \text{-}\underline{mé}$, i.e. a personal pronoun marked for the function Subject-as-Agent by -$\underline{mé}$.

$O_{GOL} : ng$

$O_{REC} : ng$ (-$\underline{para}$)

The functions of clitics such as -$\underline{mé}$ and -$\underline{para}$ suggest that these are surface case markers for certain tagmemes.

The exponents of the tagmemes marked by -$\underline{mé}$ and -$\underline{para}$ are very general: any syntagmeme marked by -$\underline{mé}$ which is also in cross-reference with the exponent of P can be an exponent of S_{AGN}. Note (33) where a cl$_{int}$ embedded in the S_{AGN} is marked by -$\underline{mé}$. The same clause may be embedded in the O_{LOC} --note (34):

(33) $\underline{áá}$ $\underline{ada}$ $\underline{pĭraa\text{-}de}$ $\underline{áá\text{-}mé}$ $\underline{óre}$ $\underline{kála\text{-}a}$ (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) $\underline{né\text{-}mé}$ $\underline{áá}$ $\underline{ada}$ $\underline{pĭraa\text{-}de}$ $\underline{áá\text{-}para}$ $\underline{kála\text{-}wa}$ '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} tagmeme being obligatorily marked by -mé and the selection of Set II altrocentric suffixes (Cf. §3.22.1):[9]

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

(36) nipú-mí onáá ma-píraa-ria (he-AGN, people, cas-
   sit-he did (alo) = 'He made the people sit down')

Transitives which are derived from complementive 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 tagmeme:

(37) né-mé ma-yaina sáá-to (I-ACT, cas-sick, put-I
   am (alo) = 'I am causing the sickness, i.e.
   spreading a disease')

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

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

The formula for a derived transitive is:

$$cl_{d-tr} \longrightarrow S_{ACT} \text{-mé} + O_{GOL} + P$$, where the semantic function of P is determined by the verb exponents such that:

$$P \longrightarrow \begin{cases} P_{MOT} / \underline{\quad} : v_{int} \\ P_{STA} / \underline{\quad} : v_{exis} \end{cases}$$, and the clitic <u>ma</u>-

precedes the verb if the function of P is MOT, but may precede the exponent of the Complement if the function of P is STA. This must be represented by an optional transformation rule:

$$C + \underline{ma}\text{-} + P_{STA} \implies \underline{ma}\text{-} + C + P_{STA}$$, where the exponents of C and P_{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)   <u>sápí</u> <u>o</u> <u>ta</u> (sweet potato, bad, affirm-it is = 'The sweet potato is bad')

$$cl_{cmp} \longrightarrow S_{TOP} + C_{QAL} + P_{STA}$$

(41)   <u>go</u> <u>oyaé</u> <u>keda</u> <u>pía</u> (this, something, heavy, sit-it has = 'This thing is heavy')

$$cl_{cmp} \longrightarrow S_{TOP} + C_{QAL} + P_{STA}$$

(42) <u>naakɨ</u> <u>adaa</u> <u>ya-a</u> (boy, big, affirm-he was = 'The boy grew large')

$$cl_{cmp} \longrightarrow S_{TOP} + C_{SZ} + P_{STA}$$

(43) <u>nɨ</u> <u>kóne</u> <u>sá-lo</u> (I, behaviour, put-I am = 'I am thinking')

$$cl_{cmp} \longrightarrow S_{TOP} + C_{IN} + P_{STA}$$

In each case the S_{TOP} may be marked by the clitic -<u>re</u>. 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: <u>pɨra</u> 'to sit', <u>sá</u> 'to put', <u>aa</u> 'to stand' and <u>ya</u> 'to affirm'. When these verbs expound the P_{STA} 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) <u>lá</u> 'to speak': <u>kunaná lá</u> 'to court'; <u>ápe lá</u> 'to argue'; <u>kɨri lá</u> 'to laugh'; <u>rɨdu lá</u> 'to stretch'.

(2) <u>méá</u> 'to bring': <u>káá méá</u> 'to smell'; <u>ágaa méá</u> 'to ask'.

(3) <u>ná</u> 'to eat': <u>ádu ná</u> 'to suckle'; <u>ɔpé ná</u> 'to commit suicide; <u>páge ná</u> 'to steal'.

(4) <u>ra</u> 'to emit': <u>i ra</u> 'to defecate'; <u>sópe ra</u> 'to spit';
<u>nááre ra</u> 'to wilt'; <u>ípa ra</u> 'to flood'.

(5) <u>tá</u> 'to hit': <u>girá tá</u> 'to sneeze'; <u>mátaa tá</u> 'to
dance'; <u>ŝári tá</u> 'to thunder'.

(6) <u>pa</u> 'to make': <u>nága pa</u> 'to file'; <u>kiru pa</u> 'to itch';
<u>pépéna pa</u> 'to decorate'; <u>puri pa</u> 'to be strong'.

The verb <u>ómá</u> 'to die' is used to expound the P_{STA} 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) <u>nipú-mí róbáá ná-la</u> (he-AGN, stomach, eat-he is
= 'He is eating stomach' (as of a pig))

(45) <u>nipú róbáá ná-la</u> 'He has a stomachache'

In (44) <u>róbáá</u> 'stomach' is the exponent of an O_{GOL} and
<u>ná</u> 'to eat' expounds a P_{GD}. In (45) <u>róbáá</u> expounds a C_{IN} and
<u>ná</u> expounds a P_{STA}. Thus neither of the following inter-
pretations occurs:

(*44a) <u>nipú róbáá-mé ná-la</u> 'He is eating with his
stomach'

(44') <u>nipú-mí róbáá ná-la</u> '*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) <u>nipú-mí</u> <u>ágaa-mé</u> <u>ná-la</u>   'He is eating with his teeth'

(47) <u>ní</u> <u>róbáá</u> <u>ná-la</u>   'I have a stomachache'

(48) <u>ní</u> <u>róbáá-mé</u> <u>ómá-la</u>   (ómá-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 complementive clause.

4.3 So-Called Equational Clauses

It is convenient to postulate equational clauses for at least two reasons. First of all, tagmemic studies frequently set-up Predicate tagmemes which have exponents that are not verbs. In such cases it is not difficult to find at least two structural differences which would separate equational clauses from other clauses.[10] Secondly, in tagmemics the function of Predicate is obligatory to the definition of a clause. In Kewa, however, so-called equational clauses are simply based upon underlying Complementive clauses, or are not clauses at all. Rather, their equivalents are sentences, in which case the function of Predicate is not relevant. In other words, there is no reason why sentence-level tagmemes have to be expounded by a lower-level syntagmeme which must include a Predicate. Note the following sentences, which are called thematic:

(49) waɛ́ kóne-re báli-ná kóne (bad, behaviour-TOP,

red man-POS , behaviour = 'The bad behaviour is

the European's')

(50) go áá-re irikai-rupa (that man-TOP, dog-MAN =

'That man acts like a dog')

(51) nɪ́ áá (I, man = 'I am a man')

The final S_TOP nɪ́ could also be nɪ́-ri (I-TOP), and in each

example the Topic can be permuted:

(49') báli-ná kóne-re waɛ́ kóne 'The European's be-

haviour is bad'

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

(51') áá-re nɪ́ 'Concerning men, I am one'

In each example the structure is considered:

$$S_{them} \longrightarrow TOP + COM$$

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) <u>adáalu</u> <u>oná</u>   (tall, woman = 'The woman is tall' or
      'It is a tall woman')

(53) <u>áá</u> <u>rúdu</u>   (man, short = 'It is a short man' or
      'He is a man who is short')

(54) <u>mená</u>   (pig = 'It is a pig')

Rather than postulate a structure:

$cl_{eq} \longrightarrow$ (S) + P , where P : n, aj, or even:

$s_{them} \longrightarrow$ (T) + C , the examples can be considered:

$cl_{cmp} \longrightarrow$ S + (P), where P is a P_{STA} such as <u>pía</u> 'to be' which is in these instances deleted. The structure of the S_{TOP} 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_{cmp} such as:

(53') <u>áá</u> <u>rúdu</u> <u>pí</u> <u>áá</u> <u>púa-a</u> (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 Modifiers 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) [áá-mé mená ká-ne] áá púa ([man-AGN, pig, give (him)-ADJZ], man, go-he did = 'The man who gives him pig, went')

$cl_{int} \longrightarrow S_{ACT} + P_{MOT}$, where $S_{ACT} : np_{des}$, and $np_{des} \longrightarrow M_{ATN} + H_{ACT}$. The $M_{ATN} : ecl_{tr}$, i.e. an embedded transitive clause. The ng expounding the H_{ACT} is the shared noun with the noun expounding the S_{AGN} of the embedded clause, but only the noun of the embedded S_{AGN} can be marked with -mé (AGN). The Adjectiviser -ne is optional; any permitted morphological structure may be represented in this position, e.g.:

(55a) [áá-mé mená kála-a] áá 'The man who gave the pig'

(55b) [áá-mé mená kálaa-e] áá 'The man who gave the pig on (his) behalf'

(55c) [áá-mé mená ká-tea] áá 'The man who will give the pig'

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

(55') [áá-mé mená ká-ne] púa-a 'The man who gives pig went'

Some examples of other clause types embedded in the S
of an intransitive clause are:

(56) [aa ada pir-i] aa pu-a ([man, house, sit-ADJZ],
man, go-he did = 'The man who sits at home went')

$cl_{int} \longrightarrow S_{ACT} + P_{MOT}$, where $S_{ACT}:np_{des}$, and
$np_{des} \longrightarrow M_{STA} + H_{ACT}$ and M : $_e cl_{int}$

(57) [áá áálú-írí yááko pí] áá pu-a ([man, hair, white,
to be-ADJZ], man, go-he did = 'The man who is
elderly went')

$cl_{int} \longrightarrow S_{ACT} + P_{MOT}$, where $S_{ACT} : np_{des}$ and
$np_{des} \longrightarrow M_{STA} + H_{ACT}$ and M_{STA} : $_e cl_{cmp}$.

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

$cl_{cmp} \longrightarrow S_{TOP}$: áálú-írí $+ C_{COL}$: yááko $+ P_{STA}$:
pía, where pía $\longrightarrow$ pí / M : __ + (H).

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

(58) [áá-mé mená ká-ne] áá-mé ní gí-a 'The man who
gives (him) pig gave it to me'

$cl_{tr} \longrightarrow S_{AGN} + O_{REC} + P_{GD}$, where
S_{AGN} : np_{des} , and
$np_{des} \longrightarrow M_{ATN} + H_{AGN}$.

Again, either of the shared nouns may be deleted with no
change in the meaning:

(58a) <u>áá-mé</u> <u>mená</u> <u>ká-ne</u> <u>ní</u> <u>gí-a</u> ⎫

(58b) <u>mená</u> <u>ká-ne</u> <u>áá-mé</u> <u>ní</u> <u>gí-a</u> ⎬ 'The man who gives him pig gave it to me'

Some further examples of clauses embedded in the Subject tagmeme are:

(59) [<u>mátaa</u> <u>épé-rupa</u> <u>tí</u>] <u>áá</u> <u>púa-a</u> ([dance, good-manner, hit-ADJZ], man, go-he did = 'The man who dances well went')

$cl_{intr} \longrightarrow S_{ACT} + P_{MOT}$;

$^ecl_{tr} \longrightarrow O_{GOL} + A_{MAN} + P_{GD}$

(60) [<u>ní</u> <u>súkulu</u> <u>maláá-e</u>] <u>áá</u> <u>ípu-la</u> ([I, school, teach-ADJZ (alo)] man, come-he is = 'The man who teaches me school is coming')

$cl_{intr} \longrightarrow S_{ACT} + P_{MOT}$;

$^ecl_{tr} \longrightarrow O_{BEN} + O_{GOL} + P_{GD}$

(61) [<u>mená</u> <u>adaapu</u> <u>púní</u>] <u>áá</u> <u>ómá-a</u> ([pig, many, shepherd-ADJZ], man, die-he did = 'The man who shepherds many pigs died')

$cl_{intr} \longrightarrow S_{ACT} + P_{MOT}$;

$^ecl_{tr} \longrightarrow O_{GOL} + P_{GD}$, where

$\qquad\qquad O_{GOL} : np_{num}$

(62) [<u>épé</u> <u>kóne</u> <u>í</u>] <u>áá-mé</u> <u>ní</u> <u>tá-a</u> ([good, behaviour, put-ADJZ], man-AGN, me, hit-he did = 'The man with the good thoughts hit me')

$cl_{tr} \longrightarrow S_{AGN} + O_{GOL} + P_{GD}$;

$^ecl_{cmp} \longrightarrow C_{ABS} + P_{STA}$, where $C_{QAL} : np_{des}$

(63) pé pádáne [rubí-ní] kála-wa (container, one,
      [overflow-ADJZ], give him-I did = 'I gave him a
      container which was overflowing')

  $cl_{tr} \longrightarrow O_{GOL} + P_{GD}$;

  $e^{cl}int \longrightarrow P_{MOT}$, and pé pádáne 'one container'
          is the exponent of the O_{GOL} of the main
          clause.

(64) [sápí ná-be] mená ná-lo ([sweet potato, eat-
      continue ADJZ], pig, eat-I am = 'I am eating the
      pig which continuously ate sweet potato')

  $cl_{tr} \longrightarrow O_{GOL} + P_{GD}$;

  $e^{cl}_{tr} \longrightarrow O_{GOL} + P_{GD}$, where P_{GD} : vst + asp_{cont}

(65) [áá ada píra-a-de] áá-mé ká-tea ([man, house,
      sit-he did-pun], man-AGN, give him-he will =
      'The man who was in the house will give it to
      him')

  $cl_{tr} \longrightarrow S_{AGN} + P_{GD}$;

  $e^{cl}int \longrightarrow S_{ATR} + O_{LOC} + P_{STA}$, where
          P_{STA} : vs + $tense_{pa}$ + asp_{cont}

(66) [aaná keda pí] lópa-a ([stone, heavy sit-ADJZ],
      fall-it did = 'The stone which is heavy fell
      down')

  $cl_{intr} \longrightarrow S_{TOP} + P_{ATN}$;

  $e^{cl}cmp \longrightarrow S_{TOP} + C_{QAL} + P_{STA}$

4.42 Clauses Embedded in Object Position

If the Object is specified as an O_{LOC} the clitic -para marks the embedded clause:

(67) nipú [nimɨ-mɨ́ maapú sá-me]-para pú-a (he, [they-AGN, garden, put-they did]-LOC, go-he did = 'He went to the place where they planted the garden')

$$cl_{int} \longrightarrow S_{ACT} + O_{LOC} + P_{MOT} \text{ , where}$$

O_{LOC} : AR (Axis Relator phrase) in which the A: $_ecl_{tr}$ + R : -para

(68) né-mé [sáá gúpá lá-pa]-para áá kála-wa (I-AGN, [we two, likewise, say-we did]-LOC, man, give him -I did = 'I gave (it) to the man at the specified place')

$$cl_{tr} \longrightarrow S_{AGN} + O_{LOC} + P_{REC} + P_{GD} \text{ , where}$$

$AR_{LOC} \longrightarrow$ A : $_ecl_{tr}$ + R : -para. The AR_{LOC} is layered within the Modification tagmeme which is in turn in an attributive relationship with the Head tagmeme, expounded by áá 'man'. Layering in phrases will be described in Chapter 5.

(69) nɨ́ [maapú mógo áá pɨ́a]-pare pú-lu (I, [garden, that, man, sits]-LOC, go-I am = 'I am going to the garden where the man is')

$$cl_{int} \longrightarrow S_{ACT} + P_{LOC} + P_{MOT} \text{ , where O : } AR_{LOC} \text{ and}$$

$AR_{LOC} \longrightarrow$ A : $_ecl_{int}$ + R : -pare.[11]

If the Object is an O_{GOL} the clitic -daa marks the embedded clause:

(70) [mená-mé náá maapú maráá-ria]-daa mená ḿéá-wa

([pig-AGN, my garden, destroy-it did]-GOL, pig,

get-I did = 'I got the pig which destroyed my

garden')

$cl_{tr} \longrightarrow O_{GOL} + P_{GD}$, where the AR phrase is

again, as in (61), attributive to the Head, expounded by

mená 'pig'. The structure of the AR is:

$AR_{GOL} \longrightarrow A : {}_e cl_{tr} + R : -daa$

(71) ní [oná mená puní-ta]-daa pédó pí (I, [woman,

pig, cares for-she does]-GOL, happy, I am = 'I

am happy about the woman who cares for the pigs')

$cl_{cmp} \longrightarrow S_{ACT} + O_{REC} + C_{QAL} + P_{STA}$, where

$O_{REC} : AR_{REC}$ and

$AR_{REC} \longrightarrow A : {}_e cl_{tr} + R : -daa$

The clitic -daa marks the O_{REC} as well as the O_{GOL} of

an embedded clause, as seen in the above examples, as well

as the following:

(72) né-mé [áá-nu-mí ní raba mí-simi]-daa mená kála-wa

(I-AGN, [man-coll-AGN, I help, get-they did]-REC,

pig, give them-I did = 'I gave pig to the men

who helped me')

(73) né-mé [mená-mé maapú maráá-ria]-daa áá-nu kála-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

$\left.\begin{matrix} O_{GOL} \\ O_{REC} \end{matrix}\right\}$: $e^{dl}tr$ -daa , i.e. an embedded transitive

clause marked as Object of the main clause by the clitic -daa.

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 áá adaa ta (that, man, big, he is = 'That is
a big man')

(75) go áá épé pía (that, man, good, sits-he is =
'That man is good')

it is possible to derive such clauses as the following:

(76) go épé pí áá adaa ta ' That man who is good
is big'

(76a) go adaa ne áá épé pía ' 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) [nipú-ná irikai nɪ́ ná-a] rábú nɪ́ ré sú-de ([he-
          pos, dog, me, eat-he did],TIME, I tears, say-I
          did-once = 'When his dog bit me, I cried')

(78) [nimɪ́ nogó-naakɪ́] rábú báli-nu ɪ́pi-simɪ ([they,
          girl-boy], TIME, red man-coll, come-they did =
          'When they were children, the Europeans came')

(79) [ne ɛ́pɛ́ pɪ́] rábú oyaɛ́ gɪ́a-lia ([you, good, sit-
          you have], TIME, something, give-he will = 'When
          you are good, he will give you something')

(80) [nɪ́ púa-wa] rábú ɛ́pɪ́-mɪ́ ne ádi-sa ([I, go-I did],
          TIME, who-AGN, you, saw-he did = 'When I went,
          who saw you?')

In each case A$_{TM}$: $_e$cl rabu 'when'. The embedded structures
are a transitive clause (77), a complementive clause (79),
a thematic sentence (78), and an intransitive clause (80).

Examples of clauses embedded in an A_{MAN} are:

(81) <u>oná nipú kíri</u> [<u>áá-mé ta-me-de</u>]-<u>rupa</u> <u>ta</u> (woman,

she, laugh [man-AGN, says-they have-pun]-MAN,

say-she does = 'That woman laughs like a man')

$$cl_{cmp} \longrightarrow S_{ACT} + C_{QAL} + A_{MAN} + P_{STA} \text{, where}$$

$$A_{MAN} : {}_{e}cl_{tr} + \text{-}\underline{rupa}$$

(82) [<u>amá lá-wa</u>]-<u>rupa</u> <u>toa</u> ([mother, say-I did]-MAN,

say-I will = 'I will tell it like I told mother')

$$cl_{tr} \longrightarrow A_{MAN} + P_{GD} \text{, where}$$

$$A_{MAN} : {}_{e}cl_{tr} + \text{-}\underline{rupa}$$

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:

$$cl_{int} \longrightarrow S_{ACT} + O_{LOC} + P_{MOT}$$

$$cl_{tr} \longrightarrow S_{AGN} + (O_{REC}) + O_{GOL} + P_{GD}$$

$$cl_{cmp} \longrightarrow S_{TOP} + C_{QAL} + P_{STA}$$

Other rules for functional points are:

(1) For any A_{TM}, the preferred order is pre-S; for any A_{MAN}, pre-P.

(2) If any S_{IN} occurs, it always occurs pre-P unless an A_{MAN} 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) pálua ní (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 permuting the S_{ACT} or S_{AGN} to pre-P position; or if a S_{IN} co-occurs, preceding it:

(84) né-mé naakí táwade (I-AGN, boy, I hit = 'I hit the boy')

$$cl_{tr} \longrightarrow S_{AGN} + O_{GOL} + P_{GD} \implies$$
$$O_{GOL} + S_{AGN} + P_{GD} \text{ 'The boy was hit by me'}$$
$$cl_{tr} \longrightarrow S_{AGN} + O_{GOL} + S_{IN} + P_{GD} \text{ (where } S_{IN} : \text{raímí}$$
'with an axe'
$$\implies O_{GOL} + S_{AGN} + S_{IN} + P_{GD} \text{ 'The boy was hit}$$
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 -mé. Instead the pre-P Subject is marked by -ná, the possessive clitic. This will be described in Chapter 5 of Possessive Phrases. An example is:

(85) <u>áámé</u> <u>oná</u> <u>nipú-ná</u> <u>tália</u>   (man-AGN, woman, he-POS,

he will hit = 'The man himself will hit the

woman' or 'The man will hit the woman himself')

The phrase <u>nipú-ná</u> <u>tália</u> represents a vp_{pos}, 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 tagmeme of the np which expounds the Subject:

(7') <u>ada-para</u> <u>píri</u> <u>áá</u> <u>láápo</u> <u>répena-me</u> <u>ra-a</u> , where the noun
phrase <u>ada-para</u> <u>píri</u> <u>áá</u> <u>láápo</u> (house-LOC, sit-ADJZ, man, two
= 'two men who were in the house') contains a clause embedded
in the Modification tagmeme. Other examples are given later.

7. The clitic -<u>re</u> is considered primarily a marker on the
sentence-level, so that <u>Putí</u> and <u>Usa</u> are the TOPIC-as-LOCA-
TION of a simple thematic sentence (§6.25). In other words,
the role of Topic, although a sentence-level function (due
to reasons discussed later in Chapter 6) often has its func-
tional role carry through to the clause-level.

8. In our E. Kewa text concordance <u>ora</u> occurs 171 times,
<u>waru</u> only 26 times; in W. Kewa <u>ora</u> is again much more fre-
quent: 100 vs. 28 times.

9. In Chapter 4 <u>ma</u>- was discussed only in relation to its
function on the word-level, i.e. how stative stems are de-
rived.

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
(<u>ibid</u>, p. 20). Bee (1965:150) contrasts transitive, intran-
sitive, and equational clauses in Usarufa.

11. -<u>pare</u> is an alternant of -<u>para</u>. In E. Kewa its equiva-
lent is -<u>lena</u>. There is no apparent difference in meaning
between the two clitics.

Chapter 5

PHRASES

5.0 Introduction

Kewa phrases are either centred, 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 Axis-Relator relationship.[1] Within these two main types there are two main exponential sets: attributive phrases with either a noun or noun phrase expounding the Head are <u>Nominal</u>; those with a verb or verb phrase expounding the Head are <u>Verbal</u>.

5.1 Noun Phrases

Noun phrases are of two broad types: <u>Descriptive</u> and <u>Possessive</u>. The former have (typically) adjectives as exponents of the Modification functions[2] 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 tagmeme.

5.12 Descriptive Noun Phrases (np_{des})

The generalised formula for a np_{des} consists of the following function points:

$$np_{des} \longrightarrow (M_{QAL}) + (M_{SZ}) + (M_{COL}) + H + (M_{QAN}),$$

where typical exponents are:

M_{QAL} : adj (épé 'good', waé 'bad', ...)

M_{SZ} : adj (ogé 'small', adaa 'big', ...)

M_{COL} : adj (kóbere 'dark', abu 'yellow' ...)

M_{QAN} : adj (láápo 'two', meda 'another' ...)

The Head of an np_{des} 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 np_{des} are:

(1)	ogé áá	'little man'
(2)	rúdu áá	'short man'
(3)	kóbere áá	'dark (=black) man'
(4)	áá láápo	'two men'
(5)	ogé kóbere áá láápo	'two little dark men'
(6)	rúdu kóbere áá láápo	'two short dark men'
(7)	épé rúdu kóbere áá láápo	'two good short dark men'

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

(1') ogé áá-si   'very small man'

Permutations of the sequence of pre-Head Modifier tagmemes are permissible. In such cases the first tagmeme receives the emphasis or focus:

(7a) <u>rúdu</u> <u>ogé</u> <u>kóbere</u> <u>áá</u> <u>láápo</u> 'two <u>short</u> little dark men'

(7b) <u>kóbere</u> <u>ogé</u> <u>rúdu</u> <u>áá</u> <u>láápo</u> 'two <u>dark</u> little short men'

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

M_{SZ} : <u>ogé</u> 'little' + M_{SZ} : <u>rúdu</u> 'short'.

Adjectives which expound the M of an np_{des} may also expound the C of a cl_{cmp} (Cf. §4.24), so that embedded adjectival clauses such as the following occur:

(7') <u>kóbere</u> <u>pí</u> <u>áá</u>   'a man who is dark' from:

(7") <u>áá</u> <u>kóbere</u> <u>pía</u>   'the man is dark', where

$cl_{cmp} \longrightarrow S_{TOP} + C_{COL} + P_{STA}$ allows

$np_{des} \longrightarrow$ M : $e^{cl}{}_{cmp}$ + H : n, with deletion of the shared noun <u>áá</u> 'man'.

There are certain characteristics of the M_{QAN} function which suggest that noun phrases containing a M_{QAN} should be treated as a sub-type of the np_{des}. Any np_{num} has two main restrictions: (1) deictics can occur as exponents; (2) names of body parts and certain other forms (when suffixed with -<u>pú</u>; Cf. §3.13; 3.26.1) may expound the M_{QAN}.

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

(8) <u>nipú láápo</u>   'the two of them'

(9) <u>go láápo</u>   'those two'

(10) <u>áápí láápo</u>   'what two?' (literally, 'who two?')

Any of the following are not acceptable (where the proposed structure is M : adj $\{$QAL, SZ, COL$\}$ + H : dei):

(*11) épé nipú   'good he'

(*12) rúdu nipú   'short he'

(*13) kóbere go   'dark that'

(*14) abu áápí   'yellow who?'

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

(15) áá su-pú (man, thumb-qan = 'five men')[3]

(16) áá kí láápo aa láápo pége-pú (man, hand, two, foot, two, doubled-qan = 'twenty men')

Examples such as (16) must include a conjoining rule[4] within the M point of an np$_{num}$ where the exponent of the Head (áá 'man') is modified by the string of forms expounding the M$_{QAN}$ (kí...pége-pú = '20'), which is marked by -pú. The marker -pú is a quantity specifier for any given np:

(17) onáá ake-pú (people, how-qan = 'How many people?')

(18) onáá adaa-pú (people, big-qan = 'plenty of people')

(19) répena kegaa-pú (fire, hot-qan = 'plenty of heat')

An np$_{des}$ may therefore be read specifically as an np$_{num}$ by the following rule:

np$_{des}$ $\longrightarrow$ np$_{num}$ / (M) ... + H + M$_{QAN}$(-pú)

Example (20) is a simple instance of POSR + H, where the exponents are respectively, a pronoun (which is a sub-class of deictics) marked by -ná and a general noun. In (21) two POSR function points occur. The K 'tagmeme' specifies that the marker -ná 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 np_{pos} which also include the characteristic adj exponents of an np_{des}. It is therefore necessary to simply specify that the exponent of any POSR may be an np_{des}. In such cases the np_{pos} is embedded within the Head tagmeme of an np_{des}.

Some of the apparent complexity of embedded np_{pos} 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) go áá-ná áme mípa-ná ada láápo   'the two houses
        belonging to that man's elder brother'

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

$np_{des} \longrightarrow M_{DES} + H + M_{QAN}$, where M_{DES} is a cover symbol specifying a function point with an embedded phrase. The M_{DES} : e^{np}_{pos} which also consists of a conjoined np_{pos} , i.e.:

$$e^{np}_{pos} \longrightarrow POSR\text{-}ná + POSR\text{-}ná + H.$$

However, the exponent of the H of the e^{np}_{pos} is the same as
the H of the np_{des}, i.e. <u>ada</u> 'house' expounds the H of the
e^{np}_{pos} ...<u>mípa-ná</u> <u>ada</u> 'elder's house' as well as the H of
the np_{des} <u>ada</u> <u>láápo</u> 'two houses', so the exponent of one H
is deleted. In addition the exponent of one H in the con-
joined np_{pos} must also be considered deleted, i.e. <u>áme</u>
'brother' underlies <u>áme</u> <u>mípa-ná</u> 'elder brother's' as well
as <u>áá-ná</u> <u>áme</u> 'the man's brother'.

In such cases the deletion of the exponent of one Head
is obligatory, whereas in conjoined clause-level tagmemes
(§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 -<u>para</u> to
the exponents of the conjoined tagmemes; (2) by simple juxta-
position, 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) yómagae meda-para ogé naakí repo (old man, another
      -conj, little, boy, three = 'an old man and three
      small boys')

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

(28) nipú-ná kóne épé-para-mé kógono-para-mé (3 sg-
      POSR,behaviour, good-AND-AGN, work-AND-AGN = 'by
      means of his good thoughts and work')

S_{AGN} : $_e np_{des}$

$_e np_{pos}$ $\longrightarrow$ POSR-ná + H : n + M_{QAL} + K , where

K specifies: H-para + H(-para) and the first Head (kóne)
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) áá oná naakí mená ráyo ípu-lumi   'the man, woman, boy and pig are coming'

(30) Kírapeaasi Abáli Uri repo ípulumi   '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 ráyo 'all' in (32) and repo '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 repo 'three' and ráyo 'all' expound the M_{QAN}, exactly as in:

(29') áá pádáne oná pádáne...   'one man, one woman...'

(30') Kírapeaasi páge Abáli páge Uri páge... 'Kirapeaasi also, Ambali also, Uri also...'

This is further confirmed by such instances as:

(29") áá meda oná meda...   'man another, woman another ...'

in which meda 'another of the same', páge 'also the same as' and pádáne 'one of the same' are all exponents of the M_{QAN} 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
(épé kóne 'good behaviour') to H + M / __-mé + P.

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

(31) ada adaa-pe-para épé ada-para pádéne pɨa-ne   'It is
a house which is at once big and good'

(32) abu pɨ-para kaane-para gú pɨa-ne láápo yaé   '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} : épé ada-para   'the good
house', an embedded nominal as modifier: adaa-pe-para 'for
(being) big' and abu pɨ-para 'which is yellow'.   In these
examples the conjoining is within a Modification tagmeme
represented by everything which follows ada 'house' (31) and
precedes yaé '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-mɨ kábá-pe yaé, báli-mɨ kábá-pe, épé-pe
yaé, kánaka-ná étaa, báli-ná étaa, ráyo ɨa   '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 string-
ing together of five phrases by simple juxtaposition. In
this instance the Head of the phrases vary from yaé 'some-
thing' (present in the first and third phrase, but deleted
in the second), to étaa 'food' in the fourth and fifth
phrases. The whole phrase is an example of a very complex
descriptive noun phrase. The numerical exponent ráyo '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 tagmemes were given.
Such embedded clauses expound the Modification tagmeme in
a np or the Axis of an Axis-Relator functional pattern, and
are either adjectival or full clauses. Thus there are em-
bedded clauses in the Modification tagmeme in the following:

    (34) [sogo né] áá ípu-la 'The man [who smokes] is
                               coming'

    (35) [sogo nísa] áá ípu-la 'The man [who used to
           smoke] is coming'

    (36) [sogo nólalo pí] áá ípu-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. nísa 'He ate

sometime ago' is a full verb form. In cases of derived
adjectivals (§3.23.1) however, there is no tense, person or
number designated, e.g. né 'one who eats' and pí 'one who
is' (i.e. 'one who sits') are no longer basic verb forms.
In the latter case, the underlying clause expounding the
Modification tagmeme 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') áá-mé sogo néa   'the man smokes'

    (35') áá-mé sogo nísa   'the man smoked'

$cl_{tr} \longrightarrow S_{AGN} + O_{GOL} \pm P_{GD}$, where P_{GD} : néa = ná 'to
eat + (3 sg Pf); and nísa = ná 'to eat' + (3 sg RP). 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) mátaa tí áá (dance, hit-ADJZ, man = 'a dancer')

    (38) mátaa tí yaé (dance, hit-ADJZ, something = decora-
                              tions')

In (37) the Head is expounded by _áá_ 'man' and is thus
agentive; in (38) _yaé_ '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) _pĭra-pe yaé_ (to sit-FOR, something = 'something
         for sitting on', i.e. 'a chair'.)

    (40) _sápĭ ná-pe_ (sweet potato, to eat-FOR = 'edible
         sweet potato')

    (41) _kógono pa-pe yápi_ (work, to do-FOR, day = 'a
         working day')

    (42) _áá-pe oná_ (man-FOR, woman = 'a married woman')

    (43) _waa-pe_ (sugar cane-FOR = 'a sugar cane pole')

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

    (45) _pawá-si áda-pe bŭkŭ_ (slow-dim, to look-FOR, book
         = 'difficult primer')

The usual structure is:

M-_pe_ + H, although in (40) the order is reversed and
in (43) and (44) there is no H given. The embedded struc-

tures are:

(39) v_{int} -pe; (40) v_{tr} -pe; (41) $_e cl_{tr} \longrightarrow O_{GOL}$:
kógono + P : v_{tr} -pe; (42) O_{GOL} : ng -pe; (43) ng -pe;
(44) v_{tr} -pe; and (45) $_e cl_{tr} \longrightarrow A_{MAN}$: pawási + P : v_{tr} -pe.
Examples of nominals marked with -de are:

(46) ráápara aa-ta-de kaane (bush, it stands-WH,
        pandanus = 'wild pandanus')

(47) íní répena págaleme-de yaé (nose, stick, they hide
        it-WH, something = 'sticks for putting in the
        nose' i.e. 'noseplugs')

(48) yáá-mataaná pópaapara ópala-de yááriraa (casso-
        warie's,in the wing, it comes up-WH, quill =
        'cassowary-wing quills')

(49) kídipaa áwáliare ómáleme-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 -de not only retains its
usual aspectual meaning but also functions as a type of
relative marker--which is glossed in the examples above sim-
ply as WH. Embedded constructions of this type expounding
the Modification tagmeme of an np_{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 np_{des}, np_{pos}, etc.) marked by a function specifying clitic are, in tagmemic terms, Axis-Relator phrases. For example, notice the following:

(50) épé áá láápo-para (good, man, two-LOC = 'to the two good men') where,

AR ⟶ A : np_{num} + R : -para (locator)

(51) dípi pádáne-mé (jeep, one-IN = 'by means of a jeep')

AR ⟶ A : np_{num} + R : -mé (specifier or instrument)

(52) adaa maapú-nane (big, garden-DIR = 'toward the big garden')

AR ⟶ A : np_{des} + R : -nane (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_{GOL} are often formally marked by clitics which include within their grammatical function the tagmemic notion of Relator. Such "case" markers in Kewa would be:

Agentive or Instrumentive (-mé), according to the ex-
ponents and clause type.

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

Locative (-para), 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 (-nane, 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) oná [nipú] kíri waé-rupa ta (woman, [3 sg pro],
        laugh, bad-MAN, she says = 'the woman is one who
        is laughing in a bad manner')

by omitting nipú 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
nipú (and other pronouns) disjoins the Head and the tagmemes
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_{pos}); Purposive (vp_{pur}); Gerundive (vp_{ger}). Each vp expounds the Predicate function of any clause type except the complementive.[6] Such verb phrases as the latter two could possibly be called pheriphrastic verbs, which are not uncommon in New Guinea languages.[7]

5.41 Possessive Verb Phrases (vp$_{pos}$)

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

(54) nipú-ná tea (he-POSR, he will say = 'it is up to him', or (literally) 'it is his to say')

In such instances the -ná form does not seem to alter the meaning from such clauses as:

(55) nipú-mí tea (he-AGN, he will say = 'He will tell it')

$$cl_{tr} \longrightarrow S_{AGN}\text{-}\underline{mí} + P_{GD} : v_{tr}$$

However, both -ná and -mí may mark functions in a clause such as:

(56) nipú-mí nipú-ná tea 'He will tell what is his to say'

$$cl_{tr} \longrightarrow S_{AGN}\text{-}\underline{mí} + P_{GD} : vp_{pos}$$

When the verb suffixes expounding benefaction are chosen -ná may also mark the O$_{BEN}$:

(57) nipú-mí nipú-ná méáária (méá 'to get' + -ria (3 sg Pa alo) = 'He got something for someone else')

$$cl_{tr} \longrightarrow S_{AGN}\text{-}\underline{mí} + O_{BEN} + P_{GD}$$

It is possible to also say:

(54a) <u>nipú-ná</u> <u>ágaa</u> <u>tea</u>   'He will tell his talk'

(55a) <u>nipú-mí</u> <u>ágaa</u> <u>tea</u>   'He will talk' ,

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

(57a) <u>nipú-mí</u> <u>nipú-ná</u> <u>OYAÉ</u> <u>méáária</u> 'He got SOMETHING for him'

$$cl_{tr} \longrightarrow S_{AGN}\text{-}\underline{mí} + O_{GOL} : np_{pos} + P_{GD}$$

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

(57c) <u>nipú-mí</u> <u>nipú-ná</u> <u>sékere</u> <u>méáária</u> 'He got the pearl shell for him'.

It seems reasonable to suggest that a vp_{pos} may be simply a surface representation of an np_{pos} expounding an O_{BEN}, O_{GOL} or even O_{LOC} tagmeme.

5.42 <u>Purposive</u> <u>Verb</u> <u>Phrases</u> (vp_{pur})

The most general formula for a vp_{pur} is characterised by the following function points:

$$vp_{pur} \longrightarrow PUR + (DES) + (K) + H \text{ , where}$$

$$PUR : vs + suf_{pur} + (suf_{des})$$

$$H : vs + \left\{ \begin{array}{l} terminal \\ non\text{-}terminal \end{array} \right\} + \text{ suffix}$$

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) [mí-la] pá-lua 'I will go [to get it]'

(59) [ádo-la] pá-lua 'I will go [to see it]'

(60) [ká-ta] pá-lua 'I will go [to give it to him]'

In every vp_{pur} the first verb is suffixed by -la ∿ -tʌ; the form of the verb stem and the pur suffix in (60) being regulated by MP rules. The restrictions on the vp 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:[8]

(58') na-mí-la pá-lua 'I will not go to get it', not

*mu-la na-pa-lua or *na-mí-la na-pá-lua.

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

(58a) [méáá-ta] pá-lua 'I will go and [get it for some-
                                       one]'

(59a) [ádaa-ta] pá-lua 'I will go and [look for someone]'

(60a) [kálaa-ta] pá-lua 'I will go and [give it to him
                                        for someone]'

There are at least two alternant analyses to any vp_{pur}:
(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) mí-la pó-no mí-la pá-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 vp_{pur}, 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) ní mí-la-lo pí 'I want to get (it)'.
However, -lo is clearly an aspect marker and can also be
used following coordination suffixes such as:

(63) ní méá-no-lo nipú épaa 'I wanted to get it and he
came'

The desiderative aspect suffix often co-occurs with the pur-
posive suffix and is also often used in a vp_{pur} if the main

verb is one of existence.

Conjoining vp_{pur} is by simple repetition of the PUR function:

(64) ní mí-la ádo-la épa-wa (I, get-pur, look-pur, come-I did = 'I came to get it and to see it')

5.43 Gerundive Verb Phrases (vp_{ger})

The structure of a vp_{ger} can be summarised by the following formula:

$$vp_{ger} \longrightarrow GER + (K) + H \text{, where}$$

$$GER : vs + vstMP\text{-}R5b$$

$$H : vs + \begin{Bmatrix} terminal \\ non\text{-}terminal \end{Bmatrix} \text{ suffix}$$

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: tá 'to hit', lá 'to speak' and roá 'to break off'.

	Ego			Alo		
	'hit'	'talk'	'break off'	'hit'	'talk'	'break off'
Ger	tu	lo	ro	taa	laa	roaa
Pur	tu-la	ta	ro-la	taa-ta	laa-ta	roaa-ta
Des	tu-la-lo	ta-lo	ro-la-lo	taa-ta-lo	laa-ta-lo	roaa-ta-lo

Chart 10: Verb Phrase Forms

Some examples of gerundive phrases are:

(65) nɪ́ tʉ́ pɪ́ra-wa (I, hitting, sit-I did = 'I sat hitting it')

(66) nɪ́ lɔ́ pɪ́ 'I am talking'

(67) nɪ́ méáá épa-lua (I, bringing (alo), come-I will = 'I will come bringing it (for someone)')

(68) nɪ́ tʉ́ sʉ́ 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 tʉ́ 'hitting' in (65) and (68); lɔ́ 'talking' and sʉ́ 'putting' in (66) and (68) respectively;

(2) altrocentric by méáá 'bringing (for someone)' in (67).

NOTES

1. Longacre (1964a: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 tagmemes 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 tagmemes on the clause-level, e.g. adverbs which permute freely such as those expounding A_{DEG} or A_{TM}. 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 Kewa counting systems.

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

5. As indicated earlier in Chapter 1, Becker (1967a:113-4) suggests K^n as a tagmeme 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' tagmeme 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 §1.3 that the concept of an "empty slot" in tagmemics is not new.

6. This is perhaps why P. Healey (1965c) describes as pheriphrastic 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 pheriphrase 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 disucss 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 alternantly be described as a series of four clauses. However, this would be a much more complicated solution.

Chapter 6

SENTENCES

6.0 Introduction

A sentence consists of main functional points such as Base, Antecedent, Sequel, Protasis, 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 syntagmemes) and which has appropriate sentence final intonation (Cf.§2.4) is generally considered a simple sentence. The Nuclear constituent is:

$$S_{simp} \longrightarrow Base: clause,$$

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-

tence type there are markers which indicate the function of the sentence tagmeme, in simple sentences only the intonation 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 (s_{co})

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 coordinators most often indicate successive actions or simultaneous actions. However, these two main features may be modified 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 involve time relationships are marked by "medial" verbs, sometimes 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 antonyms 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, super-
ordinate or principal on the other hand, according to their
syntactic setting.[2]

It seems more appropriate in Kewa to consider certain
medial-final distinctions as properties of coordinate sen-
tences and the clauses which expound the Bases as inter-
dependent. The important feature is that clause coordination
is often marked by special sets of suffixes which also dis-
tinguish other categories, such as the identity or non-
identity of the person of the actors. Coordination, there-
fore, often involves same or different person categories
between the coordinated Bases. The same person (sp) or dif-
ferent person (dp) markers are of two sets.[3]

In addition, certain other markers may modify the rela-
tive timing of the coordinated clauses. For example, the
successive or simultaneous dp coordinators may have co-occur-
ring suffixes which indicate such features as prolonged ac-
tion 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 dis-
cussed.

6.11 Sequential Coordination

Sequential sentences (s_{seq}) consist of the following
function points:

$$S_{seq} \longrightarrow ANTE + CO_{SUC} + SEQL$$

In this section only COs which are expounded by suffixes indicating the same person are given. The following sentences are paired, the first with a CO expounded by sp_{ego}, the second by sp_{alo} (the CO is enclosed in square brackets):

(1) <u>ní</u> <u>réko-[a]</u> <u>ágaa</u> <u>lá-lo</u> (I, stand-[CO sp ego], talk, say-I am = 'I stood up and am speaking')

(1a) <u>ní</u> <u>rékaa-[wa]</u> <u>ágaa</u> <u>lá-lo</u> (I, stand-[CO sp alo], talk, say-I am = 'I stood up on account of something and am speaking')

(2) <u>sáá</u> <u>píru-[a]</u> <u>ágaa</u> <u>lá-pa</u> (we two, sat down-[CO sp ego], talk, say-we are = 'We two sat down and talked')

(2a) <u>sáá</u> <u>píraa-[wa]</u> <u>ágaa</u> <u>lá-pa</u> 'We two sat down for something and talked'

(3) <u>rúdu</u> <u>yo-[a]</u> <u>madá</u> <u>na-riaa</u> (short, affirm-[CO sp ego], enough, neg-it carried = 'It was short and didn't reach')

(3a) <u>ní</u> <u>ma-adaalu</u> <u>yaa-[wa]</u> <u>keda</u> <u>ma-paa-ru</u> (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 : cl_{int} (1, 2)   'I stand'

: cl_{cmp} (3)   'It is short'

: cl_{d-tr} (3a)   'I make it long'

$$CO_{SUC} : sp_{ego} \quad (1,2,3) \quad (-\underline{a})$$

$$: sp_{alo} \quad (1a,2a,3a) \quad (-\underline{wa})$$

$$SEQL \quad : cl_{tr} \quad (1,2) \quad \text{'I am talking'}$$

$$: cl_{cmp} \quad (3) \quad \text{'It was short'}$$

$$: cl_{d-tr} \quad (3a) \quad \text{'I made it (be) heavy'}$$

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) áá pīra-a 'The man sat down'

(5) áá-mé étaa ná-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 deleted in the second clause, but it must function the same throughout the sentence, i.e. as either S_{ACT} (áá) or S_{AGN} (áá-mé). In other words, just as in clauses which are embedded 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) áá-mé píru-a étaa ná-a   (man-AGN, sit-CO sp, food,
     eat-he did)

(6a) áá-mé étaa (áá-mé) píru-a ná-a   (man,AGN, food,
     (man-AGN), sit-CO sp, eat-he did)

(6b) áá píru-a (áá) étaa ná-a   (man, sit-CO sp, (man),
     food, eat-he did)

(6c) áá étaa píru-a ná-a   (man, food, sit-CO sp, eat-
     he did)

However, the following are not permissible:

(*6d) áá píru-a áá-mé étaa ná-a

(*6e) áá-mé étaa píru-a áá ná-a , and so on,

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

$$cl_{int} \longrightarrow S_{ACT}^{1} + P_{MOT}^{2} +$$

$$cl_{tr} \longrightarrow S_{AGN}^{3} + O_{GOL}^{4} + P_{GD}^{5} \Longrightarrow$$

$$s_{seq} \longrightarrow \begin{Bmatrix} 1/3 + 4 + 2\text{-CO} + 5 \\ 1/3 + 2\text{-CO} + 4 + 5 \end{Bmatrix} \text{, and so on,}$$

where 1/3 indicates that the S may be either unmarked by
-mé 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:

$$s_{sim} \longrightarrow COTM + CO_{SIM} + SEQL$$

Again the illustrations are paired, the first with a CO
expounded by sp_{ego}, the second by sp_{alo}:

(7) épo lá-ri épa-wa (whistle, say-CO sp ego, come-
I did = 'I whistled while I came')

(7a) épo láá-ma épa-wa 'I whistled (for him) while I
came'

(8) nipú tá-ri pámua-la (he, hit-CO sp ego, walk-he
is = 'He is hitting it while he is walking')

(8a) nipú táá-ma pámua-la 'He is hitting it (for some-
one) while he is walking'

The exponents are:

COTM : cl_{cmp} (7) 'I whistle'

: cl_{tr} (8) 'He hits'

CO_{SIM} : sp_{ego} (7,8)   (-ri)

          : sp_{alo} (7a,8a)   (-ma)

SEQL : cl_{int} (7)   'I came'

          : cl_{int} (8)   'He walks'

In a s_{sim} the clause action which expounds the Contemporaneous tagmeme goes on for some time while the second action, which expounds the Sequel tagmeme, takes place. The notion of absolute simultaneity, that is two actions absolutely 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 tagmemes which may be represented in conjoined clauses of a s_{sim}. For example, sentences like the following cannot occur:

(*9) né-mé maapú-para irikai tá-ri étaa ada-para ná-lo

'I am hitting the dog in the garden while I am

eating the food in the house',

simply because the O_{LOC} would have to be expounded identically. Also, there are many actions which (semantically) cannot occur simultaneously. Such restrictions have not been accounted 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.[5] For example, note the following:

(10) <u>áálü-írí</u> <u>ípa-para</u> <u>lópaa-wa</u> <u>órópeaa-ma</u> <u>pu-a</u>

<u>rubá-la</u> <u>pi-simi</u>   (hair, water-LOC, fall-CO sp alo,

turn-CO sp alo, make-CO sp ego, throw-pur, make-

they did = '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) $s_{seq} \rightarrow$ ANTE + CO_{SUC} + SEQL , where the final SEQ:

$vp_{pur} \rightarrow$ PUR : <u>rubá-la</u> 'in order to throw' + H :

<u>pisimi</u> 'they did it'

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

áálúírí	ípapara	lópaa-wa	órópeaa-ma	pu-a	rubá-la	pisimi
(1) [		$ANTE_1$		]+[CO_1]+[	$SEQL_1$	]
(2) [		$CONTM_1$	]+[CO_2]+[		$SEQL_2$	]
(3) [	$ANTE_2$	]+[CO_3]+[		$SEQL_3$		]

Chart 11: Sentence-Level Recursiveness

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

$ANTE_1$: s_{sim} -<u>ma</u> , i.e. a simultaneous sentence marked

by -<u>ma</u>, a sp alo coordinator. This is repre-

sented in the second bracketing:

(2) $s_{sim} \rightarrow$ CONTM + CO_2 + $SEQL_2$, where

CONTM : s_{seq} -wa, i.e. an additional sequential sen-
tence marked by -wa, a sp alo coordinator. This
is represented in the third bracketing:

(3) $s_{seq} \longrightarrow ANTE_2 + CO_3 + SEQL_3$, where

$ANTE_2 : cl_{int} \longrightarrow O_{GOL} + O_{LOC} + P_{GD}.$

It is important to note that none of the above deriva-
tions 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) áálúírí ípapara lópaawa órópeaawa pua rubála pisimi
'They put the hair in the water and turned it
and did this in order to comb it'

(10b) áálúírí ípapara lópaama órópeaama pari rubála
pisimi '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) $s_{seq} \longrightarrow ANTE + CO_{SUC} + K^2 + SEQL$

(10b) $s_{sim} \longrightarrow CONTM + CO_{SIM} + K^2 + SEQL$

However, in introducing a K-equivalent operation in a coor-
dinate sentence it must be stipulated that both the Coor-
dinator and the tagmeme preceding are repeated, i.e. not
simply the coordinator. This is true of any function mark-
ing 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) nɨ́ réka-[no] ágaa lá-a   (I, stand-[CO dp ego 1 sg], talk, say-he did = 'I stood up and he talked'

(11a) nɨ́ rékaa-no ágaa lá-a   'I stood up (for something and he talked'

(12) sáá pɨ́ra-[pona] ágaa lá-a   (we two, sit-[CO dp ego 1 dl], talk, say-he did = 'We two sat down and he talked')

(12a) sáá pɨ́raa-pona ágaa lá-a   'We two sat down (on account of something) and he talked'

(13) nipú ma-rúdu yaa-nia nɨ́ ma-adaalu paa-ru   (he, cas-short, affirm-[CO dp alo 3], I, cas-long, make-I did = 'He made it short and I made it long')

The exponents are:

ANTE : cl_{int} (11,12)   'I stand'; 'we two sit'

: cl_{d-tr} (13)   'he shortened it'

CO_{SUC} : dp_{ego} (11,12)   (-no '1 sg'); (-pona '1 dl')

: dp_{alo} (11a,12a,13), + vstMP-Rl

SEQL : cl_{tr} (11,12)   'he talked'

: cl_{d-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), -pona (1 dl), and so on (Cf.§3.22.2, Chart 8, for the whole set. Occasionally the variants -pana and -mana, or even -puna and -muna 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 following coordinated clauses:

(14) nɨáá pua-a nɨ walá épa-lua (we all, go-CO sp, I, again, come-I will = 'We all go and I will return')

(15) nimɨ pu-a nipɨ walá épa-lia 'They all go and he will return'

(16) sáá pua-a nɨáá walá épa-lima 'We two go and all of us will return'

(17) nipɨ pu-a ne walá épa-li '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) yaí na-ípu-a rípu na-ópea (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.[7] Examples (14-18) can also optionally have CO dp suffixes, so that the v + CO dp would be: pó-mona rather than pú-a in (14)[8]; pé-na rather than pú-a in (15) and (17); pó-pona 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) <u>pa-no gi</u> (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) <u>ne sápí ná-ina gía-no</u> (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) <u>go raí meá-ina ípu</u> (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 (-<u>ina</u>
(2 sg)) and -<u>no</u> (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-spacial 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:[9]

(22) íra-la-nia épo-pe (cook-prol-CO dp 3, come-imper
= 'While they (or he) cook it, you come')

(23) ípu-la-pona pú-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 homophonous -la (purpose), in that the latter is never followed by a CO dp marker:

(22') íru-la épo-pe (cook-pur, come-imp[10] = 'Come in
order to cook it')

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

$S_{sim} \longrightarrow CONTM + CO_{dp} + SEQL$, where

ANTE : cl_{int}

CO : dp (-nia '3'; -pona '2 dl')

SEQL : cl_{imp} (22); cl_{int} (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:11

(24) pó-no-loa épa-a (go-CO dp 1 sg-ser, come-he did = 'I went and after that he came')

(25) ne rípína-ina-loa ní tá-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) ira-la-na-loa epa-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) kála-no-loa moge wárí-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) <u>ká-toa</u> <u>moge</u> <u>wárfá-lia</u> (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 -<u>wa</u> co-occurs following the CO dp marker:[12]

(28) <u>go</u> <u>áá</u> <u>yaé</u> <u>fa</u> <u>ní</u> <u>kábá-no-wa</u> (that, man, something, put-he has, I buy-CO dp 1 sg = 'That man has something and I should be allowed to buy it')

(29) <u>sáá</u> <u>nipú</u> <u>tá-pono-wa</u> <u>nipú</u> <u>péna</u> (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 -<u>pana</u>. The meaning implies a negative reason[13] and two separate morphemes may actually be involved: -<u>pa</u> 'inceptive aspect'[14], followed by -<u>na</u> 'CO dp 3'. The inclusion of the examples which follow are tentative. It may prove more accurate to consider -<u>pana</u>

as a sentence connector, parallel to others described later
(Cf.§6.2ff).

(30) lópa-pana pawá ádo-à pó-pe (fall-disas CO dp 3,
      slow, look-CO sp, go-imper = 'So that it does
      not fall, look and go slowly')

(31) re-para pá-li rábu róbó-a ne-ná sálu tá-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 him-
self and the addressee(s):

(32) ná-mina-paa (eat-CO dp 1 pl-excl = 'We all
      should eat it')15

(33) ná-pana-paa (eat-CO dp 1 dl-excl = '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) rogaa-mina tápa pa-mina-paa (bind-CO dp 1 pl,
      platform, make-CO dp 1 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-mí áde-na-lo pea (school, boy-coll-
AGN, look-CO dp 3-des, do-he has = 'The school
boys want to see and he is doing it')

(36) étaa né-na-lo ma-nágola-wa sáá-to (food, eat-CO dp
3-des, cas-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 re-
stricted paradigmatic set; the suffixes which occur with it
are in some cases obviously based upon ones already described.
The full set is:

(37) bá   'Let we 2 (exclusive) go'

(37a) bái   'Let we 2 (inclusive) go'

(38) bána   'Let we all (exclusive) go'

(38a) báina   'Let we all (inclusive) go'

(39) bálepaa   'Let us go (imperative)'

The suffix in (39) -lepaa 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 -$\underline{ga}$[16], and the Result (RS). The RS tagmeme is often expounded by imperative or subjunctive clauses:

(40) $\underline{sáá}$ $\underline{pú\text{-}lupa\text{-}ga}$ $\underline{pí\text{-}ra\text{-}lepaa\text{-}pe}$ (we two, go-we two are-RE, sit-imp pl-immed = 'Because we two are going, you all sit down')

$$s_{re} \longrightarrow RE : cl_{int}\text{-}\underline{ga} + RS : cl_{imp}$$

(41) ní yaina ía-ga ré-para na-épo -pe (I, sick, put-
it has-RE, base-loc, neg-come-imm imp = 'Since
I am sick, do not come close (to me)')

$$s_{re} \longrightarrow RE : cl_{cmp}\text{-}ga + RS : cl_{imp}$$

(42) épo lá-lo-ga nipú épé-na (whistle, say-I am-RE,
he, come-CO dp 3 = 'Because I am whistling, he
should come')

$$s_{re} \longrightarrow RE : cl_{cmp}\text{-}ga + RS : cl_{intr}(subjun)$$

(43) lópa-wa-de-ga ne ápe lá-no (fall-I did-compl
un -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-
junctive 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) pora póá míru rú-nane ípu-la-ga (door, strike
imp, smoke, inside-dir, come-it-is-RE = 'Close
the door because the smoke is coming inside')

$$s_{re} \longrightarrow RS : cl_{imp} + RE : cl_{int}\text{-}ga$$

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

In other examples considerable embedding may occur with-
in the RE tagmeme:

(45) [áá maa lórá paa-ga áá adaa-pe] kóne sá-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 (Cf. § 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) [né-mé ába pia-wa] ne gía-lo-ga ne ĩrí púdĩa
(I-AGN, 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 cl_{tr} which contains an
embedded clause ába pia-wa 'I shot it before' with the object
deleted (in this case obviously yáá '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) <u>nipú ípu-la</u> pare <u>ní paalá na-pía</u> (he, come-he is,

but, afraid, neg-it is = 'He is coming but I am

not afraid')

$S_{ant} \longrightarrow$ THS : cl_{intr} + <u>pare</u> + ANT : cl_{cmp}

(48) <u>waé kóne ya-pare ní pa-wa</u> (bad, behaviour, but,

I, do-I did = 'It is bad behaviour but I did it')

$S_{ant} \longrightarrow$ THS : cl_{cmp} + <u>yapare</u> + ANT : cl_{tr}

Two independent clauses may be juxtaposed in an antithetical

sentence which is begun with <u>pare</u>, but the first clause must

still be interpreted as the Thesis:

(49) <u>pare káárá áípápúlú pea áá-re pawási pópéma</u>

(but, car, quickly, make-it does, man-TOP, slowly,

travel-we do = 'A car goes quickly but a man

travels slowly')

$S_{ant} \longrightarrow$ <u>pare</u> + THS : cl_{intr} + ANT : cl_{intr}

The above sentence also illustrates the use of antonyms in

antithetical sentences[17], where <u>áípápúlú</u> 'quickly' occurs

in the THE and <u>pawási</u> 'slowly' in the ANT. The same meaning

also occurs when the THS and ANT are juxtaposed with both

<u>pare</u> and the shared verb deleted:

(47a) <u>káárá áípápúlú pámea áá-re pawási</u> 'A car goes

quickly but a man is slow'[18]

In other instances, if the THS is negated, only the

antonym need remain in the ANT:

(50) ora kóko na-rea pare pa ogépú kegaapú pea
      (really, cold, neg-emits-it does, but, just,
      little, hot, make-it does = 'It is not really
      cold but (rather) just a little bit hot')

(50a) ora kóko na-réa pare rírípú '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) pa ogépú rírípú pea pare kóko na-réa 'It is
       just a little hot but it is not cold'

(50c) pa ogépú rírípú na-pea. ora kóko réa. '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 s_{ant} such as (50).19

In other examples of s_{ant} only the ANT tagmeme may be
signalled:

(51) pare mená-mé réa-mé ómó-a sápí ná-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')

$s_{ant} \longrightarrow$ pare + ANT : s_{seq}

$s_{seq} \longrightarrow$ ANTE : cl$_{cmp}$ + COSUC : -a + SEQL : cl$_{tr}$,