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SANIO-HIOWE PARAGRAPH STRUCTURE

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Sanio-Hiowe[1] is spoken south of the Sepik River in the West Sepik
District of New Guinea. It is a member of the Sepik Hill language
family (Dye, Townsend, and Townsend 1968), which consists of fourteen
culturally homogeneous and related languages in the foothills of the
Central Range from the Karawari River Tributary of the lower middle
Sepik to the Leonard Schultze River tributary of the upper middle Sepik.
Approximately 1000 people speak the two major dialects of Sanio-Hiowe,
scattered along the banks and foothills of the April, Wogamous, and
Leonard Schultze drainages. Sanio is spoken along the lower reaches of
the Wogamous River and its tributaries and the upper reaches of the
April River. The Hiowe dialect is spoken along the upper reaches of
the Wogamous River and its tributaries and the upper reaches of the Leo-
nard Schultze River.

PARAGRAPHS

A paragraph in Sanio-Hiowe procedural discourse may be defined as a
series of subordinate and co-ordinate clauses with temporal unity;
relative to a common theme or topic. I am limiting my discussion of
Sanio-Hiowe paragraph structure to procedural discourse, since the para-
graph structure in procedural discourse is more clearly defined than
that of other types of discourse. Their structure is related to pro-
cedural paragraph structure, but lacks the rigidity of the procedural
paragraph.

Non-initial paragraphs in a procedural discourse are each marked at
the beginning by a change in the time setting. In the initial paragraph,
however, time orientation does not go beyond a relative starting point

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such as tu *'first'*, and is optional. The following example illustrates
the use of tu to begin a procedural discourse.

> TU ru ta'uwerowo *(FIRST men gather-together)*
> *'First the men gather together.'*

TU indicates that this is the first event in a series of events. When
the time is absent, the verbal title or the first event indicates the
relative time of the discourse.

> ERI TOROWO, HARE FOURI ERI. eri torowo, hare fouri osoa'i.
> *(basket-trap weave-procedural, fish mouth-of-stream basket-trap.*
> *basket-trap weave-procedural, fish mouth-of-stream small.)*
> *'Weaving a fish trap for the mouth of a stream. Weave a fish trap,*
> *one for the mouth of a small stream.'*

The title *'weaving a trap for the mouth of a stream'* sets the relative
time of this procedural discourse: How to weave a basket for a small
stream. [First] you weave a basket.

TERMINATORS

Paragraph boundaries are determined by the intersection of four
obligatory features. First, the end of a paragraph is marked by a
terminator word or by verbs with continuous or durative endings. The
terminator word papa ∿ pape *'end'* is used to terminate a discourse, but
occasionally is also used to terminate paragraphs at the end of epi-
sodes within a narrative discourse. (Episodes in a narrative discourse
are larger sections with a re-orientation of participants.)

> PAPE pa ape ta'u *(end this itself)* *'This is the end.'*

In this example pape is used to terminate a discourse. It does not
necessarily have to be the last word in the discourse, but rather comes
in the sentence that terminates a discourse.

> ru eiwawe tapa'asisawi. pate PAPA piye peri ta'ama. sosu a'i pe...
> *(men same finish-went. this end what talk negative. then just*
> *setting-marker...)*
> *'The same finished and left. It is the end. There is no more talk.*
> *Then...'*

papa may be combined with a terminating verb, as above papa comes in
the last sentence and the tapa'asi *'finish'* in the next to the last sen-
tence.

The terminator words also include the verbs tapa'asi *'finish'*,
po'ute *'finish'*, and aru *'stop'*. tapa'asi is the most frequent termi-
nator verb. It is used to terminate processes or procedures in which

the patient is being affected. po'ute on the other hand, terminates actions in which the agent is acting. aru seems to be in free fluctuation with both tapa'asi and po'ute terminating both processes and actions.

Terminator verbs are used to terminate events at two levels. If the terminator is separated from the main string of simple verbs by enclitics and has its own enclitics, it terminates the action or procedures of the complete paragraph. If however, the terminator verb is a part of the string of simple verbs with no intervening enclitics, it terminates only the action or process that is covered within the verb string. As mentioned, terminating verbs may be followed by a sentence in the same paragraph that contains the terminator word papa.

> ...taune apomo none ti-nau none tai-nau tapa'asi-rowo
> *(women these give go-continuative give come-continuative finish-procedure)*
> *'They gave these to the women one by one until finished.'*

Since tapa'asi-rowo is separated from none tai-nau by the ending -nau *'continuative'*, and has its own endings without a stem repetitive link adjacent to the terminator, it terminates the entire paragraph of which *'giving out'* is the last action.

> ...hariyo tahei fu noeinoei-rowo aru-rowo
> *(vine pullup put properly-procedure stop-procedure)*
> *'They pulled up the vine properly and stopped.'*

Since aru-rowo is separated from the main verb cluster tahei fu noeinoei-rowo by the suffix -rowo and has its own endings, aru-rowo not only completes the *'pulling up'* but all the ceremony before.

> sosu a'i pe yo tapiye yehe se o arawi asi-roawe opai-roawe eniyato-rowo eniya-tapa'asi-rowo
> *(then just settingmarker particle stone fire in cut break pile-proceduralpast cookstones-proceduralpast eat-proceduralpresent eat-finish-proceduralpresent)*
> *'Then they put the stones and broken firewood on the fire and cooked the stones. They ate and ate until finished.'*

tapa'asi is connected directly to the verb stem eniya- and shares the same procedural ending -rowo. It therefore terminates only the repetitive linked stem *'eat'*.

> eri heri-ye eri heri-ye heri-tapa'asi-ye
> *(trap hang-past trap hang-past hang-finish-past)*
> *'They hung the traps until finished.'*

ta'ane-na-we ta'ane-na-we ta'ane-tapa'asi-ye
(work-continuative-past work-continuative-past work-finish-past)
'work and work until finished'

These examples also illustrate the use of a terminator connected to the main stem to terminate the one process.

The durative aspect expresses an action in which the results endure for a period of time. The continuative aspect expresses the continuation of the action itself. Both aspects can be used to indicate the end of a paragraph. Continuative and durative aspects are expressed in two ways. The normal way is to use the continuative or durative endings. The other way is to repeat the stem together with all other endings it may have. Degrees of duration or continuation are suggested iconically by the number of repetitions.

nomo ta mo'o teiteye teitiye
(we ourselves behind stayed and stayed)
'We stayed and stayed behind.'

INTONATION

The second feature for determining paragraphs is falling and fading pitch on the last word of the paragraph. Falling and fading pitch on an independent clause, symbolised by a period, separates sentences. Rising or level pitch on the last word of a clause, symbolised by a comma, indicates that the clause is dependent and non-final in a sentence. When a sentence ends with falling and fading pitch and the other three features for determining paragraph breaks are also present, a paragraph break follows.

ABSENCE OF LINKAGE

The third feature for determining paragraph boundaries is the absence of linking across paragraph boundaries. The linking system, which exists only within the paragraph, links previously stated old information with new information. This new information is in turn repeated to become the link to further new information.

KRISMASI TA SARO URIYE. KRISMASI TA SARO URIYE, teitiye sosu a'i
   masta NOMO EIMAWIYE pranteisin. NOMO EIMAWIYE, nomo ta apo inawe.
(Christmas one here was. Christmas one here was, remain then just
   boss us sent plantation. us sent, we ourselves it went.)
'We were here for one Christmas. We were here for one Christmas;
   then the boss sent us to the plantation. He sent us; we went to it
   going continuously.'

```
ai sosu a'i pe omo YAPUTAWI IYEIYE.  YAPUTAWI IYEIYE, omo ru se
   ta'ama.
```
(OK then just particle mountain Yaputawi went-on-top. Yaputawi went-
on-top, mountain men at negative.)

'Then I went on top to Mount Yaputawi. Having gone to Mount Yaputawi,
I found no one there.'

Not all sentences within a paragraph are linked as such; but those
sentences which are linked cannot be in different paragraphs. Linking
within a paragraph identifies co-ordinate and subordinate information.
The link itself becomes a clue for co-ordinate information; the lack of
linkage indicates information subordinate to the last stated term of co-
ordination. Co-ordinate information is information of equal weight or
parallel to each other; subordinate information is supplementary to the
most recently uttered clause that was linked. sosu *'then'* within a
paragraph may also be used to mark co-ordination in the same way in
which linkage does, by returning from supplementary information to the
main train of thought.

```
tu ru ta'uwerowo
```
'first men gathertogether'

```
ru ta'uwerowo
```
'men gathertogether'

```
     taune so'oru ta'ama
```
'women understand not'

```
     taune ta amou
```
'women themselves taboo'

```
     taune so'orusu, hare aniroata
```
'women understandif, fish get-not-able'

```
ru ta'uwerowo
```
'men gathertogether'

```
     erese'ene mitaru a'i rai hariyo taheirowo.
```
'secretly men just themselves vine pull-up'

```
     hariyo taheifunoeinoeirowo
```
'vine pull-up-put-properly'

```
         arurowo.
```
'stop'

```
temitaiyerowo, poiye ape si a'i peyu
```
'sleep-till-morning, day this just setting-marker'

The linking system is also used to mark interpolations. Interpolations can be background information that throws light on the theme of the paragraph, or an explanation of an oddity, or a more detailed account of some generic statement, or an afterthought. Linking marks the return from the interpolation to the main train of thought by repeating the clause or word that preceded the interpolation. This type of linking could be called a resumptive link, in that the speaker recalls the point of departure and proceeds with the discourse.

> RU TA'UWEROWO. taune so'oru ta'ama. taune ta amou. taune so'orusu, hare an¹roata. RU TA'UWEROWO erese'ene mitaru a'i rai hariyo taheirowo. hariyo tahei fu noeinoeirowo arurowo.
> *(men gather-together. women know not. women themselves taboo. women know-if, fish get-not-able. men gather-together secretly men themselves vine pull-up-procedure. vine pull-up-properly-procedure, stop-procedure.)*
> *'The men gather together - the women do not understand. It is taboo for women. If a woman should know, the men would not be able to get fish - the men gather together secretly and pull up the vine. Having pulled up the vine, they stopped.'*

The boundaries of the embedded background interpolation are marked by RU TA'UWEROWO initially, and finally by the same expression repeated following aniroata. The interpolation is bracketed between these two expressions.

> NOMO tase, pure ane masta, sosu ta'aipomo ate yaputawi iyeiye yakoweine wiyemoro yakowei apene, NOMO fi.
> *(we one-day, Pure, I, boss - oh Ta'aipo-family yaputawi go-on-top celebration Wiyemo's celebration this. we went.)*
> *'One day we, Pure, I, and the boss - oh, Ta'aipo and his family had gone on top to a celebration at Yaputawi. This was Wiyemo's celebration - we went.'*

The narrator interpolates an explanation why the party included three individuals rather than the usual four. After defining NOMO by enumeration, he surrounds this interpolation by the defined NOMO and the resumptive NOMO following apene.

> MASTA SIONE HENETIMOWE. ta sa'i tapiwe se apo atowe. re'iyei omo se apo irapu meni ta re'iyei hesi nasiero sowano meni ta paru meni ta kora nomo ta apo fi. MASTA SIONE HENETIMOWE. henetimowe nomo ta angoru uretiye.
> *(MR JOHN PICK-UP. some water on these pick-up Re'iyei Mount on these, Irapu man one, Re'iyei two, Nasiero Sowano man one, Paru man*

one Kola, we ourselves these went. MR JOHN PICK-UP. we ourselves
Angoru was.)

'Mr John picked us up - some on the Tapiwe River. At Re'iyei these.
At Irapu one man, at Re'iyei two men. One man at Sowano. It was
Nasiero. At Paru one man. It was Kola. We all went. Mr John
picked us up. Having picked us up, we stayed at Angoru.'

Again the explanatory interpolation, surrounded by the identical expres-
sions, give detail defining whom Mr John picked up where.

teisin henerimowe, esi ape WESI a'i TA'ANETIYE, papa'ua'i. WESI
  TA'ANETIYE me'iye siye.

(station arrive-go, morning this house just work, rotten. house
  work ridge cap.)

'We arrived at the station. In this morning we just worked on the
  house. (It was rotten.) We worked on the ridge cap of the house.'

In this example the afterthought papa'ua'i tells why they had to work
on the house.

SETTING CHANGE

The fourth feature for determining paragraph breaks is the use of the
change in the time setting. A new (that is, non-initial) paragraph must
begin with a change in the time setting. Time settings can be any of
the following types. The most frequent is sosu a'i pe 'next' in a
series of events. Others include sosu 'then', mane sosu a'i pe 'all
right next', sosu a'i pe mo'o 'next afterward', and any change in day
with a durative aspect such as temi-taiyerowo 'sleep-till-dawn-proce-
dure'. sosu a'i pe is the normal form; sosu carries the same meaning
with less intensity. mane sosu a'i pe carries the same meaning as sosu
a'i pe but with maximum intensity. This form occurs around the climatic
portions of a discourse. sosu a'i pe mo'o 'next afterward' is used to
indicate that the following event is closely related in time to the
previous event.

sosu erowa, fara'une hariyo owaine. fau hare rai siyepo'utowa.
  sosu a'i pe oweirainau tewina oweirainau owerainau owerainau...

(then said (level pitch), "that's enough vine prohibit-beat (fall,
  fade). already fish downstream I-saw. then down-come-continuative
  shoot-continuative down-come-continuative down-come-continuative
  down-come-continuative...)

'Then he said, "That's enough; don't beat the vine. I have seen the
  fish down stream already."
      Then they came down shooting continually.'

The above example demonstrates the presence of all four features at a paragraph break. The first clue is the terminator verb po'utowa, which terminates the last reported action siye *'look'*. The intonation drops and fades on the determinator indicating a sentence break and possible paragraph break. Since there is no repetitive linking between the two sentences in question, the third feature is present. Finally, the change in the time setting begins the second sentence. Therefore the old paragraph ends with siyepo'utowa, and a new paragraph begins with sosu a'i pe.

> hare marefe hare pesi hare paire hare pamo piyareonuweine, sosu a'i
>   peyu tewi ta'uwe-tinau tapa'asirowo. sosu a'i pe si iyatuiyei-
>   rainau. hariyo ainiyei sahe...
> *(fish MAREFE fish PESI fish PAIRE fish PAMO killed place-future, then*
>   *spears gather-together-continuative finish-procedure. then back*
>   *pole-on-top-come continuative vine beat at.)*
> *'We will kill these fish: marefe, pesi paire and pamo. We will*
>   *gather them all together until finished.*
>   *Then we will go back to the place where we will beat the vine.'*

Looking through the data for the first category of paragraph boundary phenomena, we notice the terminator verb tapa'asirowo finishing the event of killing and gathering the fish. We notice also that falling and fading pitch occurs on the terminator. The lack of a repetitive link across the two sentences in question fulfills the third feature. Finally, a new time setting change sosu a'i pe *'then'* follows the terminator verb tapa'asirowo. Since all features intersect at this point, a paragraph break has been found between tapa'asirowo and sosu a'i pe.

> taune ta'u titanenaro pasiyepo'uterowo, sosu mitaru etomo piye ta
>   ani peiye apenawawere.
> *(women themselves waited night-finish-procedure (rise pitch), then*
>   *men these what themselves get question.)*
> *'The women themselves waited through the night, then asked what*
>   *these men were doing.'*

In this portion of discourse there is one terminator verb siyepo'uterowo. Instead of falling and fading pitch, the intonation rises on the terminator, indicating a dependent clause. There is no repetitive link between the two clauses in question. Following the terminator, there is a time setting change. Since only three of the four features intersect, we cannot find a paragraph break at this point.

NOTES

1. The field work for this paper was done in the village of Wourei on the Wogamous River in the Hiowe dialect. The stories gathered were taken from a number of informants both young and old, from October 1968 through January 1971. The analysis was done under the auspices of the New Guinea Branch of the Summer Institute of Linguistics, during a workshop partially funded by National Science Foundation Grant GS-3180 and supervised by Joseph E. Grimes.

Sanio-Hiowe consonants phonemes are /p, t, k, ' (glottal stop), f, s, h, m, n, r (tap), w, y/. Vowel phonemes are /i, e, ε, a, u, o/. I write the /e/ as ei and the /ε/ as e.

REFERENCES

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            39:2 (December 1968).

SANIO-HIOWE VERB PHRASES

SANDRA C. LEWIS

Sanio-Hiowe[1] is spoken south of the Sepik River in the West Sepik
District of New Guinea. It is a member of the Sepik Hill language
family (Dye, Townsend, and Townsend, 1968), which consists of fourteen
culturally homogeneous and related languages in the foothills of the
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the Wogamous River and its tributaries and the upper reaches of the
April River. The Hiowe dialect is spoken along the upper reaches of
the Wogamous River and its tributaries and the upper reaches of the
Leonard Schultze River.

The Sanio-Hiowe verb phrase is made up of one or more verbs, verb
clusters, and optional auxiliaries. All the verbs in a verb phrase, ex-
cept the aspectual ones, take place in a sequence in time, and their in-
clusion within a single verb phrase signifies that there are no gaps in
the time sequence.

opai onu aru we *(cook sit stop past)* 'Cooked it and set it down.'

ati owei te na we *(load down plural continuative past)* 'Loaded the
canoe and went down.'

isau wa'are heri na ti *(grab carried hangup continuative perfect)*
'Grabbed it, carried it, and hung it up.'

onu wanu na we *(sit listen continuative past)* 'Sat down and listened.'

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ACCENTUAL QUALITIES

Each verb, auxiliary, or auxiliary compound within the verb phrase is accented. If the verb phrase is dependent, there is a rising or level pitch, symbolised by a comma. If the verb phrase is independent, there is a falling and fading pitch, symbolised by a period. When two verb phrases fall adjacent to each other, they form two clauses. Certain auxiliaries can be made into compound auxiliaries. These are aspects ro, na combined with tense, the causal mo before tense, and the emphatic te combined with the equative ne. These compounds have accents only on the first syllable; accent is therefore symbolised only in this set of examples.

'teine 'pasiye 'mo-we, 'tei 'wa 'te *(poundsago night causal-past, sleep present plural)* *'As a consequence of pounding sago at night, we will sleep here.'*

'eimawi-ye 'ta'ase 'na-we, 'ta'ase 'ani-ye *(senttoget-past cook continuative-past, cook get-past)* *'He sent me to get it and we cooked it and cooked it.'*

'tewi 'tawesi 'eiwawiyei-ye *(shoot bind thisway-past)* *'Shot and tied it in this way.'*

'tahei 'fu 'noeinoei 'ro-wo, 'aru 'ro-wo *(pullup put properly durative-conjunction, stop durative-conjunction)* *'Pull it up and put it aside properly, then stop.'*

AUXILIARIES

There are two types of auxiliaries. One group occurs phrase initial and the other group occurs phrase final.

The auxiliaries that precede the verbs are imperative, jussive, and prohibitive modes. In the narrative texts examined these only occur as quotations. However, they are also common in conversations.

The imperative is fu:

fu ani asi *(imperative get load)* *'Get these things and load the canoe!'*

fu atati onu ro-wo *(imperative goaround sit durative-conjunction)* *'Go around and sit down!'*

The jussive fa is a third person imperative. It can be translated *'let him'*:

fa fu owei r-ai *(jussive put down come)* *'Let him come down and put it!'*

fa howei r-i *(jussive sleep go)* 'Let her go sleep!'

fa howei yo *(jussive sleep vocative)* 'Let him sleep!'

The prohibitive is o. The imperative can never occur with the negative because o takes the place of a negative imperative.

o ani-ye *(prohibitive get-past)* 'Don't get it!'

o aiwawi asi ro-we *(prohibitive thisway load durative-past)* 'Don't load the canoe in that way!'

o fu fariari-ye *(prohibitive put lie-past)* 'Don't lie about putting it!'

The auxiliaries that come after the last verb of the phrase state plurality, tense, negation, question, equative, pre-requisite, causal, verbaliser, and vocative. All auxiliaries have their own accent except the ones that form compounds.

There are seven ordered sets of final auxiliaries.

I	II	III
te *'pluraliser'*	ro *'durative'*	ye ∿ we *'past'*
	na *'continuative'*	ya ∿ wa ∿ Ø *'present'*
	mo *'causal'*	yei ∿ wei *'future'*
		wo *'conjunction'*

IV	V
su *'conditional'*	ta ∿ ata ∿ ta'ama *'negative'*
asu *'probable conditional'*	awere *'question marker'*
te *'emphatic'*	

VI	VII
ne *'equative'*	se *'nominaliser'*

The auxiliary te states that the subject of the action is plural. This always comes after the last verb in the phrase. It is homophonous with te which is emphatic, but occurs only after the stem.

ahowa tase pe uwei ere te na-we *(no oneday settingmarker walk carefully continuative-past)* 'We walked around carefully for some time.'

ai atu te na-we *(cross fight plural continuative-past)* 'The men were fighting cross.'

asi owei te na-we *(load godown plural continuative-past)* 'We loaded the canoe and went down.'

The tense auxiliaries act differently from the other auxiliaries because the same ones can also be verb suffixes. When they are verb

suffixes they are not in compounds, do not have their own accent, and are not followed by a pause. These will be discussed later under verbs. The auxiliary tense is either accented or in a compound. Except for a few exceptions in auxiliaries the y occurs after front vowels and the w elsewhere.

The past tense auxiliaries are ye ∿ we:

wanu we *(hear past)* 'heard it'

atati uto we *(around down past)* 'went around and down'

ani asi na-we *(get load continuative-past)* 'Got it and loaded it.'

wei ∿ yei are future tense auxiliaries:

piyare onu wei ne *(kill sit future equative)* 'the fish will be killed and set aside'

ani nehi ti na-wei *(get find go continuative future)* 'I will find him and go'

nehi yei ne *(find future equative)* 'will be found'

siye yei ta'ama *(see future negative)* 'will not see'

ya ∿ wa ∿ Ø are present tense markers:

eine to wa *(sagopudding turn present)* 'makes sago pudding'

itero wa *(quickly present)* 'goes quickly'

ta'ase ya *(cook present)* 'he cooks'

There are two aspect auxiliaries, ro *'durative'* and na *'continuative'*. Durative is an action that is completed over a period of time. Continuous, on the other hand, is a single action repeated over a period of time. These can also be verb suffixes in which case they have no accent of their own.

ei ro ata *(say durative negative)* 'not able to say'

ani asi ro wo *(get load durative conjunction)* 'get and load and...'

ani sutaite ro wa *(get carry durative present)* 'getting and carrying her'

There are two negative auxiliaries, ta ∿ ata ∿ ta'ama. ata occurs after ro and ta occurs before ne within a quotation. ta'ama occurs elsewhere.

nomo so'oru ta ne *(we know negative equative)* 'we don't understand'

ainei ye ta'ama *(fight past negative)* 'did not fight'

ute ye ta'ama *(down not fall down)* 'didn't fall down'

noeinoei ta'ama *(properly negative)* 'not properly'

siye ri ro ata *(see go durative negative)* 'can't go look'

iyei rai ro ata *(ontop come durative negative)* *'is not able to come on top'*

The auxiliary awere is placed after interrogative phrases. Unlike the English question intonation, it is used after both *'yes'* and *'no'* questions and phrases with interrogative words.

eiworo urei yei awere *(who stay future question marker)* *'Who is staying?'*

peri ei awere *(talk say question marker)* *'Is he talking?'*
piye ne fi awere *(why you go question)* *'Why did you go?'*
fai awere *(come question)* *'Did he come?'*

The emphatic te intensifies the action:

mei eite towesi yei su ru mase aine tera'e yei ne te ne *(tree this break future conditional men with strike kill future equative emphatic equative)* *'If this tree breaks it will kill the men.'*

taune nau fu te *(women sago put emphatic)* *'The women put it in the sago.'*

nomo ta nau taine pasiye wa te *(we ourselves sago pound night present emphatic)* *'We are pounding sago during the night!'*

The equative auxiliary ne indicates that the second item is appositional or descriptive.
fara'u ne *(all-right equative)* *'it is all right'*
amou ne *(taboo equative)* *'it is taboo'*
iyei ta'ame ne *(ontop negative equative)* *'it is not on top'*

The prerequisite auxiliaries are asu and su. asu is probable conditional and can be translated *'when'*. su is conditional and can be translated *'if'*. This phrase is a prerequisite to what happens in the next clause.
so'oru su *(know prerequisite)* *'if the women know...'*
towesi yei su *(breaks future prerequisite)* *'if the tree breaks...'*

efariyaiye ro asu *(redhot durative prerequisite)* *'when the stones are red hot...'*

aiye ro asu *(come durative prerequisite)* *'when he comes...'*

The auxiliary mo is causal. It indicates that the phrase that follows the phrase with mo is the consequence of the first. The phrase with mo is always dependent.

arawi mo we haiye piyariye meni eite to ani opai ani ere mo we *(break consequence past fern piyariye man this cut get cook get carefully*

consequence past) *'He broke off leaves and then this man Piyariye cut and heated stones and carefully laid them aside...'*

to ani opai ani ere mo we nau seya'u eite hi yaro sa wi *(cut get cook get carefully consequence sago seya'u this down there it went.)* *'He cut and carefully cooked the sago seya'u consequently put it down below.'*

netai mo we onu kohuneti yo irowe matiye *(shoot consequence past sit noise past bird* matiye) *'He shot the bird* matiye *and consequently the noise made the bird fall.'*

The auxiliary se is used to verbalise a noun or adjective.

ahowa ta mo pe ta'oriyei se *(no some plural setting-marker lazy verbaliser)* *'No, some were lazy.'*

ta ate haiye homai yei ariari se *(some this leaves break future lie verbaliser)* *'Some lied and said they were going to break off leaves.'*

ta sase fu wei ariari se i wo *(some hook put future lie verbaliser go present)* *'Some lied and said they were going to place fish hooks.'*

nomo i ti se kanakana sato tei na we *(we go perfect verbaliser bushman here stay continuative past)* *'We went, the bushman stayed.'*

yo ∿ wo are vocative. They are put on the end of all verb phrases when they are trying to communicate over a distance. yo is used before front vowels and wo elsewhere. This is homophonous with wo which is a conjunction.

ei ye, i yo *(said past go vocative)* *'He said, Go!'*
ei ye, fene i yo *(say past, you go vocative)* *'He said, You go!'*
wei yo *(wait vocative)* *'Wait!'*

The conjunction auxiliary wo is always attached to ro and can be translated *'and then'*. This is most common in procedural discourse.

ani asi ro wo *(get load durative conjunction)* *'Get it and load it and then...'*

eine fu atati onu ro wo *(sago pudding direction around sit durative conjunction)* *'The sago pudding was taken around and then...'*

tu ru ta'uwe ro wo *(first men gathertogether durative conjunction)* *'First the men gather together and then...'*

wesi ta'ane noeinoei ro wo *(house work properly durative conjunction)* *'Work the house properly and then...'*

ASPECTUAL VERBS

When the last verb in the sequence is aspectual, i.e. motion verbs,
tei *'perfect'*, tapa'asi, po'ute, or aru *'terminators'*, the entire pre-
ceding sequence is included in the scope of the aspect.

If the motion aspect r-ai or r-i *'come'* or *'go'* respectively is the
final verb and the motion is not mentioned in the previous phrase, the
sequence is the purpose of the motion. Other motion verbs can be put
in this position also but they have no prefix on them.

> wanu we, ei na r-ai *(hear past, say continuative purpose-come) 'When
> we heard, we came to tell them.'*

> temeniyei ye omo ta'i siye uwei ye ta'ama *(die past mountain one see
> walk past negative) 'The man died we did not walk around to tell just
> one place.'*

If the final verb is the aspectual motion r-ai or r-i and the action
is mentioned in the previous verb phrase, then the actions in the se-
quence happened simultaneously with the motion.

> nomo ta'u fai. te'e na r'ai *(we ourselves came. talk continuative
> simultaneous-come) 'We came. We talked as we came.'*

> owei r-ai wa. iyatu r-ai *(downstream simultaneous-come. pole simul-
> taneous-come) 'We came downstream. We came poling.'*

> fai. sa'i tone r-ai. nomo siye na r-ai *(come. water cross simul-
> taneous-come. we see continuative simultaneous-come) 'We came. We
> came crossing the water. We saw it as we came.'*

The final verb can be ai *'come'* or i *'go'* with a t- prefix. In this
case it is just a sequential phrase.

> none t-i nau *(give sequence-go continuative) 'We gave it, it went.'*

> nehi atati t-i ye *(find around sequence-go past) 'We found it, we
> walked around and we went.'*

> koroka atahe fi, fi, nomo ta kare sahe nihe tei t-i na we *(went we
> ourselves car in eye sleep sequence-go continuative past) 'Went close
> to Goroka, we slept and came to Goroka.'*

If the last verb in the sequence is the aspectual tei *'perfect'* the
action of the sequence of verbs is complete but its results continue.

> onu tei ye *(sit perfect past) 'We sat down'*

> anite tawesi tei ye *(got-it held-it perfect past) 'We got it and
> held it'*

siye tei ye ne *(see perfect past equative)* *'We looked at it'*

If a terminator aspect tapa'asi *'finish'*, po'ute *'finish'* or aru *'stop'* is the last verb, the action of the entire phrase is terminated.

Terminator verbs are used to terminate events on two levels. If the terminator is a complete verb phrase in itself, with no other verbs in the phrase, then the whole paragraph of which it is a part is terminated. If, however, the terminator is the last simple verb and is linked to the previous verb by the repetition of that verb, it terminates only that action included in the link.

arauwi tapa'asi ye *(split finish past)* *'finish splitting the wood'*
ta'ane tapa'asi ye *(work finish past)* *'finish doing it'*
hu tapa'asi ye *(wash finish past)* *'finish washing it'*

po'ute is used to complete an action:
siye po'uti ye *(see finish past)* *'finish looking'*
howei po'uti ye *(sleep finish past)* *'finish sleeping'*
ta'ane po'uti ye *(work finish past)* *'finish working'*

aru seems to be used in free fluctuation with both tapa'asi and po'ute:
opai onu aru we *(cook sit stop past)* *'cook it and set it aside'*
fu aru na ti *(put stop continuative perfect)* *'put aside'*
howei yaru we *(sleep stop past)* *'finish sleeping'*

VERBS

The verb is made up of a verb stem which may or may not have affixes.
The verb stem itself can be a variety of things, i.e. verb roots, directionals, verbalised nouns and qualifiers.
The verb roots are action words.
i-ye *(go-past)* *'went'*, ai-ye *(come-past)* *'came'*, onu *'sit'*, sineti-ye *(stand-past)* *'stood'*, te'e *'talk'*, eniai-ye *(eat-past)* *'ate'*, uwei *'walk'*, howei *'sleep'*, siye *'see'*, itero *'run'*.

The verbs can have past tense and aspect suffixes. These are homophonous with the tense and aspect auxiliaries. However, as suffixes they do not have their own accent and are not followed by a pause.

isau-we au fu we *(grab-past directional put past)* *'he grabbed it and put it up'*

o-we onu we *(cutit-past sit past)* *'cut it and set it down'*

owei-ye t-ai *(godown-past sequence-come)* *'we went down then came'*

toti-nau tapa'asi ro wo *(think-continuative finish durative-conjunction) 'thought then finished'*

The directionals and qualifiers are verbs, but they can also modify another verb and form verb clusters.

The directionals in a verb cluster are always placed before the verb that they modify. These directionals can also occur without another verb following.

atati uto we *(around down past) 'came around and down'*

iyei r-ai nau *(ontop come continuative) 'come on top'*

itero owei r-ai wa *(quickly down come present) 'he is coming down quickly'*

wi r-ai *(inside simultaneous-come) 'come inside'*

There is another type of directional that is different in that it is also a verb root. fu *'put'* as a directional means *'away from the speaker'*. This is homophonous with the imperative auxiliary fu. ani *'get'* as a directional means *'toward the speaker'*, au *'give'* as a directional means *'toward something else'*. These directions must occur before another verb.

fu asi ye *(from speaker load past) 'load the canoe'*
ani ta'o we *(towardspeaker breakoff past) 'break off'*
ani he'ei ye *(towardspeaker fasten past) 'close the door'*
au koko tei ye *(towardspeaker split perfect past) 'split the wood'*

The qualifying verb in a verb cluster comes after the word it modifies or it can be a verb itself.

ta'ane noeinoei ro wo *(work good durative conjunction) 'do it well'*

tawesi no'o ti ye *(carry futilely perfect past) 'carried her but it didn't do any good'*

ti fesi'i yei *(fasten securely future) 'will close the door securely'*

nowe pasiyei ye *(time night past) 'night came'*

sa is a reversal that occurs only before the final motion verb i *'go'*. It shows that the object of the first part of the phrase is performing the action of the motion and is departing from the subject of the first action.

siye po'ute sa wi *(see finish reversal go) 'we saw it already and it went'*

fu sa wi *(put reversal went)* *'threw it'*

ani tahei fu sa wi na ti *(towardspeaker pullup put directional go continuative perfect)* *'pull up and throw it away'*

po'ute sa wi ro wa *(finish reversal go durative present)* *'We will finish and it will go.'*

NOTES

1. The field work for this paper was done in the village of Wourei on
the Wogamous River in the Hiowe dialect. The stories gathered were
taken from a number of informants both young and old, from October 1968
through January 1971. The analysis was done under the auspices of the
New Guinea Branch of the Summer Institute of Linguistics, during a work-
shop partially funded by National Science Foundation Grant GS-3180 and
supervised by Joseph E. Grimes. The same grant covered computer proces-
sing of a concordance of Sanio-Hiowe texts at the University of Oklahoma
Computer Laboratory.

Sanio-Hiowe consonant phonemes are /p, t, k, ' (glottal stop), f, s,
h, m, n, r (tap), w, y/. Vowel phonemes are /i, e, ε, a, u, o/. I
write the /e/ as ei and the /ε/ as e.

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    1968   "The Sepik Hill Languages: a preliminary report". *Oceania* 39:2 (December 1968).

COMPUTER PROCESSED CONCORDANCE OF SANIO-HIOWE TEXTS

    1971   Processed at the University of Oklahoma Computer Laboratory, funded by National Science Foundation Grant GS-3180. March 1971.

ORIENTATION TO SPACE AND PARTICIPANTS IN ANGGOR

SHIRLEY LITTERAL

0. INTRODUCTION

The first section of this paper deals with Anggor[1] orientation to space. In the first part of this section I describe the directional adverbs and the framework in which they operate. The second part lists the motion verbs which are a part of this directional system, and the third part discusses how these verbs of motion are used to establish setting in discourse.

The second section of the paper is about the orientation of participants in Anggor. The three parts of the section cover change of subject chaining, scope, and the use of a change particle in discourse.

1. ORIENTATION TO SPACE

1.1. *DIRECTIONAL ADVERBS*

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The eight directional adverbs used to pinpoint directions in situational contexts come in proximal-distal pairs. The distinction is relative, the choice of 'near' or 'far' being made in relation to other places and things. When speaking of a very far village, for example, other villages are 'near' by comparison.

There are three factors besides distance to consider in choosing which of the eight forms to use: the slope of land, the direction of river flow, and the direction of the sun. At Bibriari village, where my informant lives, proximal ŋggaha[2] and distal ŋggahɨ mean *'up'* in relation to each of the three factors: *'up hill'*, *'upstream'*, and *'up where the sun sets'*. In the same way proximal giba and distal gibɨ mean *'down'*: *'down hill'*, *'down stream'*, and *'down where the sun comes up'*. Because of the lay of the land at Bibriari, there is no conflict among these factors and no difficulty in assigning a directional adverb to a specific area. The village is on a ridge. The area to the west is mountainous, while the east is low. The Nonggwanof stream runs from north to south but 'upstream' still corresponds with 'up hill' because the ridge the village is on is parallel to the stream and slopes up in the north, down in the south. Therefore one could say that ŋggaha covers the half hemisphere from the sunset to the sunrise in the north. All this area is high, ŋggaha; the north is upstream, ŋggaha; and the west is where the sun sets, ŋggaha. giba then, covers the half hemisphere from the sunrise to the sunset in the south. All this area is low, giba; the sun rises, giba (see Figure 1 on opposite page). If a man stands facing the sunrise at Bibriari, ŋggaha is all of the area to his left, up hill, and upstream, as well as straight behind where the sun sets. giba is all of the area to his right, down hill, and downstream, as well as straight ahead where the sun rises. At Bibriari ŋggaha *'west'* and giba *'east'* do not quite coincide with ŋggaha *'upstream'* and giba *'downstream'*. It is possible that these terms developed in a place where the sun set up river, over mountains.[3]

When taken to different land formations my informant was slow to pick words to describe each direction. In the Eastern Highlands he had little trouble using ŋggaha for both *'sunset direction'* and *'high'* as the sun still set behind the high ground; however, the river ran in the opposite direction from the one at his village and the north was low rather than high ground. Therefore as he stood facing the sunrise in this place, to his left was giba *'down, downstream'*, to the right ŋggaha *'up, upstream'*, rather than the opposite as at his home.

In the Philippines, on Mindanao, where I also had him try to tell directions, he was again confused at first. Here the river ran north to south as in his village, putting giba in the south, but this time the
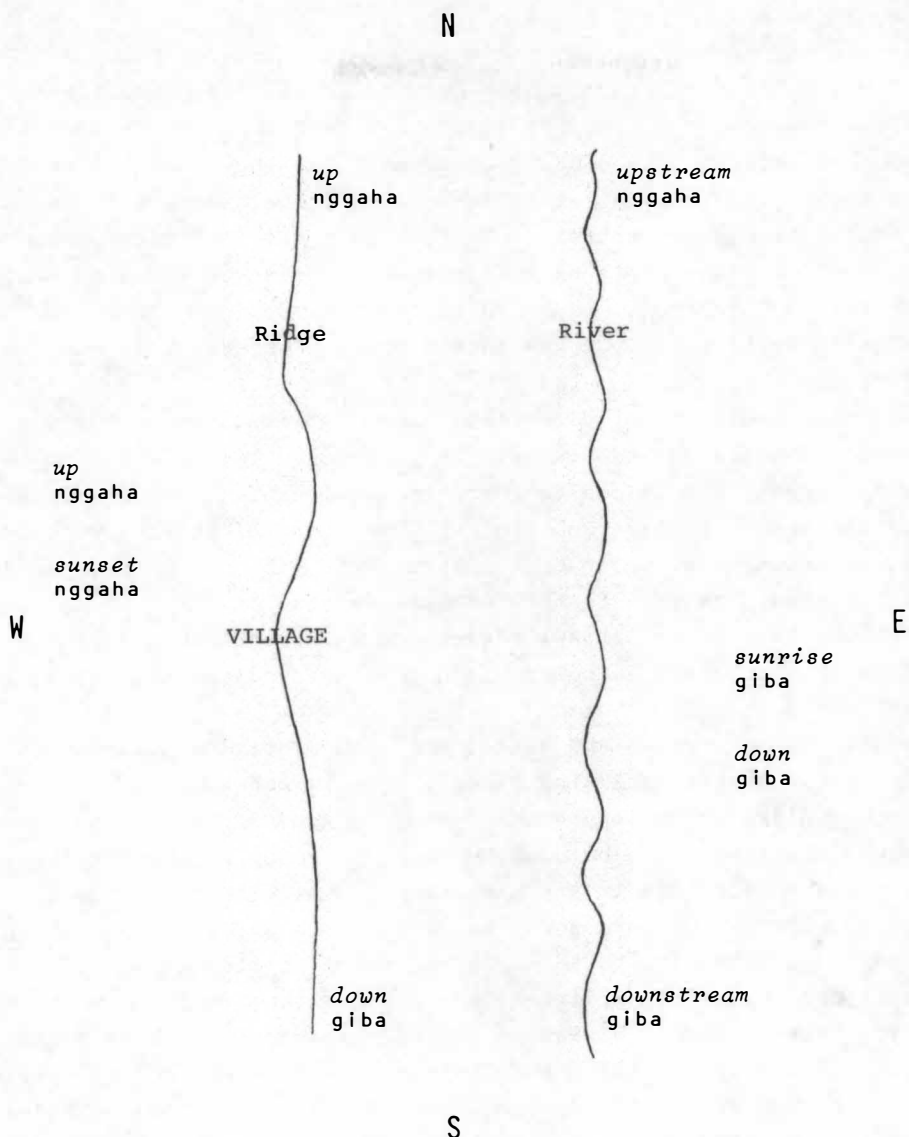
FIGURE 1. The ranges of ŋggaha and giba at Bibriari.

sun rose instead of set over high ground. He decided that the high
ground in the east was still to be called ŋggaha *'up'* locally, but that
'a long way away where the sun really comes up, that is always gibɨ'.
(East and west enter the picture here because it is said of the sun gibɨ
asafu, ŋggahɨ ahafu *'it comes up down there (*gibɨ*), it goes UP up there*
(ŋggahɨ)'. This may be said due to the fact that the sun sets over high
mountains at Bibriari, or possibly just because they think of the sun as

'going UP' to set.)

One can say then that when the three systems for determining directional names are in conflict, high ground predominates over river flow, and river flow over sunset. If there is a high area of land downriver, the general area will be giba *'downstream'*, but the high land will be called nggaha *'up'*. Likewise, a low area will be called giba *'down'* even though it may be upstream. So the hierarchy for determining the way to say *'over there'* is based first on the rise of the land, second on river flow direction, and third on solar direction. There will be examples in section 1.2. of how this hierarchy works out in conjunction with the *'go'* verbs.

The other two pairs of directionals are proximal rohwa, distal rɨhu, and proximal gogwa, distal gwogu. They are used less often. Rohwa means *'far down'* and refers to something noticeably lower than giba. Nearby villages which are quite a bit lower than Bibriari are called rohwa, and going down below the village, which is on a ridge, to the river, is always rohwa. Places that are outside of the language area from the village are all rohwa regardless of direction because the Anggor area is thought of as being the highest ground around, which, in general, it is.

The fourth set, gogwa and gwogu, are used mostly in pointing to another place. Whereas pointing steeply down is rohwa, pointing across to another ridge which is about the same height as that of the speaker is gogwa. This may also be used to refer to going to another place of about the same altitude in any direction, but it is more often used in actual pointing. One says gogwa hafombo *'to go up to the ridge'* to cross a valley, and returning to the original ridge is also gogwa hafombo.

Apart from these eight directional adverbs that function along with the *'go'* verbs that are explained in the next section, there are other adverbs which help to orient the listener. nda *'here'* and ra *'there'* refer to things close at hand. hwarina *'to the right'* and ndohwana *'to the left'*, are usually used in giving commands: ndohwana sɨhuro *'move (the board) over to the right (of the speaker)'*. The suffix -na in hwarina and ndohwana means *'towards'*. With the optional goal suffix -mbo it means *'towards a goal'*. Nɨmburɨ-na-mbo *(garden-towards-goal)* *'(going) towards the garden'*. So is a locative which also takes the na-(mbo) ending. It means *'place'* or *'place where'*: ahandɨ nggunindɨ soanambo *(his friend place-where-towards-goal)* *'(going) towards where his friend is'*. This may be expanded to ahandɨ nggunindɨ soanambo-anahɨ *(his friend place-where-towards-goal-be-1s)* *'I am (going) towards the place where his friend is'*, where the locative takes the place of a *'go'* verb. The idea literally is that *'I am in the state of towards-ing'*.

So may also occur with hɨ-(ndɨ) *'from'*, epos soahɨndɨ masɨnehɨ *(aid-post place-from past-come-1dual) 'we came from where the aid post is'*.

1.2. MOTION VERBS SHOWING DIRECTION

There are four *'go'* verbs which move the agent from the source, say Bibriari, towards a goal which may be specified by the eight directional adverbs described previously. These verbs are hafombo *'go up'*, hanombo *'go down'*, hɨfombo *'go upstream'*, and hombo *'go, go downstream'*. If a path parallels the river these same directions are denoted by the verbs used. That is, the agent still goes upstream or downstream even though he is on a path some distance from the river.

In order to go to Furamon, a village high in the west, a Bibriari man would nggaha hafombo *'go up there'* and would speak of returning to Bibriari, on a lower ridge, with giba hanombo *'go down there'*. To go to Senɨhɨ, a village in the southwest about the same altitude as Bibriari but downstream, he says giba hombo *'go downstream down there'*, and while there, says of returning to Bibriari nggaha hɨfombo *'go upstream up there'*. To go to Wamu, a village in the east about the same altitude as Bibriari he says giba hanombo *'go down towards the sunrise there'*, and returns nggaha hafombo *'go up towards the sunset there'*, using the sunrise and sunset for his orientation because neither high nor low, upstream nor downstream applies. To go to Badɨforɨ, a village in the southwest and downstream but very high, he says nggaha hafombo *'to go up there'* because *'high'* takes precedence over *'downstream'*. The corresponding verb forms relieve the ambiguity in the homophonous adverbs (see Table 1).

		haf-	hɨf-	han-	h-
proximal	nggaha	*up*	*upstream*		
distal	nggahɨ				
proximal	giba			*down*	*downstream*
distal	gibɨ				
proximal	rohwa			*far down*	
distal	rɨhu				
proximal	gogwa	*across the ridge*			
distal	gwogu				

TABLE 1. Anggor motion verbs with directional adverbs.

There are two sets of references to consider when moving from one place to another on a path. If the goal is at a higher altitude than the source, the overview calls for the combination nggaha hafombo *'go up there'*. As the reference narrows, however, the immediate slant of the land on the way to nggaha calls into play the other set of *'go'* verbs. For instance, when making a trip from one village to another, as a man walks along a path, whenever the path climbs a hill he goes hafombo *'go up'*; when the path goes down a hill he goes hanombo *'go down'*; but when the path goes on level ground he either goes hɨfombo *'go upstream'* or hombo *'go downstream'*, depending on whether his final destination is upstream or downstream from the original point of departure. For example, to go down the hill to Amanab, the subdistrict headquarters and a village of another language group to the north of Bibriari, upstream, they say rɨhu hanombo *'to go far down'*, but on the level stretches of the path rather than saying *'go straight'* they say hɨfombo because they are going upstream as well. They return to Bibriari nggaha hafombo *'go up'*, but on the level places they say hombo because they are going downstream as well (see Figure 2 on opposite page).

There is one allocation of a directional adverb which remains a problem; an airstrip in the Eastern Highlands is low, downstream, and due east from our house, and yet is nggaha. The informant explains this by saying that it is on the lower slope of a high mountain. Perhaps it is *'high'* because it is considered part of the mountain. Francis Concant (1965) describes a similar use of a word among the Pokot of East Africa. He says that **korok** describes three things: the elevation above the surrounding land, the slope 'one end of the area is higher in altitude than the other', and 'water-way demarcation'. Yet **korok** also refers to the 'shoulder', 'buttress' or 'spur' of a mountain.

1.3. *MOTION VERBS SHOWING SETTING*

Three *'come'* verbs work in opposition to the *'go'* verbs, except that the *'come'* verbs do not indicate a goal in relation to the river, but only specify *'come up'* sɨfombo, *'come down'* kɨsombo, and *'come straight'* sɨnombo.

Motion verbs play a prominent part in most Anggor discourse, especially in travel narratives, as they help to establish the setting. The two motion verbs used most often, besides *'go'* and *'come'*, are the point action verbs kɔsɨfwefimbu *'arrive down at the bottom'* and tɨkɨfimbu *'arrive up at the top'*. These parallel the *'go'* and *'come'* sets and are often used in verb strings with them. A common introduction to folk tales is hanafi kosɨfweni henɨ ... *(go-down-3fdual arrive-down-3fdual complet-3dual ...)* *'they two go down, down to the bottom (to the river) ...'*

N

upstream

AMANAB

go far down

go down

go up

W

E

go upstream

go downstream

Ridge

River

Path

Level places

BIBRIARI

downstream

S
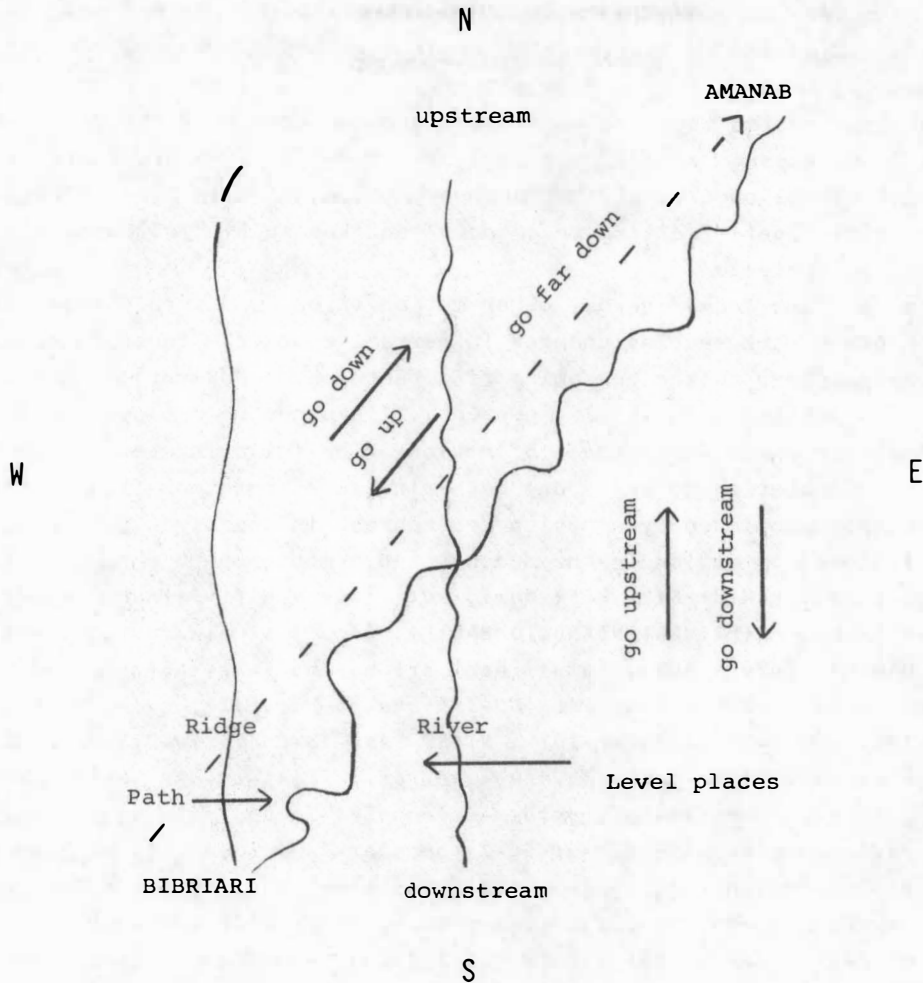
FIGURE 2. Long view reference and short view reference.

Also common is s*fomo t*kiafo *(come-up-3mpl arrive-up-3mpl) 'they come up, up to the top'*, although *'arrive up'* may also be used with *'go'* as in this verb phrase which occurs so often it is almost a set pattern: h*n* piu, h*fu t*k*fi, h*n* piu, h*fu t*k*fi, h*n* piu ranamboiu. *'he goes down, down to the bottom, goes up, up to the top, goes down, down to the bottom, goes up, up to the top, goes down, down to the bottom, and continues to do that.'* Here piu *(3ms* of pombo) has taken the place of kos*fwefimbu, as it often does. Pombo means *'to fall'* but in this idiomatic usage piu means *'he goes down to the bottom'*. This describes a typical trip in Anggor country where one must cross ridges and go down

to ford rivers continually in order to get anywhere. Kefwefimbu *'to cross a ridge'* and barɨhefimbu *'to cross a river'* are found, but infrequently, in this verb phrase pattern.

Two other forms that are used often are the dependent preverbs pɨpɨ *'walk'*[4] and kosamo *'to follow a path or a river'*. They are uninflected and must be followed by another verb of motion, usually *'go'* in both cases: pɨpɨ hanefɨ *'walking we go down'* and kosamo hɨ *'following the river I go upstream'*.

The *'go'* and *'come'* verbs, other motion verbs, and verb phrases of motion often mark setting changes in narrative texts. These changes generally appear at the beginning of a sentence. However, if a time word or a setting word is also present, time comes before setting, and setting before the verb phrase of motion. The following text fragment about a planatation worker's day gathering sweet potatoes illustrates a setting word followed by a motion verb phrase in the first sentence, time followed by motion in the second, and a motion verb phrase alone in the third: RANɨHɨ PɨPɨ HEFɨ mamɨ, sutɨrɨhu--- hifimɨrɨhu--- rarɨhu--- sɨhehu hwahu. NɨMBɨMARIANDAMBOIO HAHIFɨ; apoefɨ simaiwamboio, siambiahɨ. PɨPɨ HANEFɨ; fufurɨ huhu, fufurɨ hehi arɨ hurɨhe sahamɨndɨ hɨ mamɨ, sɨhehi hehia. *(THERE-FROM WALK GO-1PL change-particle, cut-off-repetitive-1pl--- put-1pl complet-1pl. NIGHT-PAST-IS-CHAINING-GEN.REF. GO-UP-1PL; sleep-1pl light-past-chaining-gen.ref., light-in-at. WALK GO-DOWN-1PL; gather-it complet-1pl, gather-it complet-1s bag fill-up-1s take-it-hold go-1s change-particle put-it-1s complet-1s.)* (gen.ref. will be explained in section 2.1.) *'FROM THERE* (setting) *WALKING WE GO* (motion), *then we cut and cut, we gather and gather, we do this again and again, then we put it down. WHEN IT IS NIGHT* (time) *WE GO UP* (motion), *we sleep until it is light, in the morning. WALKING WE GO DOWN* (motion), *we gather, I gather, I fill up a bag, I take it and go, then I put it down'*.

If the setting does not change at the beginning of a new paragraph, the last verb of the preceding sentence may be repeated with the same reference, to provide continuity of location or action. This is much like the linkage described by Robert Thurman (MS.), although in some cases the repeated verb may occur second in the sentence, preceded by a word which re-establishes the setting: ... mamɨ, Sendiai SUFU tɨkɨfi. Ranɨhɨ SUFU ... *(change-particle, Sandy-3rd COME-UP-3MS. There-at COME-UP-3MS ...)* *' ... then, Sandy COMES UP (to us) and arrives. There he COMES UP ...'* This restatement of the setting is one of the signs of a new paragraph. The change particle mamɨ, to be discussed in a later section, also alerts us to a major change especially when coupled with a setting word ranɨhɨ *'there'* and a motion word sufu *'he comes up'*, as in the example.

In the text to follow there are four settings, three of which are stable, arrived at by a *'come'* verb, and the other temporary, arrived at by a *'go'* verb. The **event setting** is where the main action takes place, the village of Wamu. The **narrative setting** is where the narrator tells the story from, the village of Bibriari. The **participant setting** is where the principal participant is in the story. (In the case of first person narratives, this is the narrator.) All other places are **temporary settings**. In this narrative the group of men *'go'* from Wamu (the event setting) to a place in the jungle where they decorate themselves. This would be a temporary setting. From here they may choose to travel to any of the four settings listed. They may *'go'* on to another spot on the path for a brief stay, or to another village, either of which is a temporary setting, or they may *'come'* up to Bibriari, the narrative setting, *'come'* back to Wamu, the event setting, or *'come'* to where the principal participant, the narrator, is in the story. ('Event setting' and 'narrative setting' are used as in Grimes and Glock 1970.) The first person participant setting is primary because one must always *'come'* to it, and *'go'* to the other settings from it. The narrative setting is secondary because one must *'come'* to it, and *'go'* to all of the settings from it, except for the first person participant setting. The event setting is tertiary because one can only *'come'* to it from a temporary setting, never from the narrative or first person participant setting. However, if the narrator is not present in the event and tells of, say, Watɨf's trip to the event setting (Wamu), the event village is secondary and the participant setting is tertiary because one would leave Watɨf and *'come'*, not *'go'* as in the case of first person participant, to the event setting (see Table 2).

	FROM	1st Part.	Narr.	Event	3rd Part.	Other
			TO			
1.	First Participant	-	*come*	*go*	-	*go*
2.	Narrative	*come*	-	*go*	*go*	*go*
3.	Event	*come*	*come*	-	*go*	*go*
4.	Third Participant	-	*come*	*come*	-	*go*
5.	Other	*come*	*come*	*come*	*come*	-

TABLE 2. Ranking of settings.

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The following text describes a man's travels to another village to watch a ceremonial dance there. He and his companion are joined on the path by the dancers, some of whom have sanindɨ 'spirits' in their skins. This portion of text shows how the use of 'come' establishes the stable settings even without mention of specific places. The bulk of this text, once the setting is established, contains the four 'go' verbs and other verbs of motion. As the narrator is relating his own travels most of the time he uses 'go' to describe most of the events. Except for the specialised verb kosɨfwefimbu 'come down a steep decline', all of the 'come' verbs establish stable settings by either bringing another person towards the narrator, or by stating one of the village settings, or by moving the narrator toward one of the two villages mentioned in the text. Forms of 'go' are in capitals of the same font as the base text; forms of 'come' are in capitals of a font contrasting with the base text; and other verbs of motion have a single underline.

SIHɌ, apoai hehiamboiahɨ ... mamɨ Watɨf dɨbo, Watɨf dɨbo HANE. Tɨkiaho, HI hwafe nisufo sahwase HANE. *SɌFO* nggasɨndeamunɨ heninggo MAHAFOamboiefɨ. HI, nafɨnɨ tɨkiaho. Hohɨrɨhu, HANɨ peo HOFO wemɨ sufu kakɨrɨ hehi ncowamɨ HOFO ngga. Ro hapodumbo, HO HANɨ peo HOFO, hoafendambefewane. HI hoafe sohwase hohwa tɨkiahoa nafɨ sunggu hɨhɨrɨho HI hohwa. HI yanggoeaho hwahi mamɨ tɨkɨmehwandambo *MASINɌHUNDɌ* yiwehombo ... manɨ amɨndarɨ hwarambiahɨ ranio manɨ sisenɨ tɨkɨfimbo Watɨfombo, wambo. Sampanau-ai *SUFU* dabwadanɨ nunggu hufandɨmunɨ ... mamɨ HIFɨ HIFɨ fefahɨ kurumaio ... tanambi pi pi piu, HɨFO HɨFO. 'Awio, HɨFO pwanɨ ngga, hɨirɨ HEFI HɨFOMBOANI' yahomo ho ranio hapoe poanɨ HOFO. HANɨ pehaɨɨ HOFO HOFO. HAFO tɨkɨfi HOFO ... HɨFO buhare. HIFɨ nɨmarefɨ nɨmarefɨ. Nɨmaromo, kosɨfoai ... fareafu nɨmaromo. HɨFO heninggo, sesɨ kakombo. Yifamenɨ, Yifamenɨ sesɨ kakombo bukurimo. *SINɌMO*, mamɨ mandu ... mamɨ soapundumo HOMBO ... mamɨ wurɨniafu HU ... mamɨ nganga kapehɨ mamɨ *SɌNEFɌ SɌNEFɌ*. *SIHIFɌ*. Ai *SINɌ* ... mamɨ kosɨ peo heninggo HO HO. Sambwai HAFO HAFO, nggoafambe HAFO ... 'awi *MBORAI* fandafune nɨmandɨfanɨ mamɨ, Keyuafundɨ-ai soahɨ fareaho ... Sampanambo mburambo '*MBORAI*', sehohwa. Sampanau-ai mamɨ *SUFU* mamɨ ... Yikafe-ai afundɨ wako, yipurɨ semɨndɨ *SOFO* masɨndamboiefɨ sandɨhurɨ ... kosɨfo hohu mamɨ HANɨ, rɨhu, haus kiapɨ worambi yanggorambo ra *SOFO* harɨfura harɨfura, ngangaiemo, HOMO karɨndumo HOMBO HɨFOMO nɨmarɨndani. Mamɨ *MASɌHIHAMBOEMɌ*. Yihwehumbo mamɨ hoare hoare hurimunɨ hurimunɨmbo. *SIHIEHA* ngga ai, hapo, apomo, HOMBANɨMBO hapo Ne soana NGGOMBOEMO. Hapo Ne soana NGGOMO, HOMBO, *DEFOMO*. Asunggwanɨmbo GAFOMBOEMO.

The parentheses in the following translation are added for clarity:

'I COME UP *(to Bibriari after leaving Wamu), I sleep until I'm done ... then with Watɨf, with Watɨf I GO DOWN (leaving Bibriari, headed*

for Wamu). We two *arrive up*, we GO UPSTREAM, we GO UPSTREAM, we eat betel nut and lime and we GO DOWN. They (the men and the spirits 3fs) COME UP (to where we are) and after *they pass us* by they GO UP. We GO UPSTREAM, we *arrive up* to a path. We *go on a winding path*, they GO DOWN, *down to the bottom*, and they GO UPSTREAM to the place where they finished cutting the skirts and then they GO UPSTREAM. I wait, they GO DOWNSTREAM, they GO DOWN, *down to the bottom* and GO UPSTREAM in a ditch. We GO UPSTREAM and after we eat we *arrive up* and *following* the path, *winding* around we GO ON UPSTREAM. We GO UPSTREAM and after we dance around then they *arrive up* and COME UP to where we are ... then they put their spears on our necks like this and then get them and *arrive up* to Watif and to me. Sampanau COMES UP (to us) and stands behind us helping us ... then we three GO AND GO UPSTREAM to where the berries are ... they put on charcoal again and again and they GO AND GO UPSTREAM. "Wait, don't GO UPSTREAM, but finish singing first," they say this and don't GO UPSTREAM yet. They GO DOWN, *down to the bottom*, and then GO AND GO UPSTREAM. They GO UP and *arriving at the top* they GO UPSTREAM ... they GO UPSTREAM and gather together. We three sit and sit. We all sit and they *go down* (out of the house) ... they all *go up* (into the house) and sit down. They GO UPSTREAM and then they look for food. Yifameni (he and his friends) *go to the jungle* to look for food. They all COME (to us) and then they cook it ... then they take us and GO ... then they call out and GO ... then they make noise and we call out and we all COME, and we COME (toward Wamu village). We COME UP (to the village). They COME (to the village) ... then they *go down*, *down to the bottom* and then GO AND GO DOWNSTREAM. They hide (from us) and GO UP AND UP, they GO UP to the (Wamu) village (leaving the speaker behind) ... "wait, COME, you two *come up* (inside) and sit down", then we *go* (into the house) *toward the place* where Keyuafundi is ... then to Sampanau we say 'COME'. Then Sampanau COMES UP (to us) ... Yikafe takes the back of a large lizard, and COMES UP (to us) and gives it to us three and we put it in our net bags ... we *come down* (from the house) then, and they GO DOWN below and relax at the government house and then they COME UP (to us) and dance and dance, they make noise, they GO on, GOING and *coming back* again, they GO UPSTREAM and then they sit down. Then we COME UP (to Bibriari village). Then they all (at Bibriari) (come) to us and dance and dance around. We COME UP (to Bibriari) but they (at Wamu) sleep, and when they get up they will GO toward Ne (village). When they GO toward Ne, after they GO they will COME back UP (to Wamu). The day after tomorrow they (the spirits) will GO away.'

Notice that the text begins with a *'come'* verb which sets the stage for the narrative. All the *'come'* verbs bring the agent near the

speaker, except when the narrator, then in Bibriari, says *'they will come back up (to Wamu)'* showing that Wamu is still considered the event setting for those men who live there. He speaks of their *'going'* to Ne Village, however, so this is thought of as only a temporary setting even though it is a village. *'Come'* is also used in quotations, showing that the setting changes briefly from the narrator to that of the speaker who is quoted.

It would seem that when there is a conflict between the setting defined relative to the participant and the setting defined relative to a location, the participant oriented setting takes precedence, and so can be called the primary setting. An example in the text is when the men *'GO up'* to the village (the event setting), leaving the narrator behind on the trail. In this narrative there are no place names mentioned except Ne, and in fact very few nouns are used at all; yet the verbs are so specific that the informant who translated this portion, who was not present for this episode, had no difficulty in knowing just where everyone was for each event described. Of course, knowing each turn in the path is very helpful in following the story. But one of the signals for him seemed to be the use of *'come'* when setting the stage at Bibriari, arriving at Wamu, and arriving back at Bibriari. He knew that the narrator had returned to Bibriari after the ceremony because the story teller says *'we come up'*. Since he had just been at Wamu, if he *'came up'* again it must be to another village. It seems that in Anggor they identify only what is absolutely necessary; in fact they use as few words as possible; therefore, these guideposts to orientation are important to recognise.

In another text, the stable location settings are again identified by the *'come'* verbs.

Nggɨmɨ wikɨ mahomo ngga, nggwafɨhundɨ ... ro nggɨmɨ *KOSEFɨ* Aminafɨhɨ ... Sarɨde barus *MASɨFU*. Ro nggɨmɨ Ambundihɨ *MAHANEFɨ* ... kanuambiahɨ Babɨ *MAHɨFU*, kosamɨ nafɨ. Akurumbahɨ *MASAHIF*.

(Three week past-go-3mpl and, village-from ... 1st three come-down-1pl Amanab-at ... Saturday airplane past-come-up-3ms. 1st three Ambunti-at past-go-down-1pl ... canoe-in-at Bob past-go-up-3ms, follow path. Ukarumpa-at past-come-up-1pl.)

'Three weeks ago from the village ... we three CAME DOWN to Amanab (to the airstrip for three days) ... Saturday the plane CAME UP (to Amanab) ... we three WENT DOWN to Ambunti (for five days) ... Bob WENT UP in a canoe, following the river (while we were at Ambunti). We CAME UP (in an airplane) to Ukarumpa (the narrative setting).'

For some reason this story teller treats the five days at Ambunti as a temporary setting, and Amanab as a stable one. Another informant describing this same journey says:

nggwafɨhundɨ buteahu ... *KOSEFƗ*, pres barus mbagarapɨmewa ... Sarare, barusɨ *SƗFU* pɨmewamboio ... *KOSEHƗ* Ambundihɨ pefɨ ... ahandɨ nggunindɨ soanambo, Bab-ai *MAHƗFU* ... yiwehambo ranɨhɨ, *AKUSI* tɨkɨfi haiɨ kanuambi *SƗNƗ*, tɨkɨfiu. Barus-ai *ASUFU* peu ... *SƗNEFƗ* ndanɨhɨ pɨmefɨ, Akurumbahɨ pɨmefɨ ...

(... village-from get-up-1pl ... come-down-1pl, place airplane ruined-past-chaining ... Saturday, airplane come-up-3ms fall-past-chaining ... come-down-1dual Ambunti-at fall-1pl ... his friend place-toward-goal, Bob-3rd past-go-upstream-3ms ... 1pl-obj-goal there-at ... come-down-3ms arrive complet-3s canoe-in come-3s, arrive-3ms. Airplane-3rd come-up-3ms fall-3ms ... come-1pl here-at fall-past-1pl, Ukarumpa-at fall-past-1pl ...)

'... we get up from the village (Bibriari) ... we COME DOWN, the airstrip is wet ... Saturday the plane COMES UP and lands ... we COME DOWN to Ambunti and we land ... going toward his friend (whom he visited upriver) Bob GOES UPSTREAM. There to us ... he COMES DOWN and arrives, coming in the canoe he arrives. The airplane COMES and lands. We COME to this place (from which the narrator is speaking) and land, at Ukarumpa we land ... '

For this narrator, in contrast to the other, Ambunti was a stable setting, so there seems to be a choice which the story teller may make depending on his viewpoint.

2. ORIENTATION OF PARTICIPANTS

2.1. CHANGE-OF-SUBJECT CHAINING

Nouns and pronouns are seldom used in Anggor discourse as verbs carry the main weight of a story. In one text there are 312 verbs in comparison to eighty-five nouns and twenty-one pronouns, a ratio of approximately fifteen to four to one. Most of these pronouns are used in conjunction with a noun such as Sendi-ai sufu tɨkɨfi *'Sandy-he comes up and arrives'*. This usage is not for clarity, but appears to mark theme, which may be the principal function of pronouns in Anggor. Due to this scarcity of pronouns, participant information must generally come from the person, number, and gender suffixes on the verb, or in the absence of these, from the modifications of some stem vowels which cross reference gender. As an aid to keeping track of which participants are

involved in the action, change of subject is signalled by an anticipatory subject marker on the preceding verb. This is chaining, discussed typologically by Robert Thurman (MS.).[6]

The chaining affix -ambo plus a marker which shows which person will be the subject of the next clause is affixed to a final verb, which is usually also inflected for person, number, gender, and completive aspect to show that this person as subject and the event he is acting in are finished: me-h-u-ambo-iahɨ *(past-say-3ms-chaining-1s)* 'he says' (predicting change of subject from *'he'* to *'I'*).

The chaining affix -ane also occurs. It has the third feminine singular form, and never predicts the subject of the following clause, only that a change will take place. Whereas -ambo shows a relationship of covariance (Litteral MS.) between clauses as well as subject change, -ane shows more of a temporal relationship between two clauses. -ambo can be translated *'and so'* or at other times only as *'and'*: mate tɨkɨrɨmarandAMBOlO haus sikɨ mahano. *(pig bite-past-trans-3s-CHAINING-gen.ref. house sick past-go-down-3fs.)* 'the pig bit her AND SO she went to the hospital', in contrast to barus pɨmaiwAMBOlO mafariahundɨ *(airplane fall-past-3fs-CHAINING-gen.ref. past-go-up-into-1pl)* 'the airplane landed AND we went up into it.' -ane may be translated *'until'*, *'while'* or *'when'*: woɾɨmborɨhandANE hoemaio *(house-make-1s-CHAINING rain-past-3fs)* 'I worked on my house UNTIL it rained.' nɨmɨ hɨtɨhandANE Bab makusu *(tree cut-1s-obj-3rd-CHAINING Bob past-come-3ms)* 'while I was cutting a tree, Bob came.' ro hwanggonɨpwedɨ tɨkiaheandANE Wiarɨfwau mahu *(1st bush-in-from arrive-1s-CHAINING Wiarifwau past-come-3ms)* 'WHEN I arrived from the jungle, Wiarifwau went (away).' Both can occur in one sentence: nɨmarefANE, Minawiai komo sɨhepurɨ haiɨ, hwafɨmaiwamboiefɨ, fareaho ... *(sit-1pl-CHAINING, Minawiai greens put-obj-3pl complet-3s, talk-past-3fs-CHAINING-1pl, go-up-into-1dual ...)* 'WHILE we sit, Minawiai puts out the greens, talks to us, AND SO we go up into (the house) ... '

Just as -ane is usually general reference, that is, third person feminine in form, and never predicts the subject to follow, -ambo, which does predict the subject to follow, may also end in the third feminine singular of general reference. When -io *(3fs)* is affixed to -ambo it is ambiguous. It may mean that the next subject will be third feminine singular or it may mean that the subject of the clause following the chaining affix will be the same as the subject in the clause preceding it, as in this example: pɨpɨ hi, hihane, Rumi-ai ranɨhɨ tapoko kɨkamuru ... mamarɨmondambolO. Hi tɨkɨmehwandambolO kɨka masendambolO kɨkamaraho ... *(walk go-upstream-1dual, go-upstream-chaining, Lumi-3rd there-at tobacco roll-cigarette-3mpl ... past-sit-3mpl-chaining-RESUME-SUBJECT. go-upstream-1dual arrive-past-1dual-chaining-RESUME-SUBJECT, cigarette past-*

give-3pl-subj-1dual-obj-chaining-RESUME-SUBJECT roll-cigarette-1dual ...)
'Walking we go, we go until (we reach the place) (CHANGE OF SUBJECT)
where the men from Lumi are rolling cigarettes from tobacco, ... and sit-
ting (CHANGE OF SUBJECT). And we go, arriving (to them) and (CHANGE OF
SUBJECT), they give us cigarettes (CHANGE OF SUBJECT) and we roll
them, ... '

These chaining devices help clarify which participants are being re-
ferred to. For example, when two clauses have different subjects, both
third masculine singular, and there is no nominal reference in the
second one, chaining reverses the reference: barus-ai makusuamboIU.
ndare homboiwamewamboIU, pasɨndiani ... *(airplane-3rd past-come-down-*
3ms-chaining-3MS. this-like look-3ms-past-chaining-3MS, passenger-
stative-3ms ...) 'the airplane comes down (change of subject to 3MS).
He looks (at it) like this, and (sees) (change of subject to 3MS) that
it is a passenger (plane) ... '

At times there is no subject change marked even though the subject
does change. ... mehuamboio. Pɨpɨ hanefɨ worambiahɨ, plauɨ mamɨ
masendamboio, sahusifɨ mburɨhu. *(... past-say-3ms-chaining-gen.ref. walk*
go-down-1pl house-in-at, flour change-particle past-give-3s-chaining-
gen.ref., eat-1pl-eat-1pl compl-1pl) ' ... he says (change of subject).
And so walking we go down into the house, then he (the cook boy, unnamed,
unmarked) gives us flour (change of subject) and so we eat.' In this
last sentence the subject changes from first person plural to third
person singular, yet there is no subject change marked by an affix; how-
ever, the change back to first person plural is marked. If the main
action of the discourse is not affected by the introduction of a peri-
pheral character for a short duration, the narrator treats the change as
an aside and does not bother to mark its approach, but only the return
to the main subject line. This brief departure often occurs when an
inanimate object is the subject, as in ... sɨhehu hwahu. Nɨmbɨmariand-
AMBOio hahifɨ apoefɨ simaiwAMBOio, siambiahɨ. Pɨpɨ hanefɨ ... *(... put-*
1pl complet-1pl. dark-past-3s-chaining-gen.ref. go-up-1pl sleep-1pl
light-past-3fs-chaining-gen.ref., light-in-at. walk go-down-1pl ...)
'... we put it down (no change). When it is night (CHANGE OF SUBJECT)
we go up, we sleep until (no change) it is light, in the morning (CHANGE
OF SUBJECT). Walking we go down ... ' Here too, although there is no
signal that the subject is changing when darkness and light are mentioned,
at the end of the passages in which they occur there is a chaining signal
which brings the narrative back into the principle participant's main
line of action. (These two phrases have no semantic subject; only the
dummy *'it is'*.) This mild deviation is somewhat like Asaro (Strange MS.).

On the other hand, the subject may be marked for change but the actual

change of subject takes place in a deleted or implied clause. ... *masaha-puramboIEMO. Ranɨhɨ nɨmboefane, mamɨ kusufwai sɨfu ... (... past-say-1s-obj-3pl-chaining-3mpl. there-at sit-1pl-chaining, change-particle come-down-3ms-come-down-3ms come-up-3ms ...)* '... *I say to them (change of subject predicting 3MPL). There we sit until (change of subject) (the pilot) coming down, comes up (to us) ...*' *-amboiemo* predicts that the next clause will have third masculine plural as its subject, however, it does not. This is because there is an implied clause here following '*I say to them*', which is '*and they hear*'.

2.2. CHANGE OF SCOPE

In this last example, as well, there is no change marked from '*I*' to '*we*' because from the narrator's viewpoint there has been no subject change; the narrator is still present in the group. The change of subject affix is also absent when a group spoken of in the third person plural is joined by the narrator. It is subsequently referred to as '*we*'. ... *mbahane, Tengɨrafo-ai sinɨmo, mamɨ farɨhundɨrɨhu; brukimɨrɨhu -ranipo arɨ hɨrɨhurɨ ... ranɨhɨ mahomondamboiahɨ asɨke pɨpɨ ha ... (... stay-1s-chaining, Tengirafo-3rd come-3mpl, change-particle help-3mpl-subj-1s-obj-3mpl; break-trans-repetitive-1pl - that-one net-bag fill-up-1pl-repetitive ... there-at past-go-3mpl-chaining-1s again walk go-1s ...)* '... *I stay (change of subject) until the men from Tengirafo come, then THEY all help me; WE repeatedly break (the potatoes), we repeatedly fill up that bag ... leaving there THEY go (change of subject) and so I again go walking ...*' Here, as the composition of the group is unchanged, there is no need for a change of subject to be marked, even though the person endings have changed from first singular to first plural and on to third plural. Likewise when a group is expanded or contracted it keeps the same subject: *hi nafɨnɨ tɨkiaho, hɨhɨrɨhu, hanɨ peo hofo ... (go-upstream-1DU path-to arrive-1du, go-on-winding-path-1PL, go-down-3 fall-3FS go-upsteam-3fs)* '*we TWO arrive up on the path, we ALL go on a winding path, THEY go down, down to the bottom and they go up river ...*' ('*They*' is expressed by third feminine singular here, which will be explained in the next section under scope.) The change from first person dual to first person plural expands the subject and smooths the transition to a third person plural that actually includes the speaker without signalling change of subject. Another example of this change in scope is: *pɨpɨ hanefɨ fufurɨ hehu, fufurɨ hehi arɨ hurɨhe sahamɨndɨ hɨ ... (walk go-down-1pl gather complet-1pl, gather compl-1S net-bag fill-up-1s get-hold go-upstream-1s ...)* '*walking we go down, WE gather (potatoes), I gather (them), I fill up a bag, I take it and go.*' This change of scope occurs in mid-sentence, here changing the whole

line of action from *'we'* to *'I'* by repeating the verb but changing the
person affixes on it without a change of subject suffix. As the members
of the group remain the same, it is like looking at a scene with a wide
angle lens, and then zooming in on one single feature in the scene.
(There is also no change indicated when going from *'we'* to *'they'* when
the narrator is still a member of both groups.)

   Besides the expansion and contraction of a group without changing the
subject, there is another type of scope handling which involves group
reference. In the example Tengɨrafo-aɨ sinɨmo *(Tengirafo-3rd come-3pl)*
'the men from Tengirafo come', Tengirafo is a singular place name but as
here used it stands for all of the people present from Tengirafo. Here
a group is referred to by its place or origin. In another example a
man's name stands for his entire group. YIFAMENɨ, sesɨ kakombo bukurimo
(YIFAMENI, food look-for-infin. go-to-jungle-3mpl) *'YIFAMENI AND ALL OF
HIS COMPANIONS go to the jungle to hunt for food.'*

   In an example cited earlier hanɨ peo hofo *(go-down fall-3fs go-up-
3fs)* *'they go down, down to the bottom, and they go upstream'*, we see
the opposite: rather than a singular noun taking a plural verb, a plural
subject takes a singular verb. This example occurs in the story about
the man who goes to the ceremony at Wamu, discussed in the section on
settings. In this narrative there are several groups of people taking
part. The main group (A) is the one whom the narrator meets on the path
on his way to Wamu. The group is composed of Wamu men, some of whom
have spirits 'in their skins' and some of whom do not. In general, they
are referred to by the third feminine singular (general reference) affix
throughout the discourse. When they are joined by the group represented
by Yifamenɨ the combined group is referred to by the third masculine
plural affix, as well as when group A is joined by the narrator and his
friends (B), as in this example: HɨfO buhare. HIFɨ nɨmarEFɨ. NɨmarOMO,
kosɨfoAI *(go-upstream-3FS gather-3fs. go-upstream-1PL sit-1PL. sit-
3PL, come-down-3FS)* *'THEY (3fs) go and gather together (group A). WE go
(1pl) and WE sit (group B). THEY (3mpl) sit (group A and B combined re-
ferred to as third masculine plural even though it includes the narra-
tor), THEY (3fs) leave the house (only group A).* This assigning of dif-
ferent affixes to different groups makes it unnecessary to use a noun or
pronoun to define the group involved in the action. Group A is never
referred to in any way other than in the verb suffixes. When the spirits
are doing things that only spirits can do, as when they make special
noises, they can be referred to with the third masculine plural affix
because there is no danger of confusing them with another male group.
At other times, however, they are referred to only with the general refer-
ence 3fs to differentiate them from the other groups in the narrative.

As no individual in group A is ever singled out for special mention,
the narrator finds it easier to refer to group A by the general refer-
ence affix than to try to tell who the men are; they function as a
group.

There is a folktale which uses a similar form of group reference.
It tells of a mother and father who go about doing various things. The
entire sequence of events is stated with a third dual affix on the verbs,
even though it is obvious from the cultural context that only the woman
beats sago, stirs it, and cooks meat, and that only the man kills a rat
and climbs a tree, for such is the accepted division of labour. This
is further substantiated by the fact that these activities are repeated
in three consecutive paragraphs in this way, but in the last paragraph
of the story, in which the woman is brought out of the group for special
attention, there feminine activities are stated in third feminine
singular. In the first three paragraphs there seems to be no need to
single out the separate activities that each does because the two par-
ticipants function very well as a group for the purposes of the story
teller at that point. The first three paragraphs include han+fi kar+-
heni ... bar+f+ wak+r+n+r+ sowar+nd+f+. Mandine ... fond+pundaf+ ...
yas+r+ne *(go-down-3dual ... cut-it-down-3dual ... rat kill-it-3dual get-
3dual-it-hold-3fdual. Cook-3dual ... get-it-from-fire-3pl-object-
3fdual-subj. ... sago-it-3dual ...)* 'they two go down to cut sago ...
they kill a rat and carry it. They cook it ... they take it from the
fire when it is done ... they stir the sago ...'. (3fdual is used for
either two women or a man and a woman.) The last paragraph has kak+re ...
hafo ... mande ... yas+ra ... *(cut-it-3s go-up-3fs ... cook-3s ... sago-
it-3s)* 'she cuts it ... she goes up ... she cooks it ... she stirs sago.'

2.3. CHANGE PARTICLE

Just as change of subject is marked by chaining and change of scope
by change of person affixes without chaining, changes of other kinds may
be signalled by the introducer and change particle mam+. Mam+ may ac-
company chaining, be used in place of chaining where the subject change
is considered an 'aside' as noted above, or may refer to changes outside
the chaining system entirely. I have not yet found when *not* to use
mam+. For instance, one speaker introduces a folktale with mam+, while
the next speaker, relating the same story, does not. Some speakers
sprinkle the particle liberally throughout a discourse, with mam+ occur-
ring in almost every sentence, and often twice in the same sentence,
whereas another speaker uses it rarely, to mark only major changes. The
following folktale is about a man with sores, abandoned by other men but
rescued by some birds. This fragment of the text shows mam+ used as an

introducer in the first instance, a change of subject in the second and third, two changes of location in the fourth and sixth, two changes of activity in the fifth, and one of time in the seventh.

1. MAM‡ masamimb‡ hu. Barito worambiah‡ h‡n‡ngg‡r‡hora hehi bukarehi.
2. Ngga MAM‡; ai ahandambo masamimb‡h‡, worambi amaru ...   3. MAM‡, t‡k‡fo-ai pifir‡ ah‡fu ...   4. MAM‡ hu, nindu hwaf‡ ra mbura MAM‡ h‡fu ...   5. MAM‡ yimbu ra mbura, MAM‡. Masami yapar‡, hor‡nd‡h‡mbo ...
6. hahufi mam‡; wutem sendan‡ h‡f‡ kare h‡n‡ngg‡r‡hai‡.   7. MAM‡; apafi simewamboio, siambi ...

'1. MAM‡ (introductory) *The man with the sore* (A) *goes. They* (B) *leave him* (A) *on the edge of the porch and go to the jungle.*   2. MAM‡ (change of subject) *Then he* (A), *the one with the sores, sits in the house* ...   3. MAM‡ (change of subject) *t‡k‡fo (a bird, C) flits around and goes* ...   4. MAM‡ (change of location) *he* (C) *goes, tells all of the other birds* (D) MAM‡ (change of location) *and he* (C) *goes up* ...
5. MAM‡ (change of activity) *they* (D) *spread out* MAM‡ (change of activity). *They* (D) *see the dry sore* ...   6. *the two women* (E) *go up* MAM‡ (change of location) *and plant it (the sore)* (F) *in the ground by the edge of the roof and leave it* (F).   7. MAM‡ (change of time) *They two* (E) *sleep until light, in the morning* ... '

MAM‡ can be translated *'then'*, or *'next'*. Because in every instance of its occurrence there has been some element of change observed taking place I call it a **'change particle'** without further definition of its function.

NOTES

1. Anggor is a non-Austronesian language of the Senagi family (Loving and Bass 1964) of the West Sepik District of New Guinea spoken by about 1250 people in the Amanab subdistrict. The phonemes of Anggor are p, t, k, b, d, g, mɔ, nd, ngg [ŋg], m, n, ng [ŋ], f [ɸ and ɓ], s, h [x and ɠ], w, y, r [r and l], i [i and ɪ], e [e and ɛ], ɨ [ɨ, ʉ and ə], a, u [u and ʊ], o [o and ɔ]. Intonation contours are /./ final falling, /;/ final rising checked, /,/ non-final rising, and /---/ non-final sustained.

The data presented here are based on several years spent in Bibriari Village between 1965 and 1969. A concordance of texts prepared by the Computer Laboratory of the University of Oklahoma under the sponsorship of National Science Foundation Grant GS-1605 was used in the preparation of this paper. The paper was written at a workshop held in 1971 at the Summer Institute of Linguistics base at Nasuli, Philippines, under the direction of Joseph E. Grimes, with help from Robert L. Litteral. Thanks are also due to Waf Sahayao who so patiently helped me with his language. This workshop was partly funded by National Science Foundation Grant GS-3180.

2. Unless the distal form of the adverb is definitely cited, the proximal member of each set of directionals will be used in this paper to represent each pair.

3. If the Anggor had lived near the Green River, an upper tributary of the Sepik to the south of Bibriari, this would have been the case. Because of the language tie which seems to exist between the Anggor and the Ndu languages of the East Sepik, it seems possible that they could have lived in this area. Since the river at Green River runs from west to east, along those banks the three senses of these terms would fit together, with high country, upstream and sunset all in the west.

According to a preliminary comparison of Anggor and the Ndu languages by Robert L. Litteral, lexicostatistical data indicate that Anggor and

the Ndu languages are at least 10% cognate. Here are just a few of the
obvious cognates, with the Anggor word appearing second: ndu, nindu
man; apmapmu, amamu *moon*; yf, yifiarɨ *arrow*; wʌcʌ, warɨ *arm* (Lay-
cock 1965). Although one might question genetic evidence with so low a
cognate count, there is enough other evidence to establish a historical
relationship between the two. According to personal communication with
David Bailey, working in the Abau language at Green River, the geneo-
logical data in that area trace the Abau ancestors to a downriver village.
A long while ago the Anggor people could have lived on the river. When
the Abau came upstream the Anggor were forced to move inland. Supporting
this Robert Litteral found that there are two language groups on either
side of the river, Ampto and Busa (Loving and Bass 1964), which were
split by the coming of the Abau. They also are 8-10% cognate with one
another. The farthest Ndu language upriver has the highest cognate count
with Anggor.

4. pɨpɨ *walk* and other verbs that show a continued going may include
an almost infinite number of pɨ's depending iconically on the distance
involved in the walking. In this paper only the minimal form is used.
This verb has an onomatopoetic element in it as it represents the sound
of someone tripping along. Other such verbs include tɨtɨ, *a rat walking
up a trough*, and bubu, *something lumbering through the undergrowth in
the jungle*. The sound of the vowel in each case seems to symbolise the
size of the actor involved.

5. A sentence consists of one or more final verbs, inflected for person,
number, and gender, or an infinitive, ending with final falling intona-
tion.

6. Thurman indicates that chaining is found only in the New Guinea
highlands. However, the Anggor system of marking subject change, though
different from the highland systems, would still fit his definition.
Anggor chaining differs in that, though it signals change of subject,
it does not indicate by affix when the subject will remain the same. It
is also attached to different types of verbs from the chaining in the
highlands.

7. The feminine form is often chosen to represent something else. -ane
(chaining, no referent) and -amboio (chaining, referring to previous
subject); hafo *she goes up* (sometimes referring to a group), and hanafi
they two (f) go down (sometimes referring to a man and a woman).

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CLAUSE RELATIONSHIPS IN IATMUL

PHILIP STAALSEN

1. CLAUSES

One of the most interesting features of Iatmul grammar is the
structure and interrelationship of clauses.[1]

All clauses are bi-centred.[2] That is, they contain two main parts
or centres, both of which are obligatory. The Endo-Centre looks inside
the clause and indicates the type of action, whether quotative, transi-
tive, motion, intransitive, or equative, as well as indicating the non-
verbal items related to and expanding upon the action, such as time of
action and location of action.

The Exo-Centre looks outside the clause and indicates the relation-
ship of the clause to other clauses and to the discourse as a whole.
The Exo-Centre indicates whether the clause is a declaration of fact, a
command, a clause pointing toward another more important clause, a
clause focusing upon an object or location, etc.

The division of clause into Endo-Centre and Exo-Centre is seen in
the following:

ENDO-CENTRE				EXO-CENTRE	
babala	gay-ba	waala	vɨ	-lɨ	-wun
today	*house-in*	*dog*	*see*	*-durative*	*-I*
			'Today I saw the dog in the house.'		

The verb root **vɨ** *'see'* and the presence of **waala** relating to the verb
as Object in the clause Endo-Centre indicates that the action is tran-
sitive. The occurrence of the other two items in the Endo-Centre expand
upon the action indicating where and when it took place. The durative
aspect marker **-lɨ**, the absence of present tense marker, and the first
person singular actor marker **-wun** comprising the Exo-Centre indicate
that the clause relates to the larger setting as a declaration of fact

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in which the action occurred over a period of time at some time previous to the time of the declaration, and that the action is not pointing toward some other more important clause.

Clause Endo-Centres and Exo-Centres are described separately under 2. and 3., respectively. The restrictions of combinations of Endo-Centres and Exo-Centres are described under 4. The division of most Iatmul clauses into Endo-Centre and Exo-Centre is not merely a descriptive device, but reflects structures basic to Iatmul.

There is a striking functional similarity between the case-marking clitics within the clause Endo-Centre and the affixes comprising the clause Exo-Centre. The case-marking clitics (see 3.) indicate a semantic relationship between the items so affixed and the verb root.[3] In the same way the clause Exo-Centre indicates semantic relationships between its own clause and other clauses. A string of Iatmul speech comprises mutually interrelated clauses, the interrelationships of which are signalled by relative order and clause Exo-Centres. For example:

gay-at   yi-ka   waala kla-laa   ya   -d   -ey   -an
house-to go-ing   dog   get-having come -he -fut. -cond.

  dɨ-gat vɨ-kiyo-wun
  he-for see-fut.-I

'if he comes after he has gone to the house and gotten the dog, I will see him'

This string consists of 4 clauses:

1. a Motion Statement Auxiliary Clause

NORMAL MOTION ENDO-CENTRE	AUXILIARY EXO-CENTRE
gay-at yi	-ka *'going to (the) house'*

2. a Transitive Statement Relational Clause

TRANSITIVE STATEMENT ENDO-CENTRE	RELATIONAL EXO-CENTRE
waala kla	-laa *'having gotten (the) dog'*

3. an Intransitive Statement Conditional Clause

INTRANSITIVE STATEMENT ENDO-CENTRE	CONDITIONAL EXO-CENTRE
ya	-d-ey-an *'if he comes'*

4. a Transitive Statement Declarative Clause

TRANSITIVE STATEMENT ENDO-CENTRE	DECLARATIVE EXO-CENTRE
dɨ-gat vɨ	-kiyo-wun *'I will see him'*

The use of Normal to denote the Motion Endo-Centre of the first clause is arbitrary. This Endo-Centre is chosen as the base form and other

Endo-Centres of the same battery (see 3.) are considered variants of it.

Applying the process rules for clause layering as set forth in 5., one can understand the relationships of any string of clauses. Without these relationship rules one cannot understand what the string means nor can one generate anything but single clause strings consisting of independent clauses.

2. CLAUSE EXO-CENTRES

CHART 1

Clause Exo-Centres

```
                                        ┌─Declarative  (2.1.)
                                        ├─Hortative    (2.2.)
                          Independent───┼─Imperative   (2.3.)
                        ╱               └─Volitional   (2.4.)
          Verbal Focus─┤
         ╱              ╲               ┌─Conditional  (2.5.)
Exo-Centre               Dependent──────┼─Relational   (2.6.)
         ╲                              └─Auxiliary    (2.7.)
          ╲
           Non-Verbal Focus────┬──────External Foc. 1.  (2.8.)
                               └──────External Foc. 2.  (2.9.)
```
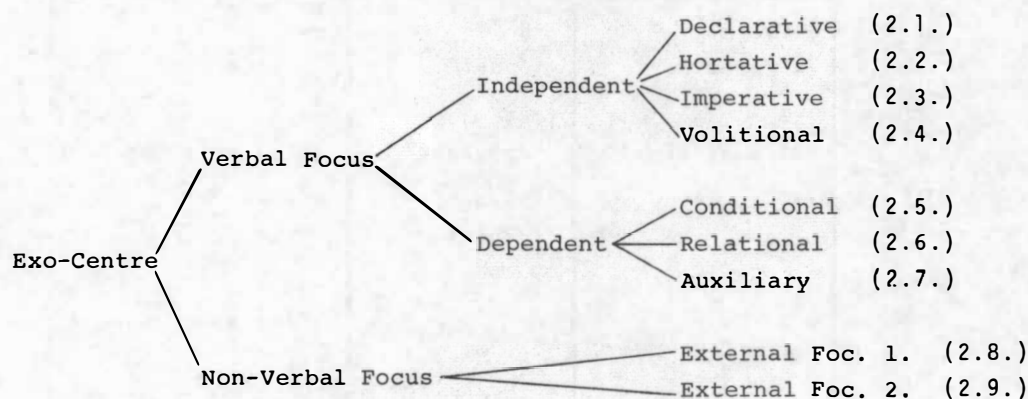
As shown in Chart 1, clause Exo-Centres are first divided into Verbal Focus and Non-Verbal Focus types. Verbal Focus Exo-Centres occur with clause Endo-Centres in which the verb is the central element. Non-Verbal Focus Exo-Centres occur with the clause Endo-Centres in which some item other than the verb is the central element, either actor, object, or the main noun of a Noun Phrase when an Adjectival Clause actualised the modifying function in a Noun Phrase.

Independent Exo-Centres indicate that the clause of which they are a part is not subordinate to another clause while Dependent Exo-Centres indicate that the clauses of which they are a part will be subordinate to another clause of a higher valence. (See 5.)

2.1. *DECLARATIVE EXO-CENTRE*

The Declarative Exo-Centre comprises three orders of suffixes: aspect, tense, and actor. All orders are obligatory. The Declarative Exo-Centre is represented by the bi-dimensional array in Chart 2, the columns of which are labelled in terms of the relationship with respect

to the action, and the columns filled by those items which may actualise that relationship.[4] In bi-dimensional arrays representing clause Exo-Centres, all members of the actualising set are listed since they are closed classes.

CHART 2

Declarative Exo-Centre

ENDO-CENTRE	EXO-CENTRE		
	aspect	tense	actor
	aspect markers	Set A	Set A
	-lɨ *'durative'* -ø *'punctiliar'*	-ø *'past'* -ka *'present'* -kiya ∿ -ika *'future'*	-wun *'1st sing.'* -mɨn *'2nd sing. masc.'* -nyɨn *'2nd sing. fem.'* -dɨ *'3rd sing. masc.'* -lɨ *'3rd sing. fem.'* -a *'1st dual'* -bɨk *'2nd & 3rd dual'* -nɨn *'1st plural'* -gwuk *'2nd plural'* -di *'3rd plural'*

The inclusion of the bound actor in the Clause Exo-Centre may seem inappropriate as it is sometimes repeated by a free form in the Clause Endo-Centre. It would seem that items related to the action in this way more properly belong to the Endo-Centre. However, the phenomenon

of clause layering (see 5.), in which there is a difference between a series of clauses with the same actor or one with different actor, puts the matter in a different light. The bound actor can be thought of in terms of an item relating to other clauses in terms of same or different actor.

EXAMPLE:

ENDO-CENTRE	EXO-CENTRE	
du bak sɨ	-lɨ -kiya -dɨ	*'the man will be shooting pig'*
man pig shoot	*-dur.-fut.-he*	

2.2. *HORTATORY EXO-CENTRE*

The Hortatory Exo-Centre comprises one suffix order: hortatory, which is actualised by one member of a set of three actor morphemes: -lu, *'1st singular'*, -li, *'1st dual'*, or -kat, *'1st plural'*.

EXAMPLE:

ENDO-CENTRE	EXO-CENTRE	
yi	-li	*'let's go!' (dual)*
go	*-1st dual*	

2.3. *IMPERATIVE EXO-CENTRE*

The Imperative Exo-Centre comprises an imperative-marking prefix, an optionally actualised first order suffix indicating instrument, and an optionally actualised second order suffix indicating actor, see Chart 3. The Imperative relationship is actualised by either a- or Ø- depending on verb class. The Instrument relationship is actualised by instrument marker -ba and actor by a member of one of two sets of actor markers. If instrument is actualised, only members of Set B may actualise actor. If instrument is not actualised, only Set C may occur. Note that the Imperative Exo-Centre is discontinuous.

CHART 3

Imperative Exo-Centre

EXO-CENTRE	ENDO-CENTRE	EXO-CENTRE		
imperative	verb root	instrument	actor	
			Set B Set C	
a- ᴧ Ø-		-ba *'instrument marker'*	-mɨn -mɨla -nyɨn -nyɨla -bɨk -bɨla -gwuk -gwula	*'you masc. sing.'* *'you fem. sing.'* *'you dual'* *'you plural'*

EXAMPLES:

a.
EXO-CENTRE	ENDO-CENTRE	EXO-CENTRE	
a-	yi	-ba-mɨn	*'go!'*
imp.-	*go*	*-ins.-you.man*	

b.
EXO-CENTRE	ENDO-CENTRE	EXO-CENTRE	
a-	yi	-mɨla	*'go!'*
imp.-	*go*	*-you.man*	

c.
EXO-CENTRE	ENDO-CENTRE	EXO-CENTRE	
∅-	kali	-mɨla	*'take it away!'*
	take (it) away	*-you.man*	

2.4. *VOLITIONAL EXO-CENTRE*

The Volitional Exo-Centre comprises two orders of suffixes: volitional and actor. Both are obligatorily actualised. See Chart 4.

CHART 4

Volitional Exo-Centre

ENDO-CENTRE	EXO-CENTRE	
	volitional	actor
verb root	-a ∿ -kaa *'volitional'* -la *'avolitional'*	2nd and 3rd persons of Set A

/a/ final verb roots occur with -a, others with -kaa.

EXAMPLES:

a.
ENDO-CENTRE	EXO-CENTRE
yi	-kaa -dɨ
go	*-vol. -he*

'Would that he would go.'

b.
ENDO-CENTRE	EXO-CENTRE
yi	-la -dɨ
go	*-avol. -he*

'Would that he would not go.'

2.5. *CONDITIONAL EXO-CENTRE*

The Conditional Exo-Centre comprises four orders of suffixes: aspect,

actor, tense, and conditional marker. All are obligatorily actualised
by a member of the set as shown in the bi-dimensional array in Chart 5.

CHART 5

Conditional Exo-Centre

ENDO-CENTRE	EXO-CENTRE			
	aspect	actor	tense	cond. marker
	aspect markers	Set B	Set B	
	-lɨ 'durative' -∅ 'punctiliar'	-w 'lst sing.' -m '2nd sing.masc.' -ny '2nd sing.fem.' -d '3rd sing.masc.' -l '3rd sing.fem.' -li '1st dual' -b '2nd & 3rd dual' -n '1st plural' -gw '2nd plural' -i '3rd plural'	-∅ 'past' -ey 'fut.'	-an 'cond.'

EXAMPLE:

ENDO-CENTRE	EXO-CENTRE		
yi	-d	-ey	-an
go	-he	-future	-conditional

'if he goes'

2.6. RELATIONAL EXO-CENTRE

The Relational Exo-Centre comprises one order of suffixes: relational, which is obligatorily actualised. The relational suffixes indicate a relationship, usually in time and space, between the Relational Clause and a following clause. The relational suffixes could be described in terms of two orders, but the present description is thought more economical as the seven forms below are the only ones that occur. Items in parentheses are not part of the Relational Exo-Centre, but are added to give context for the example.

Relational Markers

-laa   *'action of Relational Clause is completed before action of following clause begins'*
         (vɨ)   -laa   (ya-wun)   *'having seen it I came'*
         see   *-having*   *come-I*

-sɨbla   *'action of Relational Clause is concurrent with action of following clause and indicates motivation for action of following clause'*
         (vɨ)   -sɨbla   (ya-wun)   *'I saw it as I came and I was*
         see   *-having*   *came-I*   *coming in order to look for it'*

-sɨblalaa   meaning as above and *'action of Relational Clause is termi-nated'*

-kɨva   *'action of Relational Clause occurs during the course of the action of the following clause'*
         (vɨ)   -kɨva   (ya-wun)   *'I chanced to see it as I came'*
         see   *-ing*   *came-I*

-yakilaa   *'action of Relational Clause is completed before action of following clause is begun and object of Relational Clause is completely acted upon'*
         (vɨ)   -yakilaa   (ya-wun)   *'I saw all there was to see and I*
         see   *-having*   *came-I*   *came'*

-labɨlaa   *'action of Relational Clause is completed before action of following clause begins and object of Relational Clause is partially acted upon'*
         (vɨ)   -labɨlaa   (ya-wun)   *'having seen some of it I came'*
         see   *-having*   *came-I*

-levilaa   *'action of Relational Clause is completed before action of following clause begins and object of Relational Clause is*

not acted upon'

    (vɨ)   -levilaa   (ya-wun)   *'having seen none of it I*
    see   -not.having   came-I   came'

2.7. *AUXILIARY EXO-CENTRE*

The Auxiliary Exo-Centre comprises one order of suffixes: auxiliary, which is obligatorily actualised by one member of the set of auxiliary markers:

a. -ka   *'action of the Auxiliary Clause is added to the action of the following clause'*

b. -lapman *'action of the Auxiliary Clause is subtracted from the action of following clause'*

c. -vat   *'action of the Auxiliary Clause indicates the purpose of the action of the following clause'*

EXAMPLES:

  1. (vɨ) -ka   (ya-wun)   *'I came and saw'*
      see -and   came-I

  2. (vɨ) -lapman (ya-wun)   *'I came without seeing'*
      see -without   came-I

  3. (vɨ) -vat   (ya-wun)   *'I came in order to see'*
      see -in.order.to came-I

2.8. *EXTERNAL FOCUS EXO-CENTRE 1*

External Focus Exo-Centre comprises four obligatorily actualised orders of suffixes: aspect, actor, tense, and external focus marker, see Chart 6. Aspect, actor and tense are actualised by members of the same sets as in Conditional Exo-Centre, see 2.5. External Focus Exo-Centres indicate that some item other than the verb to which it is attached is the focus of the clause.

CHART 6

External Focus Exo-Centre 1

ENDO-CENTRE	EXO-CENTRE			
	aspect	actor	tense	external focus marker
	aspect marker	Set B	Set B	-a

EXAMPLE:

ENDO-CENTRE	EXO-CENTRE	
yi	-lɨ -m -ey -a	(vaala)
go	*-dur. -you.man -fut. -ext.foc.*	*canoe*

'the canoe that you will be going in'

2.9. *EXTERNAL FOCUS EXO-CENTRE 2*

External Focus Exo-Centre 2 differs from External Focus Exo-Centre 1 in that it comprises only two orders of obligatorily actualised suffixes: aspect and external focus marker, see Chart 7. This Exo-Centre most often occurs with Endo-Centres in which the object is in focus but it also occurs with several other Endo-Centres to form Relative Clauses. (See 4., and Chart 9 of Clause Types.)

CHART 7

External Focus Exo-Centre 2

ENDO-CENTRE	EXO-CENTRE	
	aspect	external focus marker
	aspect marker	-a

EXAMPLES:

a. yi -a   (vaala)   'the canoe that went'
    go -ext.foc.   *canoe*

b. wun-ai   yi-a   (vaala)   'the canoe that I went in'
    I-act.foc.   *go-ext.foc.*   *canoe*

3. CLAUSE ENDO-CENTRES

Clause Endo-Centres comprise a verb root and items preceding it which relate to it semantically. These relationships are: Time of action (T), Location of action (L), Actor (A), Co-Actor (CoA), Object (O), Goal or Intent of action (G), Instrument by means of which action was performed (Ins.), and Manner in which action was performed (Ma).[5]

The relationships occurring within a clause Endo-Centre are determined by the semantic class of the verb root. For all verb roots it is necessary to indicate (T) and (Ma). For quotative verb roots and transitive verb roots it is necessary to indicate (L), (A), (CoA), (Ins), (O), and (G). Motion verb roots require the same relationships as quotative and

transitive with the exception of (L). For intransitive verb roots, it is necessary to indicate in addition (L), (A), (CoA), and (G). For stative verb roots it is necessary to indicate in addition (L), and (O).

Clause Endo-Centres are presented in transformational paradigms.[6] In these paradigms only Actor (A), Action (P), and Object (O) are indicated as these are sufficient to demonstrate contrast between Endo-Centres. The bi-dimensional array, shown in Chart 8, shows the classes of items which may actualise relationships within the Endo-Centres.

In the following batteries, relationship labels within parentheses indicate that the relationship is optionally actualised. Lack of parentheses indicates obligatory actualisation.

There are 5 paradigms presented below, one for each clause Endo-Centre root: Quotative, Transitive, Motion, Intransitive, and Stative.

Quotative Endo-Centre Battery

(A) for Actor: du *'man'*, kada *'who'*, wun *'I'*
(P) for Action: but *'tell'*
(O) for Object: mada *'what'*, nyaagɨt *'talk/message'*

1. Normal < (A), (O), (waa), P >   du nyaagɨt but *'the man told talk'*[7]
                                     du nyaagɨt waa but *'the man said,*
                                                          "nyaagɨt"'

2. Dubitative < (A), (O), anaka, P >   du nyaagɨt anaka but *'is it not*
                                          possible that the man told
                                          talk?'

The above example with Exo-Centre included is as follows:

ENDO-CENTRE	EXO-CENTRE[8]	ENDO-CENTRE	EXO-CENTRE
du nyaagɨt anaka	-dɨ	but	-a
man talk dubit.	*he*	*say*	*ext.foc.*

'is it not possible that (the) man told talk?'

3. Interrogative Actor Focus < (O), A-na, P >   nyaagɨt kada-na but
                                                  'who told talk?'

4. Response Actor Focus < (O), A-ayi, P >   nyaagɨt wun-ayi but
                                               'I who told talk'

5. Object Focus < (O-na), P >   mada-na but *'what did (he) say?'*

6. Adjectival < P > but *'told _____'*[9]

7. Adjectival Actor Focus < A-ai, P >   wun-ai but *'I told _____'*

CHART 8

Bi-Dimensional Array of Normal Clause* Endo-Centre Relationships

Rela-tion-ships	Time (T)	Loca-tional (L)	Actor (A)	Co-Actor (CoA)	Object (O)	Goal (G)	Instru-ment (Ins)	Manner (Ma)**	Predicate (P)
Actualisers	Noun Phrase/ temporal inter-rogative	Noun Phrase/ locative inter-rogative	Noun Phrase/ pronoun	Noun Phrase/ pronoun	Noun Phrase/ discourse	Noun Phrase/ pronoun	Noun Phrase	adverb	verb
Encli-tics		-ba locative	***	-nanala 'with'	***	-kat goal	-ba instr.		

*   Other Clause Endo-Centre types have fewer relationships, see 3.

**   Manner may be actualised twice in a single Clause Endo-Centre.

***   Focus enclitics may be added to the Actor or the Object to form the various Focus Clause Endo-Centres. See the Endo-Centre Batteries under 3.

Transitive Endo-Centre Battery

    (A) for Actor: du *'man'*, wun *'I'*, kada *'who'*

    (P) for Action: sɨ *'shoot'*

    (O) for Object: bak *'pig'*, mada *'what'*

1. Normal < (A), (O), P > du bak sɨ *'the man shot the pig'*

2. Dubitative < (A), (O), anaka, P > du bak anaka sɨ *'is it not possible that the man shot the pig?'*

3. Interrogative Actor Focus < (O), A-na, P > bak kada-na sɨ *'who shot the pig?'*

4. Response Actor Focus < (O), A-ayɨ, P > bak kada-na sɨ *'it is I who shot the pig'*

5. Object Focus < O-na, P > mada-na sɨ *'what did he shoot?'*
                            bak-na sɨ *'it was a PIG he shot'*

6. Adjectival < P > sɨ *'the shot _____'*, i.e. *'the _____ which is/was shot'*

7. Adjectival Actor Focus < A-ai, P > wun-ai sɨ *'the _____ that I shot'*

    Classes actualising relationships are the same as shown in the Bi-Dimensional array (Chart 8) for Quotative Clause Endo-Centres with the exception that Object (O) is never actualised by discourse.

Motion Endo-Centre Battery

    (A) for Actor: du *'man'*, wun *'I'*, kada *'who'*

    (P) for Action: yi *'go'*

    (O) for Object: gepma *'village'*, adamal *'where'*

1. Normal < (A), (O-at), P > du gepma-at yi *'the man went to the village'*

2. Dubitative < (A), (O-at), anaka, P > du gepma-at anaka-yi *'is it not possible that the man went to the village?'*

3. Interrogative Actor Focus < A-na, P > kada-na yi *'who went?'*

4. Response Actor Focus < A-ayɨ, P > wun-ayɨ yi *'it is I who went'*

5. Object Focus < O-a, P > adamal-a yi *'where did you go?'*
                            gepma-a yi *'The village is where I went.'*

6. Adjectival < P > yi *'the _____ that I went to'*

7. Adjectival Actor Focus < A-ai, P > wun-ai yi *'the _____ that I went to'*

Classes actualising relationships are the same as those for transitive Clause-Endo-Centres with the following exceptions:

1. Items actualising Object (O) relationship are suffixed by relationship-marking clitic -at *'location toward'*. Only Noun Phrase, inanimate noun or location noun actualise this relationship.

2. Location (L) relationship is not required by motion verbs.

3. Object relationship in Object Focus Endo-Centres may be actualised by location interrogative adamal *'where'* and all items actualising this relationship are suffixed by relationship-marking clitic -a.

Intransitive Endo-Centre Battery

  (A) for Actor: du *'man'*, kada *'who'*, wun *'I'*
  (P) for Action: kawi *'wait'*

1. Normal < (A), P > du kawi *'the man waits'*

2. Dubitative < (A), anaka, P > du anaka kawi *'is it not possible that the man waits?'*

3. Interrogative Actor Focus < A-na, P > kada-na kawi *'who waits?'*

4. Response Actor Focus < A-ayɨ, P > wun-ayɨ kawi *'the _____ that I am waiting for'*

5. Adjectival < P > kawi *'the waiting _____'*

6. Adjectival Actor Focus < A-ai, P > wun-ai kawi *'the _____ that I am waiting for'*

Classes actualising relationships are the same as those for Transitive Clause Endo-Centres with the exception that Object and Instrument relationships are not required by intransitive verbs.

Stative Endo-Centre Battery

  (P) for Action: gɨlɨ *'to be all gone'*
  (O) for Object: gu *'water'*, mada *'what'*

1. Normal < (O), P > gu gɨlɨ *'the water is all gone'*

2. Dubitative < (O), anaka, P > gu anaka gɨlɨ *'is it not possible that the water is all gone?'*

3. Object Focus < O-na, P > mada-na gɨlɨ *'what is all gone?'*
              gu-na gɨlɨ *'it is WATER that is all gone'*

4. Adjectival < P > gɨlɨ *'the _____ that is gone'*

Classes actualising relationships are the same as those for Transitive Clause Endo-Centres with the following exception:

1. Actor, Co-actor, Goal, and Instrument relationships are not required by stative verbs.

2. Object is actualised only by an inanimate noun.

4. CLAUSE TYPES

Combinations of Clause Exo-Centres and Clause Endo-Centres yield 65 Iatmul Clauses, see Chart 9 on the following page. There are co-occurrence restrictions on these combinations. All Verbal Focus Exo-Centres may combine with any Normal Endo-Centre. Only Declarative Exo-Centres combine with the Dubitative Endo-Centres. External Focus 1 Exo-Centre combines with any Interrogative, Response, or Adjectival Actor Focus Endo-Centre, or any Object Focus Endo-Centre. External Focus 2 Exo-Centre combines with any Object Focus Endo-Centre and any Adjectival Endo-Centre.

CHART 9

Co-occurrences of Clause Exo-Centres and Endo-Centres

EXO-CENTRE	ENDO-CENTRE	NO. OF CLAUSE TYPES
Declarative	Dubitative Quotative Dubitative Transitive Dubitative Motion Dubitative Intransitive Dubitative Stative	5
Declarative Hortatory Imperative Volitional Conditional Relational Auxiliary	Normal Quotative Normal Transitive Normal Motion Normal Intransitive Normal Stative	35
EXTERNAL FOCUS 1	Interrogative Actor Focus Quotative Interrogative Actor Focus Transitive Interrogative Actor Focus Motion Interrogative Actor Focus Intransitive Response Actor Focus Quotative Response Actor Focus Transitive Response Actor Focus Motion Response Actor Focus Intransitive Object Focus Quotative Object Focus Transitive Object Focus Motion Object Focus Stative Adjectival Actor Focus Quotative Adjectival Actor Focus Transitive Adjectival Actor Focus Motion Adjectival Actor Focus Intransitive	16
EXTERNAL FOCUS 2	Object Focus Quotative Object Focus Transitive Object Focus Motion Object Focus Stative Adjectival Quotative Adjectival Transitive Adjectival Motion Adjectival Intransitive Adjectival Stative	9
	TOTAL	65

5. CLAUSE LAYERING

Declarative, Hortative, Imperative, and Volitional Exo-Centres have valence 4. Conditional Exo-Centres have valence 3; Relational Exo-

Centres, valence 2; and Auxiliary Exo-Centres, lowest valence 1.[10]

The relationship between clauses can be explained in terms of rules on three parameters: Termination, Order and Valence.

1. Termination   *Rule 1.*   All verbs are clause termini.

2. Order   *Rule 1.*   Clauses may be subordinate only to following clauses.

3. Valence   *Rule 1.*   Clauses are subordinate to other clauses of higher valences.

              Rule 2.   Two contiguous clauses of the same valence are in a co-ordinate relationship except that valence 3 clauses never appear contiguously.

              Rule 3.   Clauses following a clause of valence 1 or 2 have the same actor as the preceding clause. Clauses following a clause of valence 3 may or may not have a different actor. Clauses following marker maa must have a different actor than preceding clause.

              Rule 4.   Clause relator maa reduces the valence 4 clause it follows to valence 3 with respect to following clauses. It also indicates that the actor of the following clause will be different than that of the preceding clause.

Applying these rules one can see the relationships among clauses in a Iatmul string of speech. For example, given a Iatmul string of speech such as:

gay-at yi-ka waala kla-laa ya-d-ey-an dɨ-gat vɨ-kiyo-wun wun-okwinala yi-vat wa-d-ey-an kai wa-iko-wun kai wa-laa yi-wun maa kapma lɨ-kiya-dɨ.

And knowing the valences as stated:

gay-at yi-ka^1 waala kla-laa^2 ya-d-ey-an^3 dɨ-gat vɨ-kiyo-wun^4 wun-okwinala yi-vat^1 wa-d-ey-an^3 kai wa-iko-wun^4 kai wa-laa^2 yi-wun^4 maa^{-3} kapma lɨ-kiya-dɨ^4.

1. Apply the termination parameter rule and segment the string:

gay-at yi-ka^1 / waala kla-laa^2 / ya-d-ey-an^3 / dɨ-gat vɨ-kiyo-wun^4 / wun-okwinala yi-vat^1 / wa-d-ey-an^3 / kai wa-iko-wun^4 / kai wa-laa^2 / yi-wun^4 / maa^{-3} kapma lɨ-kiya-dɨ^4 /

2. Apply rules of order and valence parameters:

```
1  2  3  4  1  3  4  2  4-3  4
```
NOTE: 4-3 indicates that the 4 has been reduced to 3 by maa

3. Add English glosses:

*house-to go-ing[1] dog get-having[2] come-he-future-if[2] he to see-future-I[4]
// I-along with go-in order to[1] say-he-future-if[3] no say-future-I[4] //
no say-having[2] go-I[4-3] having alone be-future-he[4] // "If he comes,
after he has gone to the house and gotten the dog, I will see him. If
wants to go along with me, I will say no. If I go, after saying no, he
will be alone."*

6. SPECIAL CLAUSE SEQUENCES

There are some special sequences of clauses that express certain
Iatmul semantic categories such as Conditionals, Desideratives, Voli-
tionals, etc. which are related in terms of the rules in 2.5. These
sequences are restricted as to type of clause and in some cases as to
the verb root which may occur in certain clauses. These special se-
quences and their restrictions are discussed in the following sections.

6.1. CONTRARY TO FACT CONDITIONAL

Contrary to Fact Conditional is expressed by a protasis and an
apodosis. The protasis consists of an Auxiliary Clause (2.7.) and a
Conditional Clause (2.5.). The Auxiliary Clause is restricted to -ka
actualising the Exo-Centre and the Conditional Clause is restricted to
yi *'go'* as the verb root. The apodosis consists of an Auxiliary Clause
and a Declarative Clause (2.7.). This Auxiliary Clause has two restric-
tions: the Exo-Centre may only be actualised by -ka and the verb root is
restricted to yi *'go'*. The Declarative Clause is restricted to past
tense. In the following examples the restricted items are in capitals.

PROTASIS		APODOSIS	
AUXIL. CLAUSE	CONDIT. CLAUSE	AUXIL. CLAUSE	DECLAR. CLAUSE
kla-KA	YI-d-AN	YI-KA	wut-wun
get-ing	*go-he-cond.*	*go-ing*	*hear-I*
	'if he had gotten it, I would have heard'		
kla-LAPMAN	YI-d-AN	YI-KA	wut-wun
get-without	*go-he-cond.*	*go-ing*	*hear-I*
	'if he had not gotten it, I would have heard'		

6.2. *NEGATIVE FUTURE CONDITIONAL*

The Negative Future Conditional is formed by a sequence of Auxiliary Clause with -lapman actualising the Exo-Centre and a Conditional Clause with yi *'go'* as the verb root and future tense marker -ey obligatory.

EXAMPLE: 1. kla-LAPMAN YI-d-EY-AN
              get-without go-he-future-conditional
              'if he does not get it...'

6.3. *NEGATIVE IMPERATIVE*

The Negative Imperative is formed by an Auxiliary Clause containing -ka as actualiser of the Exo-Centre and Manner (Ma) relationship actualised by ke *'negative'*.

1. KE kwi-KA   *'don't give!'*
   no give-ing

2. kami dɨ-gat KE kwi-KA   *'don't give him fish!'*
   fish he-for no give-ing

6.4. *DESIDERATIVE*

The Desiderative is formed by a sequence of Auxiliary Clause and another clause of equal or higher valence. The Exo-Centre of the Auxiliary Clause is actualised by -vat *'purpose'*. The verb root of the following clause is obligatorily wa *'say'*.

EXAMPLES:

a. Auxiliary Clause followed by Auxiliary Clause
   kla-VAT WA-ka   *'wanting to get...'*
   get-to say-ing

b. Auxiliary Clause followed by Relational Clause
   kla-VAT WA-laa   *'having wanted to get...'*
   get-to say-having

c. Auxiliary Clause followed by Conditional Clause
   kla-VAT WA-d-ey-an   *'if he wants to get'*
   get-to say-he-fut.-cond.

d. Auxiliary Clause followed by Imperative Clause
   kla-VAT   a-WA   *'want to get!'*
   get-to imper.-say

e. Auxiliary Clause followed by Volitional Clause
   kla-VAT WA-kaa-dɨ   *'would that he would want to get'*
   get-to say-vol.-he

f. Auxiliary Clause followed by Declarative Clause

    kla-VAT WA-di   *'he wanted to get'*
    get-to   say-he

6.5. NEGATIVE DESIDERATIVE

Negative Desiderative is composed of a clause with its manner (Ma) relationship actualised by kai *'no'* and the verb root consisting of wa *'say'*.

EXAMPLE: KAI WA-di   *'he didn't like'*
          no   say-he

This clause may be expanded with the goal relationship (G) actualised by an Auxiliary Clause, the Exo-Centre of which is actualised by -vat *'purpose'*. It should be remembered that Goal relationship is marked by clitic -kat.

EXAMPLE: kla-VAT-KAT KAI WA-di
          get-to-goal no   say-he
          'he did not want to get' (literally: *'he said no about to get'*)

6.6. INCEPTIVE

Inceptive action is expressed by a sequence of Auxiliary Clause and Declarative Clause. The Exo-Centre of the Auxiliary Clause is actualised by -vat *'purpose'*. The Declarative Clause Exo-Centre obligatorily contains -ka *'present tense'* and the verb root is yi *'go'*.

EXAMPLE: yi-VAT YI-KA-wun
          go-to   go-pres.-I
          'I am about to go' (literally: *'I am going to go'*)

6.7. PRESENT CONTINUOUS

Present Continuous action is expressed by a sequence of Auxiliary Clause and a following clause. The Auxiliary Clause has its Exo-Centre actualised by -ka. The following clause contains li *'to be'* as the verb root and -ka *'present tense'*.

EXAMPLE: kla-KA Li-KA-wun   *'I am getting'* (literally: *'getting I am'*)
          get-ing be-present-I

6.8. DOUBLE IMPERATIVE

It is common in Iatmul to find a sequence of Imperative Clause and Hortatory Clause.

EXAMPLE: ya-kwa   yi-li   *'come, let's us two go'*
        come-imper. go-dual
        NOTE: The verb root ya *'come'* is the only Iatmul verb root to form the imperative by adding the suffix -kwa.

6.9. *RECAPITULATION*

Recapitulation may be expressed by:

1. A sequence of two Auxiliary Clauses with Exo-Centre actualised by -ka and verb roots consisting of lɨ *'to be'*. This sequence begins a sentence by setting the scene.

EXAMPLE: tɨ-ka lɨ-ka   *'that being the case'*
        be-ing be-ing
        NOTE: The alteration between tɨ and lɨ is phonologically determined.

2. The verb root of a valence 4 clause in a clause string may be repeated with an Exo-Centre of a lower valence to begin another clause string.

EXAMPLE: napa   ya-dɨ   ya-laa   kwa-dɨ
        yesterday come-he come-having remained-he
        'yesterday he came. Having come, he stayed'

7. CONCLUSION

Had the emphasis of this paper been to isolate grammatical units of various levels of the grammatical hierarchy, some of the clause sequences under 6. could have been called verb phrases. All special sequences with the possible exception of Negative Desiderative (6.5.) and Double Imperative (6.8.) are similar in form to what is usually called verb phrase. Similarly, the clause relationships described under 5. could have been the basis for sentence structure and all strings of clauses ending in a clause of valence 4 with appropriate intonation contours added would have been defined as independent sentences. Instead, in this paper I have tried to emphasise relationship between grammatical forms rather than isolation of grammatical units although some of the latter is necessary to accomplish the former.

NOTES

1. Iatmul is a language spoken by about 8000 residents of the East Sepik District of the Territory of New Guinea. The term Iatmul was first used by Bateson (1931) to describe a group of people speaking the down-river dialect of Iatmul. The language name used by the people themselves is ngepma kwundi. This paper describes the up-river dialect, more specifically that form of it spoken at the village of Kandangay. The material for this paper was collected intermittently from 1962 to 1968. The author wishes to thank Dr Katherine Peeke for her help during the summer of 1967 in the organisation of this material and especially for pointing out the distinction between the two parts of the Iatmul clause here referred to as Exo-Centre and Endo-Centre. This research has been supported in part by the New Guinea Branch of the Summer Institute of Linguistics Research Fund.

The symbols used in this paper with their phonetic equivalents are as follows: i (i), (ɩ); ɨ (ɨ); u (u), (ʋ); e (e), (ɛ); o (o), (ɔ); a (a), (ə); p (p); t (ţ); k (k); b (mb); d (nd); g (ŋg); m (m); n (n); s (s), (š); 1 (l), (ʎ); v (ɓ); y (y); w (w); aa (aʔa); j (ndž).

2. Equational Clauses, although occurring in Iatmul, are not treated in this paper. There are two varieties of the Equational Clauses: Personal Equative Clause and Focus Equative Clause.
EXAMPLES:

Personal Equative Clause	Focus Equative Clause
dɨ du dɨ	dɨ du -a
he man he	*he man -focus*
'he is a man'	*'he is a MAN'*

3. The tagmemic model from which this author has drawn heavily recognizes grammatical function as the relational principle within constructions. This function as described by Longacre (1965, p.65) is "... the peculiar office or role of one formally distinguishable part of a

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construction type in relation to other parts of the same construction."
My own use of "relationship" differs in two ways. First, relationships
of items within a clause are always relationships with respect to the
only item which is obligatory to all clauses, the verb. Therefore, I
have tried to choose relationship labels which reflect semantic relation-
ships to the verb, such as actor and goal rather than subject and object.
Second, while relationships of non-verbal items to the action in a clause
Endo-Centre do relate items within "the same construction", Exo-Centres
relate separate constructions. Cowan and Merrifield (1967) found that
slot labels were largely *ad hoc* and not particularly useful. Similarly,
in this study the slots filled by individual clauses have not been
labelled since such labels would be largely redundant with the labels of
the Exo-Centres of the clauses.

4. The label 'bi-dimensional array' follows Longacre (1968). His
columns are labelled according to 'grammatical function' and filled by
'exponents' of these functions.

5. Although 'Object' is usually used to denote Direct Object synonomous
with accusative case, my use follows Fillmore (1968) in which he uses
'Object' to denote, "the semantically most neutral case, the case of
anything representable by a noun whose role in the action or state
identified by the verb is identified by the semantic interpretation of
the verb itself; conceivably the concept should be limited to things
which are affected by the action or state identified by the verb."
    The effect of the verb on the interpretation of 'Object' relation-
ship is seen in the comparison of Iatmul Transitive and Motion Clauses
where the Object of a transitive verb is formally unmarked while the
Object of a motion verb is marked by the clitic -at *'location toward'*.

6. Thomas, David, "Transformational Paradigms From Clause Roots" in
Anthropological Linguistics, January 1964.

7. Translations of Endo-Centres also include tense, aspect and actor
which are items found in the Exo-Centre. They are translated as if
they were complete clauses.

8. When an Exo-Centre combines with Dubitative Endo-Centre, the Exo-
Centre becomes discontinuous with the actor suffixed to anaka and tense
and aspect suffixed to the verb root.

9. Adjectival Clauses occur with a noun to form a Noun Phrase.

EXAMPLES: 1. but-a   nyaagɨt   *'told talk'*
             told-ext.foc. talk

          2. but-d-a   nyaagɨt   *'talk (that) he told'*
             tell-he-ext.foc. talk

10. My use of 'valence' differs somewhat from Gleason's (1968, p.52).
He uses the term to denote specific relationships between actions and
participants as well as relationships between actions in an 'event-
line'. I use it in reference to a degree of ability to be subordinate
to another clause. The specific relationships between the actions of
the clauses are shown by the items actualising the clause Exo-Centre.

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