TUPI STUDIES I

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COCAMA CLAUSE TYPES

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A key to the abbreviations and symbols used in this paper. (Numbers in parenthesis refer to the section number in which the abbreviation or symbol first appears.)

Aff	Affirmation tagmeme (3)
App	Appositive tagmeme (3)
As	Aspect tagmeme (1.1)
Asso	Association tagmeme (3)
C	Cause tagmeme (3)
Con	Concern tagmeme (3)
Dir	Direction tagmeme (3)
I	Identification tagmeme (1.3)
IM	Intention-movement tagmeme (3)
Ins	Instrumental tagmeme (3)
L	Location tagmeme (3)
M	Manner tagmeme (3)
Mo	Mode tagmeme (1.1)
N	Non-imperative clause nucleus (3)
NA	Nominative absolute tagmeme (3)
Nc	Nucleus core (1.1)
Neg	Negation tagmeme (3)
O	Object tagmeme (1.1)
P_1	Predicate$_1$ tagmeme (1.1)
P_2	Predicate$_2$ tagmeme (1.2)
PC	Principal clause (0)
PCA	Principal active clause type (0)
PCAN	Principal active clause nucleus (3)
PCI	Principal indentification clause type (0)
PCIN	Principal identification clause nucleus (3)
PCS	Principal stative clause type (0)
PCSN	Principal stative clause nucleus (3)
Per	Perfective tagmeme (3)
Pur	Purpose tagmeme (3)
Q	Query tagmeme (3)
Qua	Quantity tagmeme (3)
R	Recipient tagmeme (1.1)

S   Subject tagmeme (1.1)
SC   Subordinate clause (0)
SCSN   Subordinate stative clause nucleus (3)
Sub   Subordinating tagmeme (2)
Sub_1 Subordinating $allotagma_1$ (2)
Sub_2 Subordinating $allotagma_2^1$ (2)
Sim   Similarity tagmeme (3)
Te   Tense tagmeme (1.1)
V   Vocative tagmeme (3)
-           Indicates phonological fusion between Cocama
            words (1.1)
∞   Alternates freely with (1.1)
...   Something precedes/something follows (narrative
            medial) (1.1)
'   Fusion of two levels (0)

0. The analysis of Cocama[1] syntax structure that is
presented in this paper follows the theory of tagmemic ana-
lysis developed by Kenneth L. Pike in his <u>Language</u> <u>in</u> <u>Rela-</u>
<u>tion</u> <u>to</u> <u>a</u> <u>Unified</u> <u>Theory</u> <u>of</u> <u>the</u> <u>Structure</u> <u>of</u> <u>Human</u> <u>Behavior.</u>[2]

The theory presented in Pike's book involves the prin-
ciple of the hierarchical structuring of all human behavior,
including verbal behavior. This hierarchical structuring
may be seen in the grammatical structure of the Cocama lan-
guage. The minimum unit of this structure is the tagmeme,
which is defined as a functional slot plus the filler of the
slot. Both concepts, the slot type and its class of fillers,
are necessary to the definition of a tagmeme in this theory.
An example to show the slot-class correlation would be a
subject slot filled by a substantive expression. The sub-
ject slot along with its filler, the substantive expression,
manifests a subject tagmeme (see 4.2).

Tagmemes are here described in a "hierarchy of distri-
butional matrices".[3] There are four major levels of distri-
butional matrices in the syntax structure of Cocama. The
lowest major level consists of stem and affix tagmemes in-
cluded in the word matrix; words in turn constitute tagmemes
included in the phrase matrix; phrases in turn constitute
tagmemes included in the clause matrix; clauses in turn con-
stitute tagmemes included in the sentence matrix. When the
focus is on the word matrix the tagmemes included on this
level are termed intra-word tagmemes. When the focus
changes to the phrase matrix the tagmemes included on this
level are termed intra-phrase tagmemes. Included tagmemes

in the clause matrix are termed intra-clause tagmemes, and
included tagmemes in the sentence matrix are termed intra-
sentence tagmemes.

    The grammatical hierarchy of Cocama language structure
may be seen in that intra-word tagmemes pyramid to intra-
phrase tagmemes, which in turn pyramid to intra-clause tag-
memes, which in turn pyramid to intra-sentence tagmemes.

    This paper focuses on the clause matrix and in par-
ticular on the nuclear contrasts of the clause matrix.
These nuclear contrasts differentiate the six major non-
imperative clause types of the independent sentences of
Cocama.

    The remaining three major matrices--the word, the
phrase, and the sentence--are discussed only briefly to show
the relationship of the nucleus of the clause and of the
clause matrix to the other matrices and to the tagmemes
included in these matrices.

    There are two main sentence types in Cocama: inde-
pendent and dependent sentences. Dependent sentences are
dependent on other sentences in narrative. Independent sen-
tences are not. Only the latter are treated in this paper,
since sequence-dependent sentences contain clauses of types
described for independent sentences (plus a sequence indi-
cator), whereas response-dependent sentences may contain no
clause.

    Independent sentences contain one obligatory principal
predicating nucleus and may also contain one optional subor-
dinate predicating nucleus. The independent sentence tag-
meme is manifested by one of two variants. The variants are
differentiated by the order of arrangement of their intra-
sentence tagmemes and occur in free variation. These vari-
ants are symbolized: [+PC' ±SC] ∞ [±SC +PC'], to be read,
"obligatory principal clause tagmeme (PC) plus optional
subordinate clause tagmeme (SC)". The symbol ' (in the
formula PC') indicates that there is a fusion of levels in
that PC'may occur either as the head tagmeme in an indepen-
dent sentence matrix or may constitute the entire matrix.
The principal clause may therefore constitute simultaneously
an independent sentence matrix as well as a clause matrix.
Henceforth in this paper fusion of two such levels will be
indicated by the symbol '.

    There are four main principal independent clause

types: (1) active (PCA), (2) stative (PCS), (3) identifi-
cation (PCI), and (4) imperative which is subdivided into
active imperative and stative imperative.

Active, stative, and identification clause types occur
both in principal and subordinate varieties and are differ-
entiated from each other by distinctions within the inter-
nal structure of their nuclear intra-clause tagmemes.

The imperative clause types are differentiated from
the non-imperative by distinctions within the internal struc-
ture of their nuclear tagmemes--which we will not discuss
here--as well as corresponding differences within the mar-
ginal intra-clause tagmemes. The imperative clause occurs
as a sub-division of the class of principal clauses and not
of the class of subordinate clauses. The imperative clause
will not be treated further in this paper, which focuses on
the nuclear contrasts of non-imperative clauses. Examples,
however, of the imperative clause are: cáni úri 'come'
(cáni 'imperative particle', úri 'stative verb, to come'),
úmi kái ái 'look at it!' (úmi 'active verb, to see', kái
'imperative particle', ái 'third person singular substan-
tive').

1. Principal Independent Clause Nuclei. The Cocama
clause consists of an obligatory nucleus and an optional
margin. The nucleus may be viewed as a matrix within the
clause matrix and consists of an obligatory core plus op-
tional modifying tagmemes. The nucleus of the principal
non-imperative clause types will be discussed in Sections
1.1, 1.2, and 1.3; the nuclei of the subordinate clause
types will be discussed in Section 2; and the margin, which
is identical for both the principal and subordinate clause
types, will be discussed in Section 3.

1.1. The core of the principal active clause nucleus
consists of three obligatory intra-clause tagmemes: a sub-
ject tagmeme (S) manifested by a substantive expression, a
predicate tagmeme (P_1) manifested by an active verb expres-
sion, and an object tagmene (O) manifested by a substan-
tive expression. The subject tagmeme precedes the predi-
cate tagmeme. The object tagmeme may either precede or
follow the subject-predicate sequence, and may be formular-
ized as follows: $[+S +P_1 +O] \infty [+O +S +P_1]$. The above
formula represents minimum non-conditioned variants of the
principal active clause nucleus. Other rare variants occur
with the object tagmeme as optional; the minus options are

conditioned in that they occur only in narrative medial
position. They do not occur narrative initially. They
are formularized as follows: [...+S +P$_1$ ±O...] ∞
[...±O +S +P$_1$...].

The above are the minimal formulas for the principal
active clause nucleus, as well as the minimal formulas for
the principal active clause as a whole. The marginal tag-
memes are optional and are included in the maximum formula
for the clause (see 3).

The following examples illustrate minimum forms of
the principal active clause nucleus:

+S   +P$_1$ +O

ipirawüra-púra čikụaráta pǘnu   'The dolphins follow us.'
dolphins   follow   us

+O   +S   +P$_1$

yanamáta   ca- kúpü   'I cultivate the grass.'
grass   I   cultivate

+S   +P$_1$

umánu ayúka   'The fever hit (her).'
fever hits

The theoretical maximum formula for the principal
active clause nucleus is: +Nc′ ±As ±Te ±Mo ±R, to be read,
"obligatory nucleus core (Nc) plus optional aspect tagmeme
(As) plus optional tense tagmeme (Te) plus optional mode
tagmeme (Mo) plus optional recipient tagmeme (R)".[4] No
occurrence of maximum structure has been found in the pre-
sent data. The following examples, however, illustrate all
the tagmemes symbolized in the maximum formula:

┌--------------Nucleus------------------┐

┌---------Nc′--------┐

+S   +P$_1$ +O   ±As   ±Te

úri debíška t- íma-   úkụa-   cúri 'He was in debt to
he   owes   my brother habitual   far   my brother.'
                          aspect   past
                                     tense

+O	+S	+P_1		±Mo	
ta-kú	t-	iára yaúki-	mía		'I would like
my garden	I	want make	potential		to make my
			mode		garden.'

+S	+P_1	+O		±Te	±R	
ái	yúmi	y-		úi	inú- cu	'He gave it to
he	gives	it		immediate	them to	them.'
				past		
				tense		

1.2.   The core of the stative clause nucleus consists of two obligatory intra-clause tagmemes: a subject tagmeme (S) manifested by a substantive expression and a predicate tagmeme (P_2) manifested by a stative verb$_1$, stative verb$_2$, or stative verb$_3$ expression (see 4.1).

The subject tagmeme may either precede or follow the predicate tagmeme, and may be formularized as follows: [+S +P_2] ∞ [+P_2 +S]. The above formula represents minimum non-conditioned variants of the principal stative clause nucleus, as well as the minimal formula for the principal stative clause as a whole.

The following examples illustrate minimum forms of the principal stative clause nucleus:

+S   +P_2

t- úcu   'I go.'
I   go (stative verb$_2$)

+P_2 +S

yumíra   t- ía   'I am angry.'
is angry   my heart
(stative verb$_1$)

+P_2 +S

tümündü   kuríki   'There is no money.'
there is no   money
(stative verb$_3$)

The theoretical maximum formula for the principal stative clause nucleus is [+P_2 +S ±As ±Te ±Mo ±R] ∞ [+S +P_2 ±As ±Te ±Mo ±R] ∞ [+S +P_2 ±R ±As ±Te ±Mo].[5]

The following examples illustrate the expanded nucleus:

```
┌-------------Nucleus-------------------┐

┌------Nc'------┐

+S        +P₂        ±Te    ±R

midra    cacacíma-  cúri  ahdn ikracún-cu  'The monkey
monkey   screams    far   this child   to   screamed at this
                    past                     child.'
                    tense


+P₂       +S         ±R

cdku     kuardči   kupüwaranú- cu              'The sun is hot
is hot   sun       cultivators to        for the cultivators.'


+S     +P₂          ±R          ±Te

úri   yumíra-     cúpü rdna-cúri              'He scolded them.'
he    is angry    to   them far
                       past
                       tense


+S     +P₂          ±Mo

ta-   cüt-úcu-    mía                         'I would like to
I     want go     potential mode              go.'


+S     +P₂          ±As

ínu   irir-       úkua                        'They always tell
they  lie         habitual aspect             lies.'
```

1.3. The core of the principal identification clause nucleus consists of two obligatory intra-clause tagmemes: a subject tagmeme (S) manifested by a substantive expression and an identification tagmeme (I) manifested by a substantive expression, locative expression, associative expression, or directional expression.

The subject tagmeme may either precede or follow the identification tagmeme: [+S +I] ∞ [+I +S].

This formula represents the minimum non-conditioned variants of the principal identification clause nucleus as well as the minimal formula for the principal identification

clause as a whole.

The following examples illustrate minimum forms of the
principal identification clause:

+I   +S

wüpü-nán   ca-mümɨrakɨramími   'I have only one little
one   only   my little son   son.'

+S   +I

úcu   inu- tía   'I am their aunt.'
I   their aunt

The theoretical maximum formula for the principal
identification clause nucleus is [+S ±As ±Te ±Mo +I] ∞
[+I +S ±Te] ∞ [+I +S ±R]⁶.

The following examples illustrate the expanded
nucleus:

+I   +S   ±Te

yaṳpü ya-pur- úi   'He was there.'
there   he   immediate
                    past
                    tense

+S   ±Mo   +I

ya- putiạkụarar-úra   ya-túa tíni 'Its chest is
its chest   subjunctive   it   white   white.'
                      mode

+S   ±Te   +I

učimatan-   cúri   yúwa   'That which was taken out
that-which- far   thorn   was a thorn.'
was-taken-   past
out   tense

+S   ±As   +I

na- kumic- úcu   ya-kụára   'Your speech will be in-
your speech aspect it in   side of it (tape re-
            of   corder).'
            going

2. Subordinate Independent Clause Nuclei. Subordinate clauses are differentiated from principal clauses by virtue of their optional occurrence in independent sentences and the occurrence of a subordinating tagmeme within the nucleus of the clause. In the present data tense and aspect tagmemes are of rare occurrence in the subordinate clause. Mode and recipient tagmemes have not been found, although it is highly probably that they may potentially occur as optional tagmemes of the subordinate clause in the Cocama language structure.

The tense tagmeme occurs following the subordinating tagmeme in the subordinate stative clause. It has not as yet been found in the subordinate active or subordinate identification clause. The aspect tagmeme occurs following the predicate$_2$ tagmeme and preceding the subordinating tagmeme in the subordinate stative clause; it occurs following the subordinating tagmeme and the object in the active clause; it has not as yet been found in the subordinate identification clause.

The following formula shows the structure of the subordinate stative clause as found in the data to date: $[+P_2 +S +Sub \pm Te] \infty [+S +P_2 \pm As +Sub]$.

The following examples illustrate the subordinate stative clause:

$+P_2$	$+S$	$+Sub$	$\pm Te$	
caipurári	ya-puránu-	íkua-	ikuá	'Because they were
drunk	they	because	yester-	drunk yesterday.'
			day	
			tense	

$+S$	$+P_2$	$+Sub$	
ta-kuríki	ümütú-	ra	'If I had the money.'
my money	there is	if	

$+S$	$+P_2$	$\pm As$	$+Sub$	
pünu	iri-	úcu-	púka	'When we return.'
we	return	going	when	
		aspect		

The following formula shows the structure of the subordinate identification clause as illustrated by the one

example that has been found in the present data:

+S   +I   +Sub

ǔnü   üram-   íkua   'Because you are good.'
you   good   because
                         ،

In the subordinate active clause the subordinating
tagmeme follows the predicate$_1$ tagmeme. Following the
predicate$_1$ tagmeme the subordinating$_1$ allotagma occurs pre-
ceding the object, and the subordinating$_2$ allotagma occurs
following the object. The subordinate active clause is
formularized as follows: [+O +S +P$_1$ +Sub$_2$] ∞ [+S +P$_1$ +O
+Sub$_2$] ∞ [+S +P$_1$ +Sub$_1$ +O].

The following examples illustrate the subordinate
active clause:

+O   +S   +P$_1$ +Sub$_2$

ašún umanuarinán ucún   c- ürucu   wíri   'Although I
one-about-ready-to-die   I   took   although   took one who
                                                was about
                                                ready to die.'

+S   +P$_1$ +O   +Sub$_2$

ca-wihu-púra   ukíra   ca- wíri   'Although my old man
my old-man   kept back   me   although   kept me back.'

+S   +P$_1$ +Sub$_1$ +O

t-   amastáka   ráši   úra   'If I can do it.'
I   can do   if   it

3.   Clause Margins. Various marginal intra-clause
tagmemes of modification may be attached to the nucleus of
each of the six clause types described in detail in this
paper (principal active, principal stative, principal iden-
tification, subordinate active, subordinate stative, and
subordinate identification). Certain of these marginal tag-
memes occur preceding or following the nucleus. The mar-
ginal intra-clause tagmemes that occur only preceding the
nucleus of the clause include affirmation, negation, perfec-
tive, and query. Those that occur either preceding or fol-
lowing the nucleus include vocative, nominative absolute,
intention movement, location, direction, association,

instrumental, cause, concern, purpose, quantity, time,
manner, similarity, and appositive. The affirmation is
always first; otherwise there is no fixed order. (There is
some possibility, however, that degree of emphasis may
affect the order of two intra-clause marginal tagmemes pre-
ceding the nucleus, or of two following the nucleus; the
one closer to the nucleus may prove to be the one empha-
sized.)

In the data studied to date there are no further
structural restrictions on the co-occurrence of the marginal
tagmemes in the various principal and subordinate clause
types.

There are, of course, some semantic restrictions such
that the intention-movement marginal tagmeme occurs chiefly
with the stative verb$_2$ úcu 'to go' as manifesting the pred-
icate$_2$ tagmeme and with other words that express movement.
Examples of sentences containing this tagmeme are:

+S   +P$_2$ ±Intention Movement ±Location ±Appositive

y- úcu kamatatára   ahánga   orejanáka
he goes work   to   here   Orellana in

'He goes to work here in Orellana.'

±Intention Movement +S +P$_1$ +O   ±Te   ±Mo

mucanakatára   c- úrúra y- ui-   mía
to-treat-   I   bring her immedi- poten-
with-medicine   ate   tial
                                    past   mode
                                    tense

'I brought her to be treated.'

The non-imperative clause formula is given below.
Tagmemes listed in the formula as following the nucleus are
from the group that may either precede or follow it (a fact
which is indicated by the arrow); those before the nucleus
are from the group which cannot follow the nucleus; free
variation of order of these marginal tagmemes in reference
to one another is as stated above, but not symbolized:
±affirmation (Aff) ±negation (Neg) ±query [+slot$_1$ +query]
(Q) ±perfective (Per) +Nucleus (N) ± ← similarity (Sim)
± ← manner (M) ± ← quantity (Qua) ± ← purpose (Pur)
± ← concern (Con) ± ← cause (C) ± ← instrumental (Ins)

±← association (Asso) ±←direction (Dir) ±←location (L)
±← intention movement (IM) ±←nominative absolute (NA)
±←appositive (App) ±←vocative (V).

     Of these, it should be further noted that the query
tagmeme is manifested by a clitic word stem which is phono-
logically dependent on the manifested form of the preceding
tagmeme other than the affirmation. When no marginal tag-
memes precede the nucleus, the query tagmeme occurs within
the nucleus following the first nuclear tagmeme, and its
manifested form is phonologically dependent upon the mani-
fested form of the first nuclear tagmeme. When the affir-
mation tagmeme occurs in the clause (which, if present,
always occurs as the first tagmeme) the query clitic can
only follow the manifested form of the second occurring
tagmeme, whatever it may be, and is phonologically dependent
upon it.

     The formula listed above is the theoretically maximum
formula for the non-imperative clauses of the independent
sentences. No more than three marginal tagmemes, however,
have been found in any one clause. The following examples
illustrate all of the tagmemes symbolized in the above for-
mula:

$$\ulcorner \text{--}PCSN\text{---}\urcorner$$

±L	±Q	+S	+P$_2$		
maka-	típa	n-	úcu		'Where are you
where	query	you	go		going?'

$$\ulcorner \text{------------}PCAN\text{-------------}\urcorner$$

+O	±Q	+S	+P$_1$	±Te	±T
mari-	típa	n-	i̯auki-úi	ikún	'What did you do
thing	query	you	do	immediate today	today?'
				past	
				tense	

$$\ulcorner \text{------}PCIN'\text{--------}\urcorner$$

+S	±Q	+I	
mari-	típa	ahánga	'What is here?'
thing	query	here	

```
                 ┌---------SCSN----┐
±M               +S    +P₂    +Sub  ±Asso      ±App
```

±M		+S	+P₂	+Sub	±Asso	±App
wŭpü	yatíri	rana-caipura-	cŭn	ta-múki		kuyara-múki
one	together	they are	for	me with		garden with
		drunk				owner

'In order for them all to get drunk with me, the owner of the garden.'

```
         ┌---------PCIN----------------┐
±Aff +I                  ±Q    +S  ±R
```

±Aff	+I			±Q	+S	±R	
áha	aicüwanán	cačin-	dip-		ái	ya- papa-	cúpü
yes	little	loved	query		he	his father	recipient
							indicator

'Yes, is he just a little loved by his father?' (rhetorical question)

```
              ┌--PCSN---┐
±M        ±App    +S    +P₂     ±NA
```

±M	±App	+S	+P₂	±NA		
cŭn	elvíra	y-	umánu	aikuán	yía	cačín
almost	Elvira	she	die	sick	heart	hurt

'Elvira almost died from a sick heart.'

```
              ┌----PCSN------┐
±Per ±Neg         +S          +P₂
```

±Per	±Neg	+S	+P₂	
ái	tima-purái	yakikuára	cáči	'(Her) head does not
now	not	head	hurts	hurt anymore.'

```
┌----PCSN-------┐
+S +P₂    ±Te    ±IM        ±Asso
```

+S	+P₂	±Te	±IM		±Asso	
t-	uri-	cúri	kamatatára	t- ima-		múki
I	come	far	work	to	my brother	with
		past				
		tense				

'I came to work with my brother.'

```
                 ┌----PCAN-------┐
±Asso            +S   +P₁    +O          ±Dir
```

±Asso		+S	+P$_1$	+O		±Dir
alkohor-múki		ya-	piáta	awaríndi		ini-cúi
alcohol with		he	asks	aguardiente		us from

'He asks us for aguardiente and alcohol.'

±Neg	+S	+P$_2$		±M	±V	
tíma	t-	amáska kumíca		ašún	señoríta	'I cannot talk any
not	I	can talk		more	Señorita	more, Senorita.'

±Sim			±Neg	+S	+P$_1$		±Ins	
ámụa	medikúnu	yá	tíma	ya-	cawatáta		pŭtimá-	pu
other	doctors	like	not	he	bring back souls		tobacco	by means of

'He does not bring back souls by means of tobacco like other medicine men.'

±Pur	±Asso		+S	+P$_2$	±Te	
mucanakamí-ra	ca-mŭna-	múki	c-	úri-	úi	
medical treatment	for my husband	with	I	come	immediate past tense	

'I came with my husband for medical treatment.'

±C	+S	+P$_1$		+O	±Te	
ra-mɨma-íkụạ	ra-	demandaška		ta-	cúri	
his pet because	he	charge		me	far past tense	

'Because of his pet he charged me.'

```
                  ┌----PCAN------┐
±Con         +S  +P₁         +O   ±As

rafael-ári   t-  ikuáta   n-  úcu    'I will tell you
Rafael about I   advise   you will    about Rafael.'
```

```
            ┌---------------PCAN-------------┐
±T      +S          +P₁      +O          ±Te         ±Qua

ikún    amuakána    ürúra   ipirapur-   úi          číta
today   others      bring   fish        immediate   many
                                        past
                                        tense
```

'Today the others brought many fish.'

4.   Internal Structure of Intra-Clause Tagmemes.   In
this section some data on the internal structuring of the
intra-clause tagmemes are to be presented.   Each of the
intra-clause tagmemes constitutes a phrase matrix.   The
breakdown of the phrase matrix will not be given in detail
except where it is pertinent to the clause structure.   The
first part of this section (4.1-8) deals with the nuclear
tagmemes; the remainder (Sections 4.9-27) deals with the
marginal tagmemes.

4.1.   The predicate tagmemes are manifested by verb
expressions.   They are distinct from other tagmemes in that
the words manifesting the head tagmemes of the predicate
phrase are made up of verb stems accompanied by verbal suf-
fixes.   There are two distinct predicate tagmemes, pred-
icate$_1$ and predicate$_2$ as mentioned in 1.1 and 1.2.

The predicate$_1$ intra-clause tagmeme is manifested by
an active verb expression.   Within this expression the ac-
tive verb word occurs as manifesting an obligatory intra-
phrase head tagmeme.   (Note that intra-clause and intra-
phrase tagmemes are on different structural levels.   When,
however, the phrase is comprised of a single word, there is
a fusion of levels--see the introduction--so that the one
word simultaneously manifests both the intra-phrase head
and the total intra-clause predicate.)   The stative verb$_1$
word, stative verb$_2$ word, and certain particles and clitics
occur as manifesting optional intra-phrase tagmemes which
modify directly the intra-phrase head--in which case there

is no fusion of levels since the head verb itself does not
manifest the total intra-clause predicate tagmeme. The mean-
ing of the predicate$_1$ tagmeme is action directed toward a
goal. The following examples illustrate the predicate$_1$
phrase:

+Head   ±Modifying particle

tɨkíta   cápa   'to tie (it) soon'
tie   soon

±Negative particle   +Head

tíma   čɨpíta   'not to blame
not   blame   (someone)'

±Modifying stative verb$_2$ +Head

ucupurána   iku   'to know (it)
immediately   knows   immediately'

±Modifying stative verb$_1$ +Head

úpa   kúpɨ   'to finish culti-
finish   cultivate   vating (it)'

.   The predicate$_2$ intra-clause tagmeme is manifested by
a stative verb expression. Within this tagmeme the stative
verb word occurs as an obligatory intra-phrase head tagmeme
and the stative verb$_1$, stative verb$_2$, and certain particles
and clitics occur as optional intra-phrase tagmemes which
modify this head.

     Stative verbs are sub-divided into three classes: (1)
stative verb$_1$ which manifests the predicate$_2$ and the manner
intra-clause tagmemes; (2) stative verb$_2$ which manifests the
predicate$_2$, manner, and aspect intra-clause tagmemes; and
(3) stative verb$_3$ which manifests the predicate$_2$ tagmeme.
The stative verb$_3$ class consists of only two members, ümútü
'there is' and tümúndü 'there is no'.

     The meaning of the predicate$_2$ tagmeme is state of
action, being, or quality of a subject. For examples of the
three classes of stative verb within the stative clause nu-
cleus see Section 1.2.

     The following examples illustrate the predicate$_2$
phrase:

±Modifying stative verb$_2$	+Head stative verb$_2$	±Modifying clitic
úri come	úri come	kat again

'to come repeatedly'

±Modifying similarity particle +Head stative verb$_1$

yiá like that	kumic- talks

'(he) talks like that'

±Modifying negative particle +Head stative verb$_1$

tíma not	amask- able	'not to be able'

±Modifying stative verb$_1$ +Head stative verb$_1$

yupúni begin	úratayar- to put in order	'begin to organize'

4.2. The subject intra-clause tagmeme is manifested by a substantive expression. The head intra-phrase tagmeme of the subject phrase matrix is manifested by a substantive class of nouns and pronouns which, with some restrictions, occur with noun suffixes.

Within the subject intra-clause tagmeme a substantive occurs as manifesting an obligatory intra-phrase head tagmeme. The head intra-phrase tagmeme may be accompanied by optional modifying intra-phrase tagmemes manifested by substantive words, location expressions, stative verb$_1$ words, and certain modifying particles and clitics.

The subject tagmeme indicates: (1) the subject of the action directed toward a goal in an active clause, (2) the subject described as being in a state of action, being or quality in a stative clause, and (3) the subject identified in an identification clause.

The following examples illustrate the subject phrase:

±Modifying noun +Head noun ±Modifying location expression

ahán	medíko	puérto prádo-katín
this	doctor	Puerto Prado at

'the doctor from Puerto Prado'

±Modifying pronoun ±Modifying noun +Head noun

ahán	ikracún	čipitára	'this child's
this	child	bewitcher	bewitcher'

±Modifying noun   +Head noun

wainakána	yapuračitáta	'the women's
women	dance maker	dance maker'

±Modifying noun   +Head noun

úpi	áwa	'everyone'
all	man	

±Modifying stative verb$_1$ +Head noun

ipípu	yawára	'the dog
inside	dog	inside'

+Head noun   ±Modifying clitic

kuyaramburá-	ya	'the owner of
owner-of-the-garden	reportative	the garden (it is said)'

    4.3. The object intra-clause tagmeme is manifested by a substantive expression (see 4.2), or by the hesitation particle, ápu.[7] The object tagmeme indicates the goal toward which the activity is directed in an active clause.

    The following examples illustrate the object phrase:

±Modifying quantity noun   +Head noun

mucaprika waránga	čupáti	'three thousand
three thousand	palm leaves	palm leaves'

±Modifying negative particle +Head noun

tíma	mári	'nothing'
no	thing	

+Head noun   ±Modifying clitic

awaríndi-   nán   'only aguardiente'
aguardiente   restrictive

    The following example illustrates the hesitation par-
ticle as manifesting the object tagmeme in a principal ac-
tive clause:

(+S   +P$_1$)   +O   (±As   ±App)

(ca-   gustáška cápa)   áp-   (úcu   fiésta)
(I   enjoy   soon)   it   (will fiesta)
                        (hesitation
                        particle)

'(I am going to go to enjoy) it, (the fiesta).'

    4.4. The identification intra-clause tagmeme is mani-
fested by a substantive expression (see 4.2), a location
expression (see 4.23), or an association expression (see
4.21). This tagmeme indicates the identification of a sub-
ject in an identification clause.

    The following examples illustrate the identification
phrase; items in parenthesis are not part of this phrase:

Locative particle manifesting the identification phrase.

+I   (+S   ±Te)

yaü̃pü (ya-pur- úi)
there (it   immediate past tense) 'There (it was).'

Associative expression manifesting the identification phrase.

(±T   +S)   +I

(ikuɟ́či   ca-mümirakúña   umanu-múki '(Yesterday my daugh-
(yesterday   my daughter)   fever with   ter was) with fever.'

Substantive expression manifesting the identification phrase.

(+S)   +I

(urúcu)   íki̯a wainakána yapuračitáta '(Pan pipes) are
(pan pipes)   this women   dance maker   the dance makers
                                            for these women.'

4.5.   The recipient intra-clause tagmeme is manifested
by a recipient expression which consists of an obligatory
substantive expression plus the obligatory recipient indica-
tor clitic cu ∞ cúpü.

With the manifested variant +S +P$_2$ of the stative
clause nucleus core, two free variants of the recipient
phrase occur. They are formulized as follows: [+substan-
tive expression +recipient indicator (cu ∞ cúpü)][8] ∞ [+reci-
pient indicator (cúpü) +substantive expression].

The recipient tagmeme indicates the recipient of the
activity, state, or identification described in the active,
stative, or identification clauses.

The following examples illustrate the recipient phrase
in the various clause types:

Active clause.

(+S +P$_1$)   ±R

(huan eskribíška) ya-papá-   cu   '(John wrote) to
(John writes)   his father recipient   his father.'
                               indicator

(+S +P$_1$ +O)   ±R

(ái yúmi ái) ya- cúpü   '(He gives it) to
(he give it) him recipient   him.'
                     indicator

Stative clause.

(±Per +S   +P$_2$)   ±R

(úcu   rana-yumɨra-) cúpü   ɨkracún '(They scolded)
(now   they scold)   recipient child   the child.'
                      indicator

(+S +P$_2$)   ±R

(úri yumíra) ta- cúpü   '(He scolded) me.'
(he   scolds   me   recipient
                    indicator

(+P₂ +S)   ±R

(cáku kuarácí) kupüwaranú- cu   '(The sun is hot)
(hot   sun)   cultivators recipient   for the cultivators.'

Identification clause (unique example).

(±Aff +I   ±Q   +S) ±R

(ɨha   aicüwanɨn cacín-dip- ɨi) ya- papa- cúpü
(yes   little only loved query he his father recipient
                                             indicator

'(Yes, is he just a little loved) by his father.'

        4.6. The aspect intra-clause tagmeme is manifested by
a stative verb₂ word. The membership of the stative verb₂
class of words includes: (1) úcu 'to go'; (2) úri 'to come';
(3) úkua 'to go about, habitual'; (4) yúti 'to be, temporal';
and (5) iára 'to desire'.

        The aspect tagmeme indicates aspectual modification of
the clause nucleus core. The following examples illustrate
the aspect phrase:

(+S   +P₁   +O) ±As

(pünu yumíta y-) úkua   '(We teach her)
(we   teach   her) habitual   habitually.'

(+S +P₁   +O) ±As

(ta- tikíta cápa r-) úcu   '(I) am going (to
(I   tie   soon it) to go   tie it right away).'

(±L   +S +P₂)   ±As   (±Te)

(ca-mümɨrakuñáka   c- uwatat-) uri-   (úi)
(my daughter at   I visit   to come (immediate
                                         past
                                         tense)

'(I) came (to visit my daughter).'

(+S)   ±As (+I)

(na- kumic-) úcu (ya-kuɨra)   '(Your speech) will
(your speech) to go (it in)   (be inside of it).'

$(+S +P_2)$ $\pm As$ $(\pm Te)$

(r- umánu-) iara-   (cúri)   '(He) wanted (to
(he die)   desire (far   die).'
                    past
                    tense)

$(\pm Per$ $+S$ $+P_1$ $+O)$ $\pm As$ $(\pm Te)$

(ai-púra ya- pápa   ayukápa ini-) yuti- (úi)
(now   his father hits   us)   to be (immediate
                                            past tense)

'(His father has already hit us.)'

    4.7.   The tense intra-clause tagmeme is manifested by
a tense clitic. The membership of the tense class of
clitics includes: (1) cúri ∞ curípü 'far past tense', (2)
ikuá 'yesterday past tense', (3) úi 'immediate past tense',
and (4) á 'future tense'. The following examples illustrate
the tense phrase:

$(\pm Aff \pm IM$ $+S +P_1$ $+O) \pm Te$

(áha mucanakatára c- ürúra y-) úi   '(Yes, I
(yes for treatment I bring her) immediate   brought her to
                                  past tense   be treated.)'

$(+S$ $+P_1 +O)$ $\pm Te$

(ínu üyu ya-) cúri   '(They ate it.)'
(they eat it   far
                past
                tense

$(+S)$ $\pm Te$ $(+I)$

(ca-kɨwɨra-) cúri (inu- pápa)   '(My brother) was
(my brother   far   (their father)   (their father).'
              past
              tense

$(+O$ $+S$ $+P_1)$ $\pm Te$

(úpi mári inu- tá-) ikuá   '(They received
(everything they receive yesterday   everything) yes-
                          past   terday.'
                          tense

(±M   +S   +P$_2$)   ±Te

(tutukári   ca-mümirakuñapuranándi   yuriti kat-   á
(washing   my daughter   stays again   future
                                                   tense

'(My daughter) will (remain to wash).'

    4.8.   The mode intra-clause tagmeme is manifested by
a mode clitic.   The membership of the modal class of clitics
includes:[9] üra ∞ üránu 'subjunctive mode', and mía 'poten-
tial mode'.   The following examples illustrate the mode
phrase:

(±Asso   +S +P$_1$ +O   ±Te)   +Mo

(č- ia-   múki   c- üruráka   y-   ui-)   üra
(my heart with   I bring   her immediate   subjunctive
                                   past   mode
                                   tense)

'(With deep feeling I brought her.)'

(±Per   ±Q   +S   +P$_2$)   ±Mo

(úcu-pura-táku   y-   umanu-)   mía   '(He) might (al-
(already   perhaps   he   die)   potential   ready be dead).'
                                      mode

    4.9.   Sections 4.1 through 4.8 have dealt with the nu-
clear intra-clause tagmemes; Section 4.9 through 4.27 deal
with the marginal intra-clause tagmemes.

    The affirmation intra-clause tagmeme is manifested
solely by the affirmation particle áha 'yes', with no modi-
fiers permitted:

±Aff (±IM   +S +P$_1$ +O   ±Te)

áha (mucanakatára   c- ürura   y- úi)   'Yes, (I
yes (for treatment I bring   her immediate   brought her
                                    past   to be
                                    tense)   treated).'

    4.10.   The negation intra-clause tagmeme is manifested
by a negation expression.   The negation expression consists
of the obligatory negation particle tíma plus an optional
modifying clitic.   The following examples illustrate the

negation phrase:

±Neg (+S +P₁   +O   +Sub)

tíma (na- čipíta ca-pur- íkua)   '(Because you did)
not   (you pay   me   because) not (pay me).'

±Neg   (±Per +S +P₂   ±L)

tíma-pur-   (ái   ra-cüt- úri ikiáka) '(He does) not
not emphatic   (now he wants come here)   (want to come
     clitic   here any more).'

4.11. The query intra-clause tagmeme is manifested by
an unmodified question or pondering clitic. The membership
of the query class of clitics includes: (1) típa~dípa, (2)
táku~dáku, (3) nda, (4) ráku, (5) ta, (6) ra, and (7) ku.
The variants as symbolized in numbers 1 and 2 are phonolog-
ically conditioned; dípa and dáku occur following the pho-
neme /n/, típa and táku occur elsewhere. The following ex-
amples illustrate the query phrase:

(±Dir)   ±Q   (+S +P₂)

(maka- cui-) típa   (n-   úri)   '(Where do you
(where from) query (you come)   come from)?'

(±L) ±Q   (+S +P₂)

(maká-) nda   (n- úcu)   '(Where are you
(where) query (you go)   going)?'

(+S)   ±Q   (+P₂)

(ra- cukuará-) ra   (cáči)   '(Does his body
(his body)   query (hurt)   hurt)?'

(±T)   ±Q   (+S +P₂   ±Te)

(maña-puká-) ta   (ini-úri uri- kat- á) '(When will we
(when)   query (we come come again fu- come again)?'
                                         ture
                                         tense

(+I)   ±Q   (+S)

(mári yawá-)   ku   (na- ritáma)   '(What is your
(thing like)   query (your city)   city like)?'

(±Per)   ±Q   (+S   +P$_2$ ±Mo)

(ucu-pura-)   táku   (y- umanu- mía)   '(He might al-
(already)   pondering (he die   potential   ready be dead.)'
                                  mode)   _or '(Might he al-
                                              ready be dead)?'

(+S)   ±Q   (+I)

(mari-)   ráku   (ahan-guára)   '(What is in
(thing)   query (this in)   this)?'

     4.12. The perfective intra-clause tagmeme is mani-
fested by a perfective expression, which consists of an
obligatory perfective particle plus an optional modifying
clitic. The membership of the perfective particle class in-
cludes úcu, ái, and áwü. Ucu and ái have been found with
the emphatic clitic. Awü has not been found with a modi-
fying clitic. The following examples illustrate the perfec-
tive phrase:

±Per   (+S   +P$_2$)

úcu   (y-   umánu)   '(She is) al-
already   (she die)   ready (dead).'

(±Ins)   ±Per   (+S +P$_2$)

(ya- pú)   ái   (y- úra)   '(By means of it
(it by means of) already (he well)   he is) now (well).'

±Per   (±M   +S +P$_2$ ±Te)

ai-   púra   (úra y- üra cúri)   '(He is) now
already emphatic   (well he well far   (very well).'
        clitic   past
                                 tense)

±Per   (+S +P$_1$ +O   ±Mo)

áwü   (inu- mucanáka ya- mía)   '(They may) al-
already   (they treat   her potential   ready (have
                               mode)   treated her).'

     4.13. The similarity intra-clause tagmeme is mani-
fested by a similarity expression, which consists of an
obligatory substantive expression or stative verb$_1$ plus an
obligatory similarity particle plus an optional modifying

clitic. The similarity class of particles includes two mem-
bers: yá and indíru. The following examples illustrate the
similarity phrase:

+Stative verb$_1$ +Similarity particle

úra   yá   'very well'
good   like

+Substantive expression +Similarity particle

tíma ámuą medikúnu   yá   'not like
not other doctors   like   other doctors'

+Pronoun +Similarity particle ±Modifying clitic

r-   ią   nán   'just like it'
it   like   restrictive

+Similarity particle +Substantive expression

indíru   áwa itikán   'like a man
like   man one-thrown-down thrown down'

    4.14. The manner intra-clause tagmeme is manifested
by an obligatory stative verb$_1$ expression, stative verb$_2$ ex-
pression, manner particle, or stative clause nucleus core,
plus an optional modifying clitic:

+Stative verb$_1$ ±Modifying clitic

úrá-   na   'just good'
good   restrictive

+Stative verb$_2$

ucári   'going'

+Manner particle

yanikáka   'fortunately'

+Stative clause nucleus core

+S   +P$_2$

tá   ucári   'my going'
I   go

4.15. The time intra-clause tagmeme is manifested by
a time expression. The time expression may consist of an
optional modifier plus an obligatory time particle; or it
may consist of an obligatory stative verb$_1$ expression, ac-
tive verb expression, substantive expression, or similarity
expression, plus an obligatory time particle or clitic,
plus an optional modifying clitic:

+Stative verb$_1$ +Time clitic

kanat-	ái	'when it is light'
is light	when	

±Modifying noun   +Time particle

wǘpü	ipíca	'the whole night'
one	night	

+Similarity +Time   ±Modifying
  expression clitic   clitic

r- iá	pukátu-	nán	'when it was just like
it like	when	restrictive	that'

+Substantive +Time clitic

amua	púka	'another time'
other	when	

+Active verb +Time particle

úyu	cakapíri	'after eating'
to eat	after	

4.16. The quantity intra-clause tagmeme is manifested
by a substantive expression:

+Substantive

úpi	'all'
číta	'many'

4.17. The purpose intra-clause tagmeme is manifested
by a purpose expression, which consists of an obligatory
substantive expression plus the obligatory purpose clitic
ra ∞ rán:

+Substantive expression   +Purpose clitic

```
t-úka cá                  rán                'for my roof'
my  roof                  for
```

4.18.   The concern intra-clause tagmeme is manifested
by a concern expression which consists of an obligatory sta-
tive verb$_1$ expression, optional object plus obligatory ac-
tive verb, or substantive expression, plus an obligatory
concern clitic:

+Stative verb$_1$ +Concern clitic

```
kuatiaranyar-   ári                    'concerning writing'
writing         about
```

±0   +P$_1$ +Concern clitic

```
úri   yumuyari-   ári                  'concerning helping
him   help         about                 him'
```

+Substantive expression   +Concern clitic

```
úpi  mári              ári           'concerning every-
all  thing             about            thing'
```

4.19.   The cause intra-clause tagmeme is manifested by
a cause expression, which consists of an obligatory substan-
tive expression plus the obligatory cause clitic íkua plus
an optional modifying clitic:

+Substantive expression   +Cause clitic

```
ra-  mɨm-              íkua                  'because of
his  pet               because                 his pet'
```

+Substantive +Cause clitic ±Modifying clitic

```
r-        ikua         purára               'because of
him       because      emphatic                him'
```

4.20.   The instrumental intra-clause tagmeme is mani-
fested by an instrumental expression, which consists of an
obligatory substantive expression, hesitation particle, or
stative clause nucleus core, plus the obligatory instrument-
al clitic pu ∞ púpü plus an optional modifying clitic:

```
+Substantive    +Instrumental    ±Modifying
 expression      clitic           clitic

ya-pua-         pupü-            nán              'by means of
his hand        by means of      restrictive     only his hands '
```

```
+Hesitation particle    +Instrumental clitic

apú-                    pu                       'by means of
it                      by means of              it'
```

```
+Stative clause nucleus core +Instrumental clitic

+S              +P2

y-    ía    cačí          pu               'by means of
her   heart pains         by means of      a pained heart'
```

4.21. The association intra-clause tagmeme is mani-
fested by an association expression, which consists of an
obligatory substantive expression plus an obligatory associ-
ation clitic:

```
+Substantive expression   +Association clitic

ca-  mümira-             müki               'with my son'
my   son                with

ya-  mirikuá            ndi                'with all his
his family              with all            family'
```

4.22. The direction intra-clause tagmeme is mani-
fested by a direction expression which consists of an oblig-
atory stative verb1 expression, substantive expression, or
location expression, plus an obligatory direction clitic
plus an optional modifying clitic:

```
+Stative verb1    +Direction clitic

amu-             suíka                    'from far away'
far away         from
```

```
+Location particle    +Direction clitic

máka             cúi                      'from where'
where            from
```

```
+Substantive      +Direction   ±Modifying
 expression        clitic       clitic

iruḁka ku̯aračí-   cúi          nán          'after four days'
four    days       from         restrictive
```

4.23. The location intra-clause tagmeme is manifested
by a location expression which consists of an obligatory
substantive expression plus an obligatory location clitic
plus an optional modifying clitic, or which consists of a
location particle:

```
+Substantive   +Location   ±Modifying
 expression     clitic       clitic

ku̯ín ɨwɨ́r-    arí         ya              'on this tree, it is
this tree       on          reportative     said'
```

+Modifying particle

```
yaǘpü                                      'there'
```

+Substantive expression   +Location clitic

```
c-    uká́-                 ka          'to my house'
my    house                to,toward
```

4.24. The intention-movement intra-clause tagmeme is
manifested by an intention-movement expression, which con-
sists of an optional substantive plus an obligatory verb ex-
pression plus an obligatory intention-movement suffix:

+Stative verb$_1$ +IM suffix

```
ukɨri-           tára                   'in order to sleep'
sleep            in order to
```

+Active verb   +IM suffix

```
kamata-          tára                   'in order to (go)
work             in order to             to work'
```

±Substantive +Active verb ±IM suffix

```
señóra           yumita-      tára      'in order to teach
lady             teach        in order to   the lady'
```

±Substantive +Stative verb$_2$ +IM suffix

t-	ucu	tára	'in order for me to
I	go	in order to	go'

4.25. The nominative absolute intra-clause tagmeme is manifested by a nominative absolute expression, which consists of an obligatory active clause nucleus core, stative clause nucleus, or identification clause nucleus core, plus the obligatory nominalizing clitic n:

+Active clause nucleus core +nominalizing clitic

+S	+P$_1$		'(He died) by a witch doctor killing.'
bruhúnu	umanutá	n	
witch doctors	kill		

+Stative clause nucleus +nominalizing clitic

+P$_2$	+S	±As	
ukuatári	íni-	ucú-	n	'when we went walking'
walking	we	go		

+Identification nucleus core +nominalizing clitic

+I	+S		
ahangatína	kuaračí	n	'when the sun is here'
here	sun		

4.26. The appositive intra-clause tagmeme is manifested by a substantive expression, locative expression, similarity expression, intention-movement expression, instrumental expression, and associative expression. Although other manifestations of the appositive tagmeme have not as yet been found, it seems highly probable that any expression which manifests any intra-clause tagmeme may potentially manifest the appositive tagmeme as well. See examples in Sec. 3.

4.27. The vocative intra-clause tagmeme is manifested by a sub-class of substantive words determined by their membership in the vocative tagmeme. The vocative tagmeme indicates vocative or direct address. See Sec. 3 for an example.

FOOTNOTES

[1]Cocama, according to Tessman in the Handbook of South Amer-
ican Indians, 3.60, 687-89 (1948), is a language spoken by
some 10,000 people living largely in Peru along the Amazon
and some of its tributaries. McQuown in "Indigenous Lan-
guages of Latin America" American Anthropologist, 57. 522
(1955), lists Cocama as a member of the Upper Amazon Tupian
Family.
        For a description of the phonemes of Cocama see Faust
and Pike, "The Cocama Sound System", Publicacões Avulsas do
Museu Nacional, Série Lingüística Especial, No. 1, Rio de
Janeiro, 1959, pp. 10-55. [The present paper was written
in 1958-59 in connection with a study program at the Univer-
sity of Michigan and has, unfortunately, remained unpub-
lished until now. Its contribution to our knowledge of
this geographically peripheral Tupian language compensates
for a possible lack of relevancy to current theoretical
questions.]

[2]Janua Linguarum, Series Major XXIV, Mouton & Co., The
Hague, 1967.

[3]The concept of tagmemes-in-matrices used in this paper
follows R. E. Longacre's modification of Pike's tagmemic
theory. This concept is introduced and developed in Gram-
mar Discovery Procedures, Janua Linguarum, Series Minor
XXXIII, Mouton & Co., The Hague, 1964.

[4]One exception to this formula that has been found in the
present data is the occurrence of the far past tense clitic
cúri within the nucleus core following the subject or pred-
icate tagmeme.

[5]One exception to this formula that has been found in the
present data is the occurrence of the far past tense clitic
cúri within the nucleus core following the subject tagmeme.

[6]Only one example has been found to date of the occurrence
of the recipient tagmeme within the identification clause.

[7]The hesitation particle may occur as manifesting a modify-
ing tagmeme in any phrase matrix and indicates hesitation
of the speaker. It is not shown specifically in our regu-
lar formulas, although it can occasionally occur in slots
where the optional presence of particles is indicated.

[8]One informant accepted only the variant cu in this

position; however other informants have given both variants
in what appears to be free variation.

[9]A few others may have to be added to this class. There is
a small number of clitics occurring too infrequently in our
corpus to allow us to determine whether they belong in the
modal or in the tense class.