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by

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TABLE OF CONTENTS

	<i>Page</i>
RELATIONSHIPS BETWEEN SENTENCE AND DISCOURSE IN HALIA, by Janice Allen	
0. INTRODUCTION	1
1. DESCRIPTION OF UNITS	1
2. RELATIONSHIPS BETWEEN UNITS	7
<i>Notes</i>	14
 OKSAPMIN SENTENCE STRUCTURE, by Marshall Lawrence	 17
1. SENTENCE TERMINATION	18
1.1. Information Structure within the Clause	18
1.2. Information Structure and Information Focus within the Sentence	24
2. SENTENCE STRUCTURE	27
2.1. Opening	27
2.1.1. Outer Periphery	27
2.1.2. Inner Periphery	28
2.2. Closure	30
2.2.1. Tense and Mood	30
2.3. Nucleus	33
2.3.1. Simple Nucleus	33
2.3.2. Complex Nucleus	35
2.3.3. Compound Nucleus	38
<i>Notes</i>	44

4. Joseph G. Greenberg and others have shown that the
relationship between the two is not as simple as it
seems, and that it is not a simple matter of
cause and effect.

5. The view of the world is not a simple matter of
cause and effect. It is a complex and multi-faceted
phenomenon that is determined by a variety of factors,
including social, cultural, and political influences.

7. A period of time is not a simple matter of
cause and effect. It is a complex and multi-faceted
phenomenon that is determined by a variety of factors,
including social, cultural, and political influences.

8. A period of time is not a simple matter of
cause and effect. It is a complex and multi-faceted
phenomenon that is determined by a variety of factors,
including social, cultural, and political influences.

9. A period of time is not a simple matter of
cause and effect. It is a complex and multi-faceted
phenomenon that is determined by a variety of factors,
including social, cultural, and political influences.

(1) There is a relationship between the two
phenomena. The relationship is not a simple matter of
cause and effect. It is a complex and multi-faceted
phenomenon that is determined by a variety of factors,
including social, cultural, and political influences.

(2) There is a relationship between the two
phenomena. The relationship is not a simple matter of
cause and effect. It is a complex and multi-faceted
phenomenon that is determined by a variety of factors,
including social, cultural, and political influences.

10. I have not been in a situation where a person is
being treated as a second-class citizen. I have not
been in a situation where a person is being treated
as a second-class citizen. I have not been in a
situation where a person is being treated as a
second-class citizen.

11. I have not been in a situation where a person is
being treated as a second-class citizen. I have not
been in a situation where a person is being treated
as a second-class citizen. I have not been in a
situation where a person is being treated as a
second-class citizen.

12. I have not been in a situation where a person is
being treated as a second-class citizen. I have not
been in a situation where a person is being treated
as a second-class citizen. I have not been in a
situation where a person is being treated as a
second-class citizen.

13. I have not been in a situation where a person is
being treated as a second-class citizen. I have not
been in a situation where a person is being treated
as a second-class citizen. I have not been in a
situation where a person is being treated as a
second-class citizen. It is the distinction of the two
concepts that marks the relationship, so that it is
not possible to separate the two.

RELATIONSHIPS BETWEEN SENTENCE AND DISCOURSE IN HALIA

JANICE ALLEN

0. Introduction.
1. Description of Units.
2. Relationships Between Units.

0. INTRODUCTION

The first part of this paper describes the linear arrangement of clauses within sentences and of higher level units within the discourse in Halia¹. The second part describes the relationships between clauses within the sentence and between higher level units within the discourse.

1. DESCRIPTION OF UNITS

1.1. The sentence unit is shown by sentence final intonation or by anaphoric clause linkage. A sentence is defined as a unit consisting of one or more independent clauses optionally preceded or followed² by dependent clauses. These clauses may be divided into content clauses, appositional clauses, quotation margin clauses and linking clauses. These clauses in their various combinations and with their appropriate intonations comprise the sentence unit.

1.1.1. Each clause finishes with either rising, level, or falling intonation³. For the purposes of this paper sentence final falling intonation is symbolized by a full stop (period). Sentence final rising intonation is symbolized by a question mark in the case of questions and by a semicolon in the case of assertions. Sentence medial rising intonation is symbolized by a comma. Sentence medial

falling intonation is symbolized by a colon. Sentence medial or final level intonation is symbolized by a dash.

Sentences may end with falling, rising, or occasionally, level intonation. Sentence final falling intonation occurs in ordinary declarative sentences and in information questions and is the predominant sentence final intonation pattern. The fall occurs immediately before, or in varying patterns within, the last word of the sentence⁴:

alia e solor e Patrik. (*I a. name a. Patrick.*) *My name is Patrick.*
 nonei e ka gonomena a tahol itanen. (*he v. is with a. woman his.*)
He is with his wife.

a saha ta ka te mi tukuna itamulam. (*a. what thing v. come arrives ours.*) *What thing is coming to us?*

Non-final clauses are marked by rising or level intonation:

ba nori a tsi mun toulana e saleri-en a tsi poum, ba nonei e nouna.
 (*and those a. dim. two brother v. give-him a. dim. pig-(meat), and he eats.*) *The brothers give him a little pig meat, and he eats.*

poata te palaka-nen, e hiaka-na. (*when v. dry-it, v. white-it.*)
When it is dry, it is white.

Falling intonation may also occur sentence medially, but in only two types of instances - before an appositional clause or phrase and before a direct quotation.

First, falling intonation sentence medially shows apposition between a sentence final clause or noun phrase and the clause with which it is in apposition. This gives compound falling intonation:

manasa koru a maroro e omi koru: e tsiktsiki koru. (*before very a. road v. bad very: v. ground very.*) *In the past the road was very bad, very muddy.*

...ba nori te ka talar i pipiou: nori a tsi elapisa a tsi katun.
 (...and they v. are now in rubbish heap: those a. dim. three a. dim. person.) *...and they are now in the rubbish heap, those three little people.*

In using this appositional type of information structure⁵ the speaker is taking the option of packing into two units - the appositional clause or noun phrase and the clause to which it is in apposition - information which could be included within the preappositional clause. The speaker takes this option for one or more of the following four reasons: to show marked information focus,⁶ as an afterthought, to clarify the preceding clause, or as an afterstatement to prevent overloading the

preceding clause.

Second, falling intonation sentence medially may occur before a direct quotation:

na nonei e Hugen e rangata tala: ime te mar kato talaua-golia.
(and he a. Hugen v. asked now: where v. way do now-I.) And Hugen asked, "What do I do now?"

The type of intonation that occurs before a direct quotation appears to be irrelevant. All contrasts are neutralized; it is only the position of the intonation break that is significant, not the particular intonational contour. Level intonation has been noted here:

...ba te masaka-r ba te poeie-r - ara e na lupura i mahö... (and v. talk-they and v. say-they - we v. go dig-up (banana shoots) tomorrow....)
... and they talk and say, "We will go dig up (banana shoots) tomorrow..."

Rising intonation has also been noted:

ba u tsunono te rangar, na hoatemuma.... (and a. chief v. say, go fish....) And the chiefs say, "Go fish...."

Sentence final rising intonation distinguishes yes-no and rhetorical questions, obvious statements, assumptions, insistent requests, and unfinished sentences from ordinary declarative sentences and information questions.

There are two kinds of question sentences besides information questions: yes-no questions and rhetorical questions. Ordinary yes-no questions must finish with rising intonation, as only the intonation distinguishes a yes-no question from a statement:

alo e kaka talam o Hugen? (you v. are-here now o Hugen?) Are you here, Hugen?

However, a yes-no question with an "or not" ending will have rising intonation on the question, but falling intonation on the "or not":

alimiu e ka hanigamiu, tsi emoa. (you v. are good, or not.) Are you well or not?

Rhetorical questions may finish with rising intonation:

alo be hakatsi tsiponeiem ara e tapa seira? (you un. think un. we v. fly up?) Do you think we will fly up? The speaker then answers his own question, saying, "We're going down."

Obvious statements also finish with rising intonation. They indicate that the speaker considers the statement so obvious that he should not really have to make it:

alö e gummoia itamulam; alö e gummoia i halahala-mulam; (*you v. sit on-us; you v. sit on our-shoulders;*) *You sit on us (implying, where else?). You sit on our shoulders (implying, where else?).* These sentences were spoken by three little birds in reply to a little boy's mystified question, "What do I do now?"

ga ra e russira; (*un. we v. go-down;*) *We go down (of course).*

Assumptions also finish with slight rising intonation:

na tana ka len, alimiu e atei silemiu a tun tolala te ka gonome-gulia reka; (*now another thing more, you v. know a. white man v. am with-I here;*) *Now another thing, you all know the white man that I'm with here.*

Insistent requests finish with rising intonation:

ba tsi mun toulana i poe poni alö go hala talaramelam ta tsi kannou; (*and dim. two brother v. say again you imperative give now-us a. dim. food;*) *And the brothers say again, "You give us a little food."*

Ordinary requests finish with level or falling intonation:

ba nonei e poiema luema a kikiono i toum ba lia u noubuto - (*and he v. says, give a. pudding directive here and I v. eat -*) *And he says, "Give the pudding here, and I'll eat."*

ba tsi mun toulana e singor alö go hasalarame-lam ta tsi pemun kalekale. (*and dim. two brother v. beg you imperative give-us a. dim. husk betelnut.*) *And the brothers beg, "You give us some betelnut husks."*

Sentences left unfinished by the speaker also carry rising intonation.

1.1.2. Sentence final intonation is irrelevant before anaphoric clause linkage,⁷ which itself signals the beginning of a new sentence. All contours are neutralized as is the case before a direct quotation. The anaphoric clause showing linkage carries rising intonation. It optionally begins with a connective, *poata when* or *ba (be, bu) and*. It must repeat the verb of the clause to which it refers and optionally repeats the subject or object or both. The adverb *hakapa finish* usually follows the verb to show completion of the action. The linking clause may contain new information such as an explicit object for the verb, an adjective modifying the object, or a locative. Linkage of one sentence to another may continue until a related sequence of actions is completed. A discourse describing the making of a canoe has four units containing sequences of sentences linked by anaphoric clauses. The first describes preparations for starting construction of the canoe. The second

describes the construction, the third the gluing of the joints, the fourth, painting and using the canoe.

In the following example each new sentence begins with anaphoric clause linkage. The preceding sentence to which the linkage refers finishes with rising intonation:

...ba nori te saloier u taariomo; salo hakape-r-en, ba te hakitseie-r; hakits hakape-r ba te salo tsonie-r u bibiana; ba te salo hakape-r u bibiana ba te hakitseie-r. (...and-then they v. plane a. taariomo-plank; plane finish-they-it, and v. tie-they; tie finish-they and-then v. plane again-they a. bibiana-plank; and v. plane finish-they a. bibiana-plank and v. tie-they.) And then they plane the taariomo plank. (When) they have finished planing it, they tie (it). (When) they have finished tying (it), then they plane again, (this time) the bibiana planks. And (when) they have finished planing the bibiana planks, then they tie (them).

In the following example the sentence to which the linkage refers finishes with falling intonation:

...ba te na noue-r a kannou e naselila tohalio. poata te nou hakapa-ri-en,... (then v. go eat-they a. food v. cook women. when v. eat finish-they-it,...) ...then they eat the food the women have cooked. When they have finished eating it,...

In the following example the sentence to which the linkage refers finishes with level intonation:

...me kana me pikana - pika peseie-na a pien... (...and stays-she and becomes-pregnant - becomes-pregnant alone-she a. child...) ...and she stays and becomes pregnant. She conceives a child by herself...

1.2. Higher level units within the discourse are shown, not by intonation as is the sentence unit, but by sequences of anaphoric clause linkage, by the use of transitional sections, by changes of setting or participants or both, and by the repetition of a particular element at the beginning of each section of the discourse.

The first, sequences of anaphoric clause linkage, has been described under 1.1.2.

The second is the use of transitional units. These units have anaphoric reference to the unit of discourse just completed and cataphoric reference to the unit being introduced:

Now I will talk again, (this time) about the way the roads were before, the grass (roads). The phrase *talk again* refers to the talking already done in the preceding section while *the way the roads were before* introduces the subject of the new section.

In a story about some birds trying to rescue a small boy named Hugen who has been kidnapped by the sky dwellers the following section makes the transition between the efforts of the larger birds to reach the sky country and the successful attempt of the three despised small birds:

And they (the bigger birds) say, "Oh, we ate all that food for nothing (since the strength we got from it didn't enable us to reach the sky country). You little birds try now."

The third is changes of setting or participants or both. The story about Hugen mentioned above is divided in this way:⁸

Section 1: Setting - earth; Hugen is kidnapped from there by the sky dwellers.

Section 2: New participants - all the birds; they try to reach the sky country from earth in order to rescue Hugen; the three smallest birds finally succeed in reaching it.

Section 3: Setting - sky country; Hugen and the three little birds make a plan for Hugen's escape from there and carry it out.

Section 4: Setting - earth; Hugen and the three little birds arrive home there and a feast is made for them.

A story about a man named Tokanbehi who tricks two brothers is divided as follows:

Section 1: Setting - the sea; Tokanbehi persuades the two brothers to row his canoe with him in it. He keeps eating and promising to give them food when they pass the next cape but never does it. They eventually jump overboard and swim to shore.

Section 2: Setting - the land; the two brothers fight off wild dogs all night. The people who live at that place prepare food for the boys to take with them when Tokanbehi returns for them.

Section 3: Setting - the sea; Tokanbehi takes the boys and their cargo to sea again. The boys now eat in front of Tokanbehi, tricking him as he did them. He is finally eaten by a crocodile they have secreted in one of the food baskets. The brothers then return to shore.

The fourth way higher level units within the discourse are shown is by the repetition of a particular element at the beginning of each section of the discourse. In a certain historical narrative the repeated element is a temporal phrase, often lengthy in comparison with the shorter temporal phrases that usually occur within the sections:

And this time now...; Long ago, no, not so very long ago...; Long ago, during the time of Fr. Siaban....

Another discourse, which is a tape recorded letter from a young man away from home to his relatives back in the village, begins each sentence with either *you know* or *I want you to know* or *I don't know*.

2. RELATIONSHIPS BETWEEN UNITS

These relationships may be divided into three types: specific, semi-specific and general.⁹ A few are shown by connectives that mark relationships only between clauses. One is shown by a linkage that marks relationships only between sentences. Most are shown by connectives that mark relationships between clauses and also between higher level units within the discourse.

2.1. Specific relationships may be shown in three ways. First, by the use of certain verb phrase suffixes or purposive adverb plus transitive suffix in the first clause of a sentence that have reference to the following clause. The two clauses are interdependent. The referential suffix *-ne*, the beneficiary suffix *-beie*, the associative suffix *-me* and the purposive adverb *sil-* plus the transitive suffix *-e* all have specific case relationships within the clause but they may also show relationships between clauses as follows:

The referential suffix *-ne* shows purpose or reason:

ba te hasesei-ne-na ge gi pan boroboro. (and v. hurry-referential-she un. imperative big quickly.) And she hurries (them) up so they will grow up quickly.

*alia e la-ne-gu-la te raharahauana e tsina-r. (I v. go-referential-I-directional v. anger a. mother-my.) I went because my mother is angry. (El.)*¹⁰

The beneficiary suffix *-beie* shows reason:

nonei e hahatongo-beie-na e lama turu skul. (he v. knows-beneficiary-he v. came from school.) He is smart because he has been to school. (El.)

The associative suffix *-me* shows reason or simultaneity:

ara e haromana-me-ra te kui menarera a hatu na te kui menarera a maromo. (*we v. sorry-associative-we v. work with a. stone-axe and v. work with digging-stick.*) *We are sorry because we have to work with stone axes and digging sticks.*

...ba nori te la tala-me-r te susukun tsirukuuana pitala tara lahi. (*...and they v. go now-with(associative)-they v. near set sun in afternoon.*) *...and they go at the time the sun is nearly setting in the evening.*

The purposive adverb *sil-* followed by the transitive suffix *-e* shows purpose or reason:

a han e ski sil-e-na te galualila a barebana. (*a. village v. deserted purposive-transitive-it v. go (to the beach) a. people.*) *The village is deserted because the people went to the beach.* (El.)

a moni itar e antuna sil-e-na te go hol meni lia a wailis. (*a. money my v. enough purposive-transitive-it v. subjunctive buy transitive I a. radio.*) *My money is sufficient for me to buy a radio.* (El.)

Second, specific relationship may be shown by the use of anaphoric clause linkage described in 1.1.2. It specifies a sequential relationship between sentences. The linking clause is sometimes separated from the sentence to which it anaphorically refers by an appositional sentence. In this case it links the sentence it introduces to both of the preceding sentences:

...nori e hakits mame-r u hatsinana. hatsinana e kate-ri u polats has. Poata te kits hakapana u hatsinana... (*...they v. tie first-they a. hatsinana-planks. hatsinana-planks v. make-they a. polats-wood too. when v. tie finish a. hatsinana-planks...*) *First they tie the hatsinana planks. The hatsinana planks are made from polats wood, too. When they have finished tying the hatsinana planks,...*) In this example the second sentence is in apposition to the first sentence. And the anaphoric linking clause at the beginning of the third sentence links that sentence to both of the preceding ones.

Third, specific relationships may be shown by the use of specifying connectives. *Taraha* and *tara neha*, both meaning *because*, show reason:

alia e ramaneg-en taraha e omi-na. (*I v. dislike-it because v. bad-it.*) *I don't want it because it is bad.* (El.)

Matanatsil begs for a little fire and the woman doesn't want to give it to him. Because (taraha) she sees that he has a liver hanging from him.

alia e lag-ou i haus-sik i lahi tara neha e tsina-r e sikina. (I v. go-future to hospital in afternoon because a. mother-my v. sick.) I will go to the hospital this afternoon because my mother is sick. (El.)

Hena and sanena, both meaning *if*, show hypothetical result:

hena alo go katsin hitöl ba lo te hatakeiem a luma. (if you imperative want marry then you v. build a. house.) For example, if you want to get married; all right, you build a house. (El.) Hena carries a connotation of for example as well as if.

Sanena te go lauu lö turu hai skul i Lei ba lö te luea niatei pan. (if v. subjunctive go-you to high school in Lae then you v. get a. knowledge big.) If you go to high school in Lae (whether you really go there or not), you learn a lot. (El.)

Here- like shows analogy:

a bom e gutsil here-nei u gururu. (a. bomb v. sound like-it a. thunder (sound).) A bomb makes a noise like thunder. Here- in the first clause has reference to the following clause which is often elliptical as in the elicited example above.

Tsi or shows alternation:

alimiu toum e hapolasa banemolia, tsi alimiu toum e na hakats silemia. (you maybe v. forget-away me, or you maybe v. negative think about-me.) Maybe you have completely forgotten about me, or maybe you just don't think about me.

If we follow the ways told about in our folklore will it be well with us? Or (tsi) shall we change these ways?

E poeiena it says shows implication:

If a person asks the question: *What does this mean - the village is deserted and the houses are locked?*, the reply could be as follows:

a ka teka e poeiena a barebana e kete hakapalila. (a. thing here v. says a. people v. go-to-bush finish.) This means that everybody has gone already to the bush. (El.)

Poata when shows temporal setting. It precedes the temporal clause. It may show a simultaneous or a sequential temporal setting relationship:

Poata te tukuia a tolala, a katun hoboto e na alosolia i kotolana.
(when v. arrive a. ship, a. person all v. go wait on beach.) When the ship arrived, all the people went (and) waited on the beach.

2.2. Semi-specific relationships are shown by connectives that in some cases show specific relationships but in others do not specify as to the type of relationship being shown. Three connectives, *ba*, *me*, and *kaba*, are semi-specific.

*Ba*¹¹ (*be*, *bu*)¹¹ tends to show the specific relationships of sequence or consequence in narrative discourse. In one narrative composed of sequential actions ten sections out of a total of thirteen are tied together with *ba*.

ba kako te sunguna, bu katun hoboto te soater nonei a maman a ka tere patere. (and cargo v. comes-to-shore, and-then person all v. carry this a. every a. thing of priest.) An the cargo comes ashore, and then all the people carry all the priest's things.

te kamua alö ba lö te tatei hengoem u ranga itar. (v. are-(there) you then you v. can hear a. talk my.) (if) you are there (and I expect you to be), you can hear what I have to say.

a mapou e las pokapnana mona ba mona te me tatei takata boroboronei. (a. bench v. pull hold canoe so canoe v. negative can break quickly.) The bench holds the canoe together so that it cannot break apart quickly.

In non-narrative discourse *ba* does not specify the type of relationship shown.

Me tends to connect clauses within a close knit action sequence. It usually specifies extended or continuous action:

ba tsi hatoulana a tsi kapan e seieta u uele me na tsekona me koluna. (and dim. brother a. dim. big v. climbs-up a. coconut-tree and go breaks-off (coconuts) and comes-down.) And the bigger brother climbs the coconut tree and picks (the coconuts) and climbs down.

Me may also be used when the same action is expressed in two different ways:

Ba nonei e gamoto me poiena.... (and he v. lied and says....) And he lied and said, "...."

Also *me* may show result without specifying it:

ba nori e hengoer-en me na osa talar tara mona tere Tokanbehi. (and they v. hear-him so go board now on canoe of Tokanbehi.) And they listened to him, so they boarded Tokanbehi's canoe.

Occasionally *me* occurs sentence initial rather than between clauses within a sentence. Here it also tends to show sequential action.

Kaba tends to show the adversative relationship:

nonei a poata teka patere e ka hakapa, kaba nori u katun teka emoa ta toukui pan itaren. (*this a. time here priest v. is finish, but they a. person here no a. work big their.*) *At this time the priest was already here, but these people didn't have a lot of work.*

Kaba may be used as a nonspecifying connective also. In the following example it is used to show that the speaker forgot a procedure in a discourse describing the building of a canoe and wants to backtrack to put it in:

kaba i mam turu taariomo nu bibiana, nori e hakits mamer u hatsinana. (*but directive before of tarriomo-planks and bibiana-planks, they v. tie first a. hatsinana-planks.*) *But before (making) the taariomo and bibiana planks, they first tied the hatsinana planks.*

2.3. General relationships show that there is a relationship but do not specify what relationship. These relationships are shown by the connective *na* and by juxtaposition.

The connective *na* (*nu, ne*) tends in non-narrative discourses to connect nonsequential units:

e tatei hakeier, tsi a saha ka te omina itanen? na u hahatate u mana, nonei u Pinari? (*v. can put-(it), or a. what thing v. bad its? and a. story a. true, this a. Pinari?*) (*We*) *can approve it, or what is wrong with it? And is it true, this Pinari (story)?*

In narrative discourses *na* may indicate collection, sequence, or simultaneity without specifying which:

te kaia i Hanahan, na a teret stoa itanen e kaia tara makum ti ngöei i Kobono. (*v. stay at Hanahan, and trade store his v. stay at place v. call directive Kobono.*) (*He*) *stayed at Hanahan, and his trade store was at the place called Kobono.*

na taina muki e pietama na nonei e singatsi na muki e rus i puta. (*and another dog v. runs and he v. hits and dog v. fall directive below.*) *And another dog comes running and he hits (it) and it falls down below.*

toa pal katun te larima, ne Hopuei e pila baren. (*one group person v. come, and Hopuei v. shoot away-them.*) *One group of people comes, and Hopuei shoots them down.*

Juxtaposition may indicate the following relationships:

Positive-negative and negative-positive:

One narrative says: "Before the roads were very bad. They weren't good enough for cars to go on."

In a historical discourse a unit of discourse describing the "bad old days" is in an adversative relationship with a block describing the present good time.

nonei a poata teka emoa ta tun tolala te para te ga ka, emoa. e masta Heben talasi a toa te ka. (*this a. time here no a. white man a. many v. subjunctive are, no. a. Mr Heben only a. one v. is.*) *At this time there weren't many Europeans (here). Only one, Mr Heben, was here.*

Equivalence is also shown by juxtaposition:

...ba nonei a katun eni te kopis pouts ponn-ou romana, e la pouts ponn-ou... (*and this a. person here v. return back again-future future, v. go back again-future...*) *...and this person will return again; he will go back again...*

It is a good time now as foreseen and brought about by the Europeans ... It is a very good time now... It is a good time.

Collection is also shown by juxtaposition:

A tape recorded talking letter home has the following collection of sections:

Sections 1 and 2: *what I want you to know.*

Section 3: *what I'm doing with the white man.*

Section 4: *what I want you to tell Dad.*

Section 5: *what I want to tell Latu.*

Section 6: *what I want you to do for Jerry.*

Setting is shown by juxtaposition of the setting with the remainder of the discourse and also by order when it occurs at the beginning. The following setting of identification and location occurs at the beginning of a tape recorded talking letter:

My name is Patrick. I am in Lae. I work at the hospital.

The relationships of general-specific and result are indicated by order as well as by juxtaposition:

a tahol itanen has e posa hakapa. e posei a tsi pien tahol. (*a. woman his also v. give-birth finish. v. give-birth a dim. child woman.*)

His wife also has given birth. (She) has given birth to a baby girl.

Today there is much work. (Specifically,) the building of good houses.

This example shows reason followed by result:

We now live in many different places rather than all together as before. I have married a girl from another tribe.

N O T E S

1. Halia is a Melanesian language closely related to the north Bougainville languages - Petats, Solos, and Sapos (J. Allen and C. Hurd, Languages of the Bougainville District, Port Moresby, 1965). According to Isidore Dyen (The Lexicostatistical Classification of the Austronesian Languages, IUPAL Memoir No. 19, 1965, p.43) Halia is a member of the Northwest Buka subfamily of Austronesian languages.

The following Halia orthography is established: p, b, t, k, g, s, ts, h, m, n, ng [ŋ], l, r, ɿ, e, a, o, u, ö [o[^]], ei, ëi [ɛ^vi], au, ou.

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2. Although it is unusual in this part of the world to find dependent clauses following independent clauses, this does occur in Halia:

alö e ma tara putami te go mamariulö. *You must not look down lest you become dizzy.*

3. The four levels of intonation in Halia are extra high (limited usage), high, mid, and low.

4. The following abbreviations are used in word for word translations of text:

v.: verb phrase introducer
 a.: article
 dim.: diminutive
 un.: untranslatable

5. M. A. K. Halliday, Notes on Transitivity and Theme in English, part 2, *Journal of Linguistics*, 3:2, 199-236, October 1967.
6. Marshall Lawrence, *Oksapmin Sentence Structure* (forthcoming), Section 1, describes compound falling intonation sentence final in Oksapmin as a means of focusing information.
7. Longacre says that this linkage "basically consists in repeating, paraphrasing, or referring in some manner at the onset of a succeeding sentence to the whole or part of the preceding sentence" (Robert E. Longacre, 1968).
 Robert C. Thurman, *Chuave Medial Verbs* (forthcoming), 1971, distinguishes between chaining (cataphoric reference through predicting the subject of the next clause) and linkage (anaphoric).
8. Only direct translations are shown in Italics; paraphrases and condensations are not. Examples that have more than one sentence are usually given only in English. If the use of a particular connective is being illustrated, it will be given in Halia as well as English.
9. Simon C. Dik, *Coordination*, North-Holland, 1968, page 291, gives a scale of semantic specificity for coordinators followed by a description of general tendencies which may be formulated in connection with the scale.
10. Examples marked (El.) have been elicited from a Halia speaker, rather than found in free text.
11. Jerry Allen, *Tense/Aspect and Conjunctions in Halia Narrative*, (forthcoming), 1971, describes Halia conjunctions.

OKSAPMIN SENTENCE STRUCTURE

MARSHALL LAWRENCE

1. Sentence Termination
 - 1.1. Information Structure within the Clause
 - 1.2. Information Structure and Information Focus within the Sentence
2. Sentence Structure
 - 2.1. Opening
 - 2.1.1. Outer Periphery
 - 2.1.2. Inner Periphery
 - 2.2. Closure
 - 2.2.1. Tense and Mood
 - 2.3. Nucleus
 - 2.3.1. Simple Nucleus
 - 2.3.2. Complex Nucleus
 - 2.3.3. Compound Nucleus

A sentence in Oksapmin¹ is composed of one or more clauses within a discourse and is characterized by certain features of opening and closure. Between the boundaries of opening and closure is the nucleus. These three sections, opening, closure, and nucleus, act in different ways to unify the events of a discourse.

Sentence opening expresses the theme or point of departure of a discourse, paragraph, or sentence. It also provides the mechanism for expressing the relationship of that sentence to the preceding sentence, or the relationship of a group of sentences (paragraph) to the preceding group of sentences.

Closure expresses the speaker's relationship to the discourse through tense and mood.

There are three types of sentence nuclei, simple, complex, and compound. The simple nucleus expresses the relationship of one event to the following event. This relationship may be sequential or simultaneous. The complex nucleus permits embedding a simple nucleus. The compound nucleus expresses relationships between one group of events and another group of events, such as coordination, alternation, and condition.

1. SENTENCE TERMINATION

The sentence in Oksapmin not only relates events of a discourse into a unified whole; it also packages the information about these relationships into a bundle of a certain size. The size of the package may vary, however. Usually it is two to four clauses long; but it may vary from one to at least eighteen clauses, and presumably more. Before we look at the structure of the sentence, then, I want to consider what determines the size of the package; that is, why the speaker terminates sentences when he does.

I have mentioned that the speaker's relationship to the discourse is expressed in the sentence closure through tense and mood. Thus, one effect of closing sentences is to bring in the speaker's relation to the discourse from time to time. This, however, is a byproduct of terminating a sentence; it does not in itself determine why a sentence terminates when it does.

Sentence termination seems to be explained best from Halliday's ideas of information structure and thematization.²

In Oksapmin there are two levels of information structure. The clause is the domain of the lower level information structure, the sentence of the higher. At both levels information structure and theme may be unmarked or marked. It is only on the higher level, however, that new information may be focused. It is this ability to focus on new information within a sentence that determines when the speaker terminates a sentence.

1.1. INFORMATION STRUCTURE WITHIN THE CLAUSE

As I have said, information structure within the clause may be either unmarked or marked. Information structure is unmarked if there is exactly one information unit per clause. Information structure is marked if there are two information units per clause.³ To establish two information units for a clause, one informationally new constituent is repeated within the clause. The repetition may be exact, or it may have

some new information added to it.

In the unmarked state an Oksapmin clause usually has no more than one constituent other than the predicate. There are at least three means that Oksapim uses to keep down the number of constituents, other than the predicate, to one per clause. First of all, any given information recoverable from a previous clause is usually deleted from the clause.

(1) / tom gatetporhan / ungoh daraa / kaar temnong maraa / mandesaa /
 (/ rain stopped-then / baggage took-then / car hole-to put-then / came-
 across-then /) the rain stopped, then we took our baggage and put it in
 the car, then came across, then ...

In each of the four clauses (enclosed by slashes), no more than one informationally new constituent is introduced. Once given it is not repeated in a following clause. For example, *baggage* is introduced in the second clause but is not repeated in the third clause, although in English we would need to have at least an anaphoric reference to it. Within any one clause in the example, no constituent is repeated; thus each clause is one information unit and the information structure is unmarked.

The second method used to keep down the number of constituents per clause is to repeat a clause introducing one new constituent in each:⁴

(2) / taapresep waan haan tit aprisaa / kaarsi aprisaa / (/ European
 another man one come-then / car-with come-then /) another European man
 came, he came in a car, then ...

The verb *aprisaa* came then occurs twice referring to the same action. The first time the clause has one other constituent *another European man*; the second time it has another *in the car*.

(3) / kaaroh pisongopari / aahannong pisangopari / (/ car carried /
 Hagen-to carried /) the car took the body away. It took it to Hagen.

The verb *pisongopari* carried occurs twice referring to the same action. In this example the verb is in final form and each time ends a sentence as well. The effect is still the same; the first time it introduces one informationally new constituent *kaaroh car*; the second time it introduces another informationally new constituent *aahannong to Hagen*.

A slightly different situation is shown in the next example where the clause is repeated, but with the same two clause constituents each time:

(4) / kaakmoh kwai taanoh kwes / kaakmoh kwai taan kwes poraa / (/ head-
 this stone side split / head-this stone side split said-then /) he split
 his head with a flat rock, he split his head with a flat rock, then ...

kwes poraa split then is a verb phrase; *poraa say* is an auxiliary verb which is often omitted, as in the first clause which just has *kwes*. In this example the whole clause is repeated with the same two constituents in both occurrences. In the first clause, however, the constituents are informationally new. In the second clause they are given information. Although this does not reduce the constituents to one per clause, it has the effect of slowing the average rate of information introduction to one constituent per clause.

A third way to keep the constituents down to one per clause is to use semantically nonspecific verbs such as *take* and *carry*. These are used in Oksapmin in places where we could just as well leave them out in English and put two constituents in the one clause instead:

(5) / *supaat / kwai taanoh daraa / kaakmoh kwes poraa / (/ killed-then / stone side took-then / head-this split-then /) he killed him, then he took a stone and split open his head, then ... or, he killed him, then split open his head with a stone, then ...*

(6) / *akiaap ohsi mengiro hapti / kwaito samaano tohwaano oh pisusaa / akiaap ohnong aapriperhan / (/ patrol-officer he-with talked-and did-then / sugar-cane-and greens-and sweet-potato-and it took-then / patrol-officer he-to gave-him-then /) we talked with the patrol officer, then took sugar cane, greens, and sweet potato, and gave it to the patrol officer, then ... or, we talked with the patrol officer, then gave him sugar cane, greens, and sweet potato, then ...*

Clauses are not limited to one constituent, however, or even to one informationally new constituent, to still be one information unit:

(7) *aat ohnong darmaayeng oh baan karomsen tit kaakmoh arwaandai hangop (my-father he-to Darmaayeng he arrow karomsen one head-this shot did) Darmaayeng shot my father in the head with a karomsen arrow.*

In the above example there are four constituents in the clause, every one informationally new. Since no constituent is repeated, the clause contains only one information unit and information structure is unmarked.

(8) *aap ham ner awaamoh maaso oh ihirnong pande hangopaa (house down bird awaam Marshall he they-to fed did) down at the house Marshall had fed them the awaam bird.*

Again there are four constituents in the clause with no repetition of any one, thus one information unit.

As was mentioned, it is also possible to establish two information units per clause, the marked information structure, by repeating one of

the constituents. This has the effect, as in repeating a whole clause, of slowing the rate of introduction of new information. Marked information structure has an advantage over repeating a clause; it introduces two informationally new constituents but thematizes only one.

(9) *yaim ihoh kwehahaa tai waah yaim ihoh saripti (tree-bark pounded leaves place below tree-bark pounded put-then) we put the pounded tree bark on top of the dry leaves, then ...*

yaim ihoh pounded tree bark comes before and after *kwehahaa tai waah on top of the dry leaves*. This repetition marks two information units within the clause: one information unit is *yaim ihoh kwehahaa tai waah pounded tree bark on top of the dry leaves*, the other information unit is *yaim ihoh saripti we put the pounded tree bark*.

(10) *amaa kaar haanip susi kaar gonoh atai mandaamaa (particle car people killed-with car body there left-then) he left the car there, the car that had killed the people, then*

The repetition of the object *amaa kaar that car* and *haanip susi kaar gonoh the car that had killed the people* marks two information units. The first information unit is *amaa kaar that car*; the second information unit is *haanip susi kaar gonoh atai mandaamaa left the car that had killed the people then*.

(11) *kamaa taanoh yarapeng ohwe kamaa taanoh aasar hangop (breast-of-a-bird side Yarapeng his breast-of-a-bird side put-for-him did) he had put out the bird's breast side, Yarapeng's breast side, for him.*

The repetition of the object *kamaa taanoh breast side*, and *yaraapeng ohwe kamaa taanoh Yarapeng's breast side* marks two information units. The first information unit is *kamaa taanoh breast side*; the second information unit is *yarapeng ohwe kamaa taanoh aasar hangop had put out Yarapeng's breast side for him*.

On the lower level of information structure the theme is the first constituent in the clause, as in English. In Oksapmin the theme is unmarked if it does not violate the normal order of clause constituents: subject, location, time, indirect object, object, destination, quotation, accompaniment or instrument (mutually exclusive), manner, and predicate. Not all of the constituents are possible in any one clause (the average is two with five being the maximum observed), but this seems to be the normal, preferred order in which they occur.

(12) *akiaapoh yot haan maa sutip (patrol-officer two men particle killed) the patrol officer killed two men.*

The subject *akiaapoh patrol officer* (Pidgin kiap) is unmarked theme; it comes first in the clause in its normal order before the indirect object⁵ *yot haan two men*.

(13) *saremtai masoh maa aap hatipoh (Saremtai along-here particle house built) at Saremtai along here we built a house*

The location *saremtai masoh at Saremtai along here* is unmarked theme since there is no subject; it comes first in the clause in its normal order before the object *aap house*.

(14) *mengoh tepnong maaa daiyaaoh (talk tape-to particle put) we put the talk on the tape*

The object *mengoh talk* is unmarked theme since there is no subject, location, time, or indirect object; it comes first in the clause in its normal order before the destination *tepnong on the tape*.

On the lower level of information structure the theme is marked if it violates the normal order of clause constituents:

(15) *tit ner tit atai kapmaro (one bird one there missed-and) we missed a bird there, and*

The object *tit ner tit one bird* is marked theme; it comes first in the clause before the location *atai there*, out of its normal order.

(16) *aap han tandaitaar oh noh erhahmur dame supoh nimuro arimaa (house down Tandaitaar he I sick cold mother attacked-me said-then) down at the house Tandaitaar said, "I am sick, I have had an attack of malaria," then*

The location *aap han down at the house* is marked theme; it comes first in the clause before the subject *tandaitaar oh Tandaitaar*, out of its normal order.

(17) *kopi amgapoh ... haa aruushengwerim nuhurnong ginapatporhan (coffee shoot ... particle let-come-up we-to said-then) "the coffee shoot ... let it come up," he told us, then ...*

The quotation *kopi amgapoh ... haa aruushengwerim the coffee ... let it come up* is marked theme; it comes first in the clause before the indirect object *nuhurnong to us*, out of its normal order.

On the lower level of information structure we have considered information structure and thematization separately. Now we want to look briefly at the two together. Combining unmarked and marked information structure with unmarked and marked theme, there are four possible combinations within the clause: (1) unmarked information structure and unmarked theme, (2) unmarked information structure and marked theme,

(3) marked information structure and unmarked theme, and
 (4) marked information structure and marked theme. The next set of examples illustrates all four combinations:

(18) haan paser ohwe aapoh matai paatgopari (*man old his house here was*)
the old man's house was here

Since none of the constituents is repeated there is only one information unit and information structure is unmarked. The subject *haan paser ohwe aapoh the old man's house* comes first in the clause in its normal order, thus is the unmarked theme. The clause, then, has both unmarked information structure and unmarked theme.

(19) aakeoh kuu ihirwi daptimur (*stomach women they-only eat*) *only*
the women eat the stomach

Since none of the constituents is repeated, there is only one information unit and information structure is unmarked. The object *aakeoh stomach* comes first in the clause before the subject *kuu ihirwi only the women*, out of its normal order. Thus the object is the marked theme. The clause has unmarked information structure and marked theme.

(20) iraat baraak tit ite paatnong iraat baraak apingopari (*wood chip*
one their stay-to wood chip came) *a wood chip came to where they were*

The repetition of the object *iraat baraak tit one wood chip* and *iraat baraak wood chip* marks two information units and information structure is marked. The object comes first in the clause in its normal order in the absence of a subject, a location, a time, or an indirect object. The object, then, is unmarked theme. The clause has marked information structure and unmarked theme.

(21) aap taioh aap taiorhor iraat kirkir gon tit paatgopari (*house place*
house place tree kirkir distinctive one was) *at the house there was a*
kirkir tree

The repetition of the location *aap taioh at the house* and *aap taiorhor at the house* marks two information units. The location is marked theme as it comes first in the clause before the subject, out of its normal order. The clause has marked theme and marked information structure.

1.2. INFORMATION STRUCTURE AND INFORMATION FOCUS WITHIN THE SENTENCE

Information structure on the higher level as it is organized within a sentence is independent of information structure on the lower level. As on the lower level, information structure and theme may both be either

unmarked or marked, but by different means than within the clauses and with different results.

Normally sentences in Oksapmin end with a clause in which the predicate is the last constituent. If it is a verbal predicate it is characterized by a verb having tense and mood (section 2.2.1.). When this normal structure occurs the information structure within the sentence is unmarked. The final clause of a sentence, however, may have a constituent occur after the predicate, out of its normal order, or a clause with nonfinal verb may be put after the final clause, out of sequence. When either of these situations occur the information structure within the sentence is marked. It should be noted here that a nonfinal clause may never have a constituent after the predicate.

In the higher level of information structure the information put last is focused.⁶ Thus, in the unmarked state the predicate is focused information. Marked information structure within the sentence permits the information focus to occur on some other constituent of the final clause. There is a way, mentioned below, in which a constituent other than the predicate of the final clause may be made focused information without marking the information structure.

(22) / marasaa / iraat suhungopari.⁷ / (*came-up-then / wood split. /*)
... *he came up, then split wood.*

The clause *marasaa came up then* is not last in the sentence, thus is not focused information. But the clause *iraat suhungopari split wood* is last in the sentence and has the predicate as its last constituent. Thus information structure is unmarked and the predicate is focused information.

(23) / susaa / maa waahirioh. taraangaapnong. / (*/ Went-then / particle went-down. Oksapmin-to. /*) *We went, then went on down to Oksapmin.*

The destination *taraangaapnong to Oksapmin* comes last in the sentence after the predicate *maa waahirioh went down*. Thus information structure is marked and the destination is focused information.

(24) kereporaapoh yah tai mongorhoraa. (*Telefomin good place ground.*)
Telefomin is a level place.

Since the predicate *yah tai mongorhoraa a level place* comes last in the sentence, information structure is unmarked and the predicate is focused information.

(25) stophe garpohmur. nute timapti aapoh. (*Stove small. our sleep house.*) *The stove is small in the house where we sleep.*

Since the location *nute timapti aapoh* comes last in the sentence, after the predicate, information structure is marked and the location is focused information.

(26) *aakeoh daptimur. temaraa. (stomach eat. cook-then.) ... we eat the stomach, after we have cooked it.*

The clause *temaraa cook then* is not a final verb and comes after the final verb *daptimur eat*, out of sequence. Thus information structure is marked and the predicate *temaraa cook then* is focused information.

In a procedural discourse it is possible to put information focus on a constituent other than the predicate of the final clause without marking the information structure. This is done by putting the assertive mood marker *-mur*, which usually comes on the final verb, on another constituent of the final clause. Information focus with marked information structure is also possible within sentences of a procedural discourse. I have not yet determined whether these two types of information focus in a procedural discourse express the same thing.

(27) *haano ihirwi-mur tonggaterioh maripti. (men they-only-assertive bamboo-rattle hold.) ... just the men hold the bamboo rattle.*

The assertive mood marker would normally come on the verb *maripti hold*. Putting it on *haano ihirwi only the men* instead makes it focused information. In the example the predicate of the final clause comes last in the sentence, thus information structure is unmarked.

(28) *apai taanoh-mur daripti. (apai-bamboo length-assertive take.) ... take a length of apai bamboo.*

-mur on the phrase *apai taanoh length of apai bamboo* makes it focused information. Since the predicate *daripti take* comes last in the sentence, information structure is unmarked.

In information structure within the sentence, the sentence opening is the theme. There are two types of sentence opening: outer periphery and inner periphery (described in more detail in section 2.1.). The outer periphery occurs only in the first sentence of a paragraph and indicates a paragraph boundary. The outer periphery repeats the final verb of the preceding sentence with coordinating intonation (described in section 2.1.1.). It establishes the point of departure for the information given in the entire paragraph that follows.

The inner periphery may occur on any sentence. Often the inner periphery is a repetition of the final verb of the preceding sentence, but in medial form. It gives the point of departure for the information

within that sentence. When the predicate alone from a preceding sentence is repeated in the outer or inner periphery of a following sentence, it is the unmarked theme. When more than the predicate is repeated, it is the marked theme. Also, if new information is given in the inner periphery of a sentence it is the marked theme.

(29) sariptimuraa; saraa patin kaaput inap uhari hapurhanhe (*Put-coordinate; put-then stay-until in-future wife she-first if-dies*) *They buy the bride then they stay until, if the wife dies first ...*

This sentence begins a noninitial paragraph in a procedural discourse about taking a wife. sariptimuraa; repeats the final verb of the previous sentence with coordinating intonation (;), thus it is the outer periphery. Since only the predicate is repeated it is the unmarked theme for the paragraph that follows. saraa is also a repetition of the final verb of the previous sentence but in medial form, thus it is the inner periphery. Since only the predicate is repeated it is the unmarked theme for the sentence.

(30) ung bitang awaamoh miptimur. ung bitang awaamoh mimaa harepdapat iraat aatendaiptimur. (*string-bag small taboo put-in. String-bag small taboo put-in-then under-from fire build-for-it.*) ... *put it in a small taboo string bag. Then we build a fire for it underneath.*

miptimur *put in* ends a sentence. ung bitang awaamoh mimaa is the inner periphery of the next sentence (mimaa is a repetition of miptimur in medial form). Since more than the predicate is repeated, it is the marked theme.

In summary, when the speaker wants to focus on some new information he terminates the sentence. Having a marked theme at the higher level of information structure also gives prominence to new information or repeated given information. The hypothesis that the speaker terminates a sentence when he wants to focus on new information not only satisfies the data which have short sentences (two to four clauses), but it also satisfies the data with longer sentences.

I have examined two texts which have some very long sentences - up to eighteen clauses. In one text, the long sentences occur where there are many quotations. All the important new information is given in these quotations. The events of speaking and moving which make up the nucleus of the sentence serve as transitions but give no important new information. Thus there is no need to focus on that information, so the events are put into long sentences.

Another text involves a trip of 250 miles by air. What happens before and after the trip and at the start of the trip is given in normal

length sentences. The actual trip, however, is given in one long sentence that tells some of the things that were seen and done during the trip. These events had no influence on the main part of the narrative, what happened at the end of the trip, so the informant did not focus on any of that information, but put it in one long sentence instead.

2. SENTENCE STRUCTURE

2.1. OPENING

Sentence opening is a peripheral unit; an opening may occur with any sentence, but is not obligatory. There are two types of sentence opening, outer periphery and inner periphery. The first is more peripheral than the second and both may occur together.

2.1.1. OUTER PERIPHERY

The outer periphery of a sentence may be expounded (in the tagmemic sense of Longacre 1964) by a clause or a noun phrase. In either case, the outer periphery is a repetition of the predicate of the final clause of the previous sentence. The outer periphery has coordinating intonation. Coordinating intonation, symbolized by a semicolon, is a high falling pitch superimposed on the final syllable of the last word of a phrase or clause. If the last word has a final open syllable, coordinating intonation may be superimposed on that. If it has a final closed syllable, the vowel aa is added and coordinating intonation is superimposed on that. (Coordinating intonation contrasts with final intonation, symbolized by a period. Final intonation is a falling of pitch over the last few syllables of a phrase or a clause, with the most noticeable fall on the final syllable. Coordinating intonation and final intonation both contrast with phrase intonation, left unmarked except on the inner periphery or nonfinal units of a compound nucleus where it is symbolized by a comma. Phrase intonation follows the pitch pattern of the words within the phrase with no falling of pitch on the final syllable.)

Coordinating intonation serves to bind the clause or phrase of the outer periphery to what follows in the sentence, yet not as closely as phrase intonation.

As has been mentioned, the outer periphery may occur only in the first sentence of a paragraph at a paragraph boundary. Thus it also marks the end of one paragraph and the beginning of another. In Oksapmin it is possible to have a number of discourses about a common theme as units of

a larger discourse, which I call a compound discourse. Thus, the outer periphery may begin a paragraph which is also the beginning of a discourse within a compound discourse, in which case the outer periphery marks the end of one discourse and the beginning of another.

As well as being the theme, as discussed earlier, the outer periphery expresses a coordinate relationship between the unit it begins and the preceding unit. Coordinate relationship as used here refers to two units of equal status within a larger unit. That is, if the outer periphery occurs in the first sentence of a discourse, that discourse and the preceding discourse have equal status; neither is subordinate to the other within a larger unit - in this case, a compound discourse. If the outer periphery, on the other hand, marks the beginning of a new paragraph that does not begin another discourse, that paragraph and the preceding paragraph have equal status, neither is subordinate to the other, within the discourse.

For example, in a procedural discourse about taking a wife one sentence ends *imaaho baningo suaato aaho aipo oh maa sarisheoh. (pig-and shells-and cowry-and adze-and salt-and it particle used-to put.) ... used to buy the wife with pigs, shells, cowry, adze, and salt.* The next sentence begins with *sariptimuraa; (Put-coordinate;) Put and ... sariptimuraa;* is a repetition of the final word of the preceding sentence, *sarisheoh*, and because of its coordinating intonation is the outer periphery (the difference in form is due to different tense and mood). From the structure of what follows it is seen that *sariptimuraa;* begins a paragraph that does not begin a discourse. Thus, *sariptimuraa;* expresses a coordinate relationship between the new paragraph and the preceding paragraph.

In a compound descriptive discourse, a section expounded by a discourse ends with *tikimdiporhan maa timaptioh. (Extinguish-then particle sleep.) We turn out the light, then sleep.* The next sentence begins with *timaptiohmuraa; (Sleep-coordinate;) Sleep and timaptiohmuraa;* is a repetition of the last word of the previous sentence, *timaptioh.*, and because of its coordinating intonation is the outer periphery of the sentence. From other structural features it is seen that this begins a discourse. Thus, *timaptiohmuraa;* expresses a coordinate relationship between the new discourse and the previous discourse.

2.1.2. INNER PERIPHERY

The inner periphery may be expounded by a sentence, clause, noun phrase, or a conjunction. The inner periphery has phrase intonation and is thus

more closely bound phonologically to what follows than the outer periphery. Often the inner periphery is the repetition of a lexical item from the last clause of the previous sentence.⁸ If a verb is repeated it is in medial form and is not different in form or meaning from a verb in the nucleus of the sentence. In such cases there is no structural evidence that the first clause should be separated from the nucleus of the sentence. There are other reasons, however, which give evidence that the repeated clause at the beginning of a sentence is different from a clause within the nucleus: (1) It is a repetition of a final verb of the previous sentence; verbs in the nucleus are not repetitions of a previous final verb. (2) The clause which is a repetition rarely introduces new information. In the two examples that have been observed where new information is introduced, in one case a pronoun is introduced where the actors are already known. In the other example, a sentence ends with the clause *came down*. This is repeated as the inner periphery of the next sentence with the new information *hill*. (3) Instead of a repetition there may be a conjunction, but never both. Conjunctions do not substitute for clauses in the nucleus.

The use of the inner periphery as theme has already been shown. The inner periphery may also express a sequential or simultaneous relationship between the sentence it is in and the previous sentence.

(31) apung maa marahuroh. marasaa, timoroho. (*yesterday particle came-up. Come-up-then slept.*) ... *yesterday I came up. Then I slept.*

marahuroh ends one sentence and marasaa, a repetition of marahuroh only in medial form begins the next sentence. Thus it is the inner periphery and as well as being the theme for the sentence it expresses a sequential relationship between the sentence *I slept.* and the previous sentence.

(32) ihit tambenong ti pandengopari. gaahan, ihit kas hamaa (*They-two brother-and-sister-to some fed. And-then, they two fear did-then*) *He fed some to the brother and sister. And then they were afraid and ...*

pandengopari *fed* ends one sentence and the conjunction *gaahan and then* is the inner periphery of the next sentence. The conjunction expresses a sequential relationship between the sentence it begins and the preceding sentence.

The conjunction *ihan so, therefore* expresses a result relationship as a sequential relationship:

(33) it marono por hangopari. ihan, it hat aruus (*back come-up said did. So, back up went-and*) "*Come back up!*" *he said. So they went back up and ...*

ihan is the inner periphery of the new sentence. It asserts a result relationship between the new sentence and the preceding sentence.

A response word in the inner periphery expresses a response relationship:

(34) es, noh iraat saan ohot naa aruupaatmur. (*No, I tree trunk up-there not am-climbing*) *No, I'm not climbing up the tree.*

es no is the inner periphery of the sentence and expresses a response relation with the preceding sentence.

2.2. CLOSURE

Final intonation along with tense and mood mark the termination of a sentence.

The characteristics of final intonation have already been given. It has also been mentioned that a clause or phrase may be put after the predicate of the last clause of a sentence as focused information. When it is, final intonation comes on both the final predicate and the focused information.

2.2.1. TENSE AND MOOD

Tense and mood relate the speaker to the discourse.

Tense is marked by a class of second order verb suffixes. The variety of morphological shapes of the tense suffixes makes them too complicated to list here.⁹ The following tense categories are distinguished in Oksapmin.

The future tense indicates that the event is expected to take place no sooner than the day after the day on which it is spoken.

The immediate future tense indicates that the event is expected to take place the same day as the day on which it is spoken.

The present tense indicates that the event is taking place at the time of speaking. A stative or equational clause, although not marked for tense, likewise indicates that the state given is still in effect at the time of speaking. The present tense may also be used in procedural discourse to represent actions in projected time.

The near past tense indicates that the event took place in the morning of the same day on which it is spoken.¹⁰

The middle past tense indicates that the event took place the day before the day on which it is spoken.

The far past tense indicates that the event took place at least two days before the day on which it is spoken.

The imperative is also a tense category in Oksapmin in that it is mutually exclusive with the entire set of tenses. Unlike the other tenses, the imperative distinguishes first, second, and third person.

Mood is marked by a class of enclitics, or by the absence of any such enclitic. The enclitic attaches to the predicate. The absence of any mood enclitic in a nonpast tense indicates a declarative mood. The absence of any mood enclitic in a past tense indicates that the narrator is telling the story from his own point of view, as a participant in the story. This is therefore an unembedded viewpoint mood.

In the unembedded viewpoint mood the past tenses distinguish between events in which the narrator is agent and events in which he is not agent but which he has seen or heard.¹¹

The enclitic *-ari* expresses an embedded viewpoint mood. It asserts that the narrator, although not a participant himself, is telling the story from the viewpoint of one of the actual participants within the narrative. In the embedded viewpoint mood, the past tenses distinguish between events in which the participant from whose viewpoint the narrative is being told is the agent and events in which he is not the agent, but which he has seen or heard.

The discontinuous morpheme *maa ... -oh* expresses a neutral mood. *maa* occurs before the verb phrase and *-oh* is suffixed to the verb phrase. In a narrative discourse, the neutral mood indicates an omniscient viewpoint. In other discourse types it indicates a more remote association of the speaker with the discourse than the assertive mood.

The enclitic *-mur* expresses an assertive mood. In the assertive mood the speaker gives what he is saying a more factual flavor than with the declarative mood. The assertive mood is not used in a narrative discourse.

The four moods described, declarative, viewpoint (unembedded and embedded), neutral, and assertive are discourse oriented. These moods occur on unembedded sentences of the discourse as well as in direct quotations. The range of moods that occur on the unembedded sentences of the discourse help to determine the discourse type. The other moods to be described, yes-no interrogative, response, topical interrogative, echo question interrogative, and probable, are sentence oriented and occur only in direct quotations in a discourse or in conversation.

The enclitic *-daa* expresses a yes-no interrogative mood. *-waa* without the demonstrative expresses a response mood:

(35) *go paat-daa. yo, noh paat-waa.* (*You live-present-interrogative.*
Yes, I live-present-response. Are you well? Yes, I am well.

-waa is not obligatory in a response to a yes-no question; declarative or assertive moods may be used. -waa is also used, at times, outside a question-reponse situation. Perhaps it indicates that the speaker detects a question in the hearer's mind and is answering it.

The response mood clitic -waa with the demonstrative (demonstrative suffixed to the predicate, then -waa) expresses a topical interrogative mood. The only thing that it presupposes is that the speaker knows what he is talking about, shown by the demonstrative:

(36) *barer-moh-waa.* (*Child-this-response.*) *What about the child?*

The interrogative mood clitic -daa with the quotation marker -o suffixed to it (resultant form -do) with a distinctive intonation expresses an echo question interrogative mood:

(37) *naa saproh-do* (*Not go-immediate-future-echo-question*) *Did you say, "I am not going to go?"*

The enclitic -ning/-nang expresses an optative mood.

(38) *noh waamptipraa-ning.* (*I see-future-optative.*) *Oh how I wish I could see it.*

The assertive mood clitic -mur may also occur with the optative mood clitic when the optative mood clitic is used to establish a contrary to fact condition relationship; but this is comparable with modal patterns of usage:

(39) *kuu yot ihit tambantai ohotoh haanoh waaron mengari hapaatin naa arhuupaa-ning, tamaamoh naa amtahatpaa-ning-mur-o.* (*Women two they-two Tambantai up-there man drum playing doing not go-up-far-past-optative, tamaan not get-to-know-optative-assertive-quote.*) *If the two women had not gone up to Tambantai up there, while the man was playing his drum, they would not have gotten to know about tamaam sorcery.*

The enclitic -kin expresses a probable mood:

(40) *daa tarpapti-kin-o.* (*Soul come-to-life-present-probable-quote.*) *The soul probably does come back to life, then.*

The quotation markers -o and -e have moodlike characteristics but do not fit into the above system of mood. The quotation marker may optionally occur at the end of a verbal complement or on any sentence in a verbal complement. -e occurs only with interrogatives and indicates more doubt than -o. -o may occur with any of the mood enclitics including the yes-no interrogative.

(41) *bapormoh kin hapti-e daa hat (heart-this what do-present-quote thoughts doing) thinking, what happens to the soul ... or, wondering what happens to the soul ...* *bapormoh kin haptie* is the complement of the verb *think*.

(42) *ning wanpaat-daa-e arim (opossum come-down-present-interrogative-quote saying) wondering if the opossum was falling ...*

(43) *go haanip di-kin-o poripti (You person eat-immediate-past-probable-quote say-then) "You probably attacked the person," we say, then ...*

2.3. NUCLEUS

As was stated before, there are three types of nuclei, simple, complex, and compound.

2.3.1. SIMPLE NUCLEUS

A simple nucleus is a potential string of units in a sequential or simultaneous relationship. The formula for a simple nucleus is

$$\pm \text{Unit}_1 \pm \text{Unit}_2 \pm \dots + \text{Unit}_n$$

In the simple nucleus each unit is a clause. The morphology of the verb of a nonfinal unit marks the relationship of that unit with the following unit. The morphology of the verb of the final unit relates the nucleus to the performative, as has been described under tense and mood.

A sequential relationship between units in a simple nucleus is expressed by one of the following second order sequential verb suffixes: *-paat* (singular) *-pti* (plural),¹² or *-maa~-raa~-saa* (depending on the verb stem), or *-porhan* (singular) *-perhan* (plural).¹³ As well as expressing a sequential relationship each suffix gives some other information. *-paat* or *-pti* assert that the action of the following unit took place while its object (if a transitive clause), or its subject (if of another clause type) is in the state established by the unit that contains *-paat* or *-pti*. They are thus perfective. *-maa* and *-porhan* or *-perhan*, on the other hand, do not relate the action of the following unit to any state established by the unit that contains one of these forms; they are nonperfective. *-maa* simply asserts that the subject of the following unit will be the same as the unit that contains *-maa*, and *-porhan* or *-perhan* asserts that there will be a change of subject in the following unit.

In the examples that follow, each unit is enclosed by slashes.

(44) / ansaangingo ihir waandai-pti / ihirhe kas ha-maa / (/ Ansaanging-and they look-at-sequential-perfective / they fear do-sequential-non-perfective /) *Ansaanging and the rest looked at the corpses, then they were afraid and ...*

-pti on waandai *looked at* expresses a sequential relationship between the first and second unit. That is, *they looked* took place before *they were afraid*. It also asserts that the event *they were afraid* took place while they were in the state of looking.

(45) / traangaap mong waama-raa / su-saa / (/ Oksapmin ground look-at-sequential-nonperfective / go-sequential-nonperfective /) *he looked at the land at Oksapmin, then went and ...*

-raa on waama *looked at* expresses a sequential relationship between the two units and asserts that both units have the same subject. It also asserts that the event *went* did not take place while he was in the state of looking.

(46) / asotai iraat tendai-paat / iraat barakoh giomat apri-saa / ihitnong waandaingopari. / (/ along-there fire build-sequential-perfective / wood chip looking-for come-sequential-nonperfective / they-two-to see-far-past-embedded-viewpoint. /) ... *along there he built a fire, then came looking for the chip of wood and saw them.*

-paat on the verb *tendai build* asserts that the first unit is in sequential relationship with the second unit, and that *came looking for the chip* took place during the state established by the unit *along there built a fire*. -saa on the *apri came* also asserts a sequential relationship between the second and third units, but that the third unit is not viewed as taking place during the state established by the second unit.

(47) / akiaap ohnong aapri-perhan / oh saro baningo oh aapri-porhan / apri-saa / (/ patrol-officer he-to give-sequential-nonperfective / he salt shells-and it give-them-sequential-nonperfective / go-sequential-nonperfective /) ... *they gave them to the patrol officer, then he gave them salt, shells, and things, and they came, then ...*

The units are in a sequential relationship expressed by -perhan and -porhan respectively. These suffixes also assert that the subject of the next unit will be different, and, since they are nonperfective, that the event in the next unit is viewed apart from the state established by the units with -perhan and -porhan.

The second order verb suffix -paatin (singular) or -ptin (plural)¹⁴ expresses a durative action. It also asserts a simultaneous relationship

with the next unit; the action of the next unit took place within the time span of the action of the unit marked by *-paatin* or *-ptin*:

(48) / kas ham waamat p-ptin / a be ambar kaa-nongoh be oh mimat pade-paatin / (/ *fear doing looking stay-durative* / particle just ambar-leaf cooked just he like-this eat-durative /) while they were there watching in fear, he was just feeding the cooked ambar leaf like this ...

-ptin on the verb *p stay* expresses a durative action and asserts that the action of the following unit, which in this example is also durative, took place within the time span of *stay*.

(49) / hanaatoh iraat suhu-paatin-aa / noh ning aakemtip. / (*Hanaat-he wood cut-durative* / *I opossum took-out-stomach.* /) While Hanaat was cutting wood, I took out the opossum's stomach.

-paatin on the verb *suhu cut* expresses a durative action and asserts that the action of the next unit, *took out stomach*, took place within the time span of *cut*.

(50) / bar indi-ptin / besmoh heraa / (/ *ball play-durative* / *arm-this broke-sequential* /) we played ball until I broke my arm, then ...

2.3.2. COMPLEX NUCLEUS

The complex nucleus is a string of two or more units:

$$+ \text{Unit}_1 \pm \text{Unit}_2 \pm \dots \pm \text{Unit}_n$$

Whereas in the simple nucleus each unit is expounded by one and only one clause, in the complex nucleus one of the units is itself a simple nucleus which may contain several clauses. There are two types of embedded simple nuclei. The first type, the temporal, expounds the first unit of a complex nucleus and must have at least one unit following it. In the embedded temporal nucleus the verbs of the nonfinal units have either a sequential verb suffix or the durative verb suffix, as in the unembedded simple nucleus illustrated above. The verb of the last unit of the embedded temporal nucleus has the second order temporal suffix *-rit* (singular) or *-yaarit* (plural).¹⁵ This suffix expresses a sequential relationship between the entire embedded temporal nucleus and the unit that follows.

In the examples that follow an embedded simple nucleus is marked off by //.

(51) // gin noh kumururu mande-saa / pretoh moh gahmaro ha-paat / pret gahmat sar-paat / nuhur barerohsi mahan benat waamar depero ... ari-yaarit-aa // benat waamar mandaa-maa / (// *Now I morning come-across-sequential / plate this washed-and do-sequential / plate washed put-sequential / we children-with over-here peanut look-at let-us-go ... say-temporal* // *peanuts looking finish-sequential* /) *Now, this morning after I had come across and washed the plates and put the washed plates away, and they had said, "Let's go across there with the children to look at the peanuts ...," then we looked at the peanuts and ...*

-yaarit on the verb *said* marks an embedded temporal nucleus, and asserts that the entire temporal nucleus is in a sequential relationship with the next unit of the complex nucleus. Within the embedded temporal nucleus -saa and -paat express a sequential relationship between the units.

The second type of embedded simple nucleus gives background information. It cannot occur as the first unit of a complex nucleus. The background nucleus has been observed in narrative discourse only.

The last verb of the unit that precedes an embedded background nucleus has a second order nonsequential verb suffix, -ham (singular) -yaaham (plural) if the subject of the embedded nucleus is the same, -oh (singular) -yaaoh (plural)¹⁶ if the subject of the embedded nucleus is different.

The morphology of the last verb of the embedded background nucleus depends upon whether it is nonfinal or final in the entire complex nucleus. If the background nucleus is nonfinal in the complex nucleus its last verb has a second order nonfuture tense suffix and the third order suffix -han. The tense suffix expresses the time relation between the background information and the previous unit. A present tense on the verb asserts that the action in the background information is still going on at the time of the action of the previous unit. A past tense asserts that the action in the background information was completed before the time of the action of the previous unit. The time of completion in relation to the previous unit is indicated by the particular past tense used. The third order suffix -han expresses a sequential relationship between the units preceding and following the embedded background nucleus.

If the embedded background nucleus is the last unit of a complex nucleus, its last verb has two tense morphemes. The first tense morpheme is suffixed directly to the verb and expresses the time relation of the embedded nucleus with the unit preceding it, as described above. The second tense suffix expresses the time relation of the speaker with the discourse as described in section 2.2.. The second tense morpheme is

suffixed to the first tense morpheme if the first is the present tense. If the first tense morpheme is a past tense, the auxiliary verb *ha do* is added at the end of the last verb and the tense morpheme is suffixed to that.

(52) / waandai-yaaoh // haan tit kaak dah haanip yah basaa yiwit hatip gwe tit p-paat-han // noh waamaraa / (/ look-nonsequential // *man one on-ground down person good not dwarfed short small one stay-present-background // *I look-sequential* // *I looked and there was a man, a person who had not grown up but was dwarfed and short, then I looked again and ...**

The present tense *-paat* on the verb *p stay* asserts that the man was still there at the time of *he looked*. The suffix *-han* on the same verb expresses a sequential relationship between the first *he looked* and the second *he looked again*.

(53) aros waandai-oh // nanipir ire gaaoh aap minsah daap tai mandeh gaaoh enmati-p ha-ngop-ari. // (/ *went-in-and look-nonsequential* // *older-brothers their jawbones house wall-stripping length place across-here jawbones lined-up-far-past do-far-past-embedded-viewpoint*. //) ... *he went in and looked, there were his older brothers' jawbones lined up along the wall stripping.*

The far past tense suffix *-p* on the verb *enmati line up* asserts that the jawbones had been lined up at least two days before he saw them. The far past tense *-ngop* on the verb *ha do*, on the other hand, asserts that the events given in the sentence took place at least two days before the time of narration.

(54) / kong ari-yaaoh // guyemsi maaso ihithe mara-saa / tandaitaar ohwe paa arang taioh p-pti-ngopaa. // (/ *arrive said-nonsequential* // *Guyem-and Marshall they-two come-sequential* // *Tandaitaar his taro garden place stay-present-far-past-unembedded-viewpoint* //) ... *we got there and Guyem and Marshall had come up and were at Tandaitaar's garden.*

In this example the embedded background nucleus itself consists of two units. The relationship between the two units in it is sequential marked by *-saa* on the verb *mara come up*.

There are a few examples where the last verb of the unit preceding an embedded background nucleus does not have the nonsequential suffix:

(55) / apri-ptin // ami bap ihir mandaap dusoh aap hamaa aapoh wataah aap gwengweoh hapti / aap tem ohom p-pti-he. // (/ *come-durative* // *army people they road side house build-sequential house skin house small build-*

sequential / *house hole down-there stay-present-immediate-past ///* came to where the army people had built a house on the side of the road, a small skin house, and were inside.

2.3.3. COMPOUND NUCLEUS

A number of logical relationships are expressed by a compound nucleus: coordination, alternation, condition, contrary to fact condition, fact-result, and unexpected result.

The compound nucleus is expounded by two or more sentence-like units which may themselves consist of simple, complex, or compound nuclei. (Compound nuclei expressing a coordinate or an alternative relationship are the only ones that have been observed embedded within a compound nucleus.) A compound nucleus that expresses a coordinate or alternative relationship is open ended; it may presumably have any number of units in it, though four is the maximum observed. A compound nucleus expressing any of the other logical relationships is bipartite.

The units of a compound nucleus are sentence-like in that at the boundaries between units the last verb of the first unit has a tense suffix and may have a mood marker, and the beginning of the second unit may have an inner periphery. The units are not sentence-like, however, in that at the boundaries of the units the first unit ends in coordinating intonation (when the compound nucleus expresses a coordinate relationship), or phrase intonation, but not final intonation, and there is no outer periphery in the second unit.

In the examples that follow /// enclose each unit of a compound nucleus.

COORDINATION

Coordination allows for a list of events of equal status without necessarily asserting a sequential relationship between them. A coordinate relationship is used most frequently when two events are coterminous. Coordinating intonation at the end of all units but the last marks a coordinate relationship. Any mood but the interrogative, and any tense, may occur on the units of a coordinate compound nucleus.

(56) *pung, /// kaar yotoh garum garum tahatperhan / amaa traaktaa maa marimaa tongnat paat haanoh tandutaa mandaap pepuknong hangopari; /// a be maa tongnataa haan yot ihitnongoh kaaroh waasaa / pung potporhan / titoh kaak gon kat ket kaak gon gatong pot aasar hangopari. /// (Hit, /// car two smash smash did-sequential / particle tractor particle hold-sequential sitting stay man taking-off road end-to did-far-past-embedded-*

viewpoint-coordinate; /// *hesitation just particle sitting men two they-two-to car go-down-sequential / hit say-sequential / one head thing cut cut head thing cut saying put did-far-past-embedded-viewpoint. ///*
After the car hit, the two cars smashed up, then the man who was sitting down driving, jumping off, went to the side of the road, and the car went down and hit the other two men who were just sitting there on the tractor, then cut one of their heads off and laid it aside.

The first word *pung* is the inner periphery of the entire sentence. The nucleus is compound and consists of two units in a coordinate relationship marked by coordinating intonation on the verb *hangopari did* in the first unit. Each unit of the compound nucleus consists of a simple nucleus.

(57) /// *tit te samaan te hangopari; /// titoh ambar te hangopari; /// titoh tayop te hangopari; /// tit ohwaa te hangopari. ///* (/// *one branch samaan branch did-far-past-embedded-viewpoint-coordinate; /// one ambar branch did-far-past-embedded-viewpoint-coordinate; /// one tayop branch did-far-past-embedded-viewpoint-coordinate; /// one ohwaa branch did-far-past-embedded-viewpoint. ///*) ... *one branch was a samaan branch, and one an ambar branch, and one a tayop branch, and one an ohwaa branch.*

This compound nucleus is itself the second unit of another compound nucleus. It has four units in coordinate relationship each marked by coordinating intonation on the verb *hangopari did*.

(58) /// *noh hatraatoh hamaa patetoho; /// gaahan, dopoh hamaa patetaa; /// besoh apung maa marahuroh. ///* (/// *I five down-there stay-middle-past-viewpoint-coordinate; /// and-then, six down-there stay-middle-past-viewpoint-coordinate; /// seven yesterday come-up-middle-past-viewpoint. ///*) *I stayed down there Friday, and then Saturday, and came up yesterday, Sunday.*

(59) /// *gawaapsi tainmoh gut waasaa / gutaarhe peoh dapetipriaa; /// susaa / kuusi haansi tarun tit aruparup taham tarmutperhanmur / tainmoh dapetinmur. ///* (/// *Gawaap-with bundle-this you-two go-down-sequential / you-two end unwrap-negative-imperative-coordinate; /// go-sequential / women-and men-and many one gather doing get-together-sequential / bundle-this unwrap-imperative. ///*) *Don't you two go down and open this bundle with Gawaap away from the village, but go and after a lot of men and women have gathered and gotten together, open up this bundle!*

This compound nucleus has two units in coordinate relationship marked by coordinating intonation on the verb *dapetipriaa don't unwrap*. The first unit is negative and the second unit positive, which results in an

adversative relationship as well as coordination.

ALTERNATION

An alternative relationship is marked by the interrogative mood clitic *-daa* suffixed to the last verb of the first unit of a compound nucleus. The following units may have the conjunction *da or* (some speakers use *gin now* instead of *da*) as its inner periphery with no mood marker on that unit, or the conjunction may be omitted in noninitial units in which case *-daa* is suffixed to the last verb of those units as well.

The interrogative mood clitic establishes an interrogative mood for the whole sentence. Thus this construction expresses an alternative relationship in the interrogative mood only. In the declarative mood, alternation has to be expressed by two sentences. Basically this is accomplished by juxtaposing two sentences each having a conditional relationship.

(60) /// go suaa uhwe meng tai sun-daa, /// da, itaa oh sutin naporit su. /// (/// You mother her talk place killed-near-past-interrogative, /// or, father he kill say-temporal kill-near-past. ///) Did you kill it on your mother's orders, or because your father told you to kill it?

(61) /// arapin kuram ohwe mandaapnongoh haanip hapuriyaa daa sashen-daa-e, /// da-raa, daa suh hashe. /// (/// True Kuram his road-to people's died soul go-far-past-interrogative-quote, /// or, thoughts lie did-far-past. ///) Is it true that people's dead souls used to go on Kuram's road, or did they lie?

CONDITION

A conditional relationship is marked by the third verb suffix *-han* on the final verb of the first unit of a two-part compound nucleus. Any tense but imperative may occur on the last verb of the first unit, but most frequently it is the immediate past tense. The second unit of the compound nucleus may have *oh it*-indicating-result as its inner periphery.

(62) /// go itaa nohwe sawaa napor mengoh moh bong arimaa / suaa uhwe andaap mahamwi waapaat-han-oh, /// oh, go ermuro. /// (/// You your-father my instruction told-you talk this not-heed say-then / your-mother her toilet-area down-here-only go-down-present-condition-demonstrative, /// it, you bad. ///) If you do not heed your father's, my, instruction and go down to your mother's toilet area, you are bad.

(63) sariptimuraa; saraa, /// patin / kaaput inap uhari hapur-han-he, /// imaapoh kuu waan darpaatmur. /// (Put-coordinate; put-sequential, /// stay-durative / in-future wife she-first dies-immediate-past-condition,

/// husband woman another take-present-assertive. /// Then, they stay until, if the wife dies first, the husband marries again.

The first word of the sentence, *sariptimuraa*; repeats the final verb of the preceding sentence and because of its coordinating intonation is the outer periphery of the entire sentence. The second word, *saraa*, is also a repetition but in medial form. It is the inner periphery of the entire sentence.

(64) */// go saproh-han, /// sonaa. /// (/// You go-immediate-future-condition, /// go-imperative. ///*) If you will go, go!

CONTRARY TO FACT CONDITION

There are two ways to express a contrary to fact condition relationship.

The first way is to put the optative mood clitic *-ning/-nang* on the last verb of both units of a two-part compound nucleus. This method is used when the final verbs of the two units are both in a future tense, or both in a nonfuture, nonimperative tense.

(65) */// haanip matuh apris dapetpaa-ning, /// a haanip kin taiorhor hanaat tong poraa / dapti-ning-muro. /// (/// People middle come-and unwrap-far-past-optative, /// hesitation people eye place arrow shoot-sequential / eat-present-optative-assertive-quote. ///*) If they had come and unwrapped it in a crowd of people [which they did not do], we would shoot the *tamaam* with an arrow, in plain sight, and eat them.

(66) */// mong yah tai-ning, /// isip gonapti-ning./// (/// Ground good place-optative, /// big plant-present-optative. ///*) If the weather were good [which it isn't], we would be planting a lot of food.

(67) */// go kimsioh harep ohwe aramaram andeh gatmatipraa-ning, /// mahaap isip naa hatipraa-ning. /// (/// You tomorrow below its flower over-there cut-future-optative, /// banana big not do-future-optative. ///*) If, in the future, you would cut the bottom of the banana flower there [which you did before but shouldn't have], the stalk of bananas would not grow big.

(68) */// aruuhup-ning, /// ambutip-ning-daa-o, da, itaait iman tautipaa-ning-o. /// (/// go-up-far-past-optative, /// collect-far-past-optative-interrogative-quote, or, they-two mother-and-child burn-far-past-optative. ///*) If I had gone up [which I didn't], would I have gotten it, or would the mother and child burned it?

In this example, the second unit of the compound nucleus is itself a compound nucleus expressing an alternative relationship.

The second way to express a contrary to fact condition relationship is to put the interrogative mood clitic *-daa* on the last verb of the first unit of a two-part compound nucleus, and *ihan so, therefore* as the inner periphery of the second unit. This form is used when the last verb of the first unit is in a nonfuture, nonimperative tense and the last verb of the second unit is in a future tense. One example in this form has been observed where the last verbs of the two units are both in a past tense.

(69) /// mong er hat paat-daa, /// ihan, aap tainongmoh apriprohe. ///
 (/// Ground bad doing stay-present-interrogative, /// therefore, house
 place-to-this come-immediate-future. ///) If it were bad weather [which
 it is not], they would come to the village.

(70) /// es tain-daa, /// ihan, yah hatiproh. /// (/// No surface-
interrogative, /// therefore, good do-immediate-future. ///) No, if it
 were on the surface [which it is not], it would get better.

(71) /// hapu naa naatir-daa, /// ihan, go daa er hamaa / imaahoh naasuto.
 /// (/// Death-price not put-for-you-middle-past-interrogative, ///
therefore, you thoughts bad do-sequential / pig kill-against-us-near-past.
 ///) If we had not paid you the death price [which we did], then it
 would have been reasonable for you to have become angry and kill our pig.

(72) /// ti ari-rit-daa, /// ihan, noh am hati-proh. /// (/// It say-
 temporal-interrogative, /// therefore, I knowledge do-immediate-future.
 ///) If he had said it [which he did not do], I would know about it.

In this example the last verb of the first unit has the temporal suffix *-rit* and not a tense suffix.

FACT-RESULT

The situation implied in a contrary to fact relationship may be made explicit in a positive manner by a two-part compound nucleus with a fact-result relationship between the two units.

A fact-result relationship between two units of a compound nucleus is marked by the enclitic *-ohv-ohohv-oharaa* suffixed to the last word in the first unit, and the conjunction *ihan therefore, so* as the inner periphery of the second unit.

(73) /// a itaarhe pe mahanoh dapetpaa-ohoh, /// ihan, tamaam ihiraa haanip
 aahaar mamaa nandaptiohmuro. /// (/// Hesitation they-two end over-here
 unwrapped-far-past-fact-result, /// therefore, tamaam they people secretly
 particle to-us-eat-present-assertive. ///) Because the two unwrapped it
 away from here, therefore tamaam secretly attack us.

The negative side of the situation is implied in a contrary to fact relationship before this sentence (example 65): *If they had come and unwrapped it in a crowd of people, then we would shoot the tamaam with an arrow, in plain sight, and eat them.*

UNEXPECTED RESULT

An unexpected result relationship is expressed in a two-part compound nucleus. It is marked by the clitic *-orhor(aa)* (emphatic demonstrative) suffixed to the last word of the first unit of a compound nucleus.

(74) */// nitaa haan-orhuraa, /// aropoh matai patesuh. /// (/// Relative man-unexpected-result, /// grandfather here live-far-past. ///) He was a relative, alright, but his grandfather used to live here.*

This example was in answer to the question, *Wasn't he related to the people down below?* implying that he lived there as well.

(75) */// iraat duup tai maham tit pohwi-orhuraa, /// tit te samaan te hangopari; titoh ambar te hangopari; titoh tayop te hangopari; tit ohwaa te hangopari. /// (/// Tree base place down-here one only-unexpected-result, /// one samaan branch did; one ambar branch did; one tayop branch did; one ohwaa branch did. ///) The base of the tree was a single base, but one branch was a samaan branch, and one an ambar branch and one a tayop branch and one an ohwaa branch.*

This last example has a coordinate compound nucleus as its second unit (example 57).

N O T E S

1. Oksapmin is a language spoken by 5,000 people living in the Telefomin subdistrict, West Sepik District, New Guinea. They are bounded by the Om River to the north, the Strickland River to the east, and the Papua-New Guinea border to the south. Oksapmin appears to be a language isolate; Healey says that "The Oksapmin language ... is divided into several dialects. No closely related languages have been discovered, and Oksapmin must be regarded as having the same classificatory status as a family." Alan Healey, The Ok language family in New Guinea, Australian National University doctoral thesis, 1964.

Field work was carried out between July 1968 and January 1971 under the auspices of the Summer Institute of Linguistics. The basic sentence analysis was done at a linguistic workshop at the Summer Institute of Linguistics headquarters at Ukarumpa, E.H.D., New Guinea, conducted by Joseph E. Grimes. The workshop was partly funded by National Science Foundation Grant GS-3180.

The phonemes of Oksapmin are consonants p t k b d g s h (velar fricative) r (flap) m n w y and vowels i e aa (low front) a (mid central) ai u (high close back, fronted and slightly rounded) uu (high open back) and o. The velar consonants may be labialized. There are also two contrastive pitch patterns on words, which do not carry a high functional load, and are not symbolized in the orthography.

2. M. A. K. Halliday, Notes on transitivity and theme in English, part 2, *Journal of Linguistics* 3:2.199-236 (1967).

3. One example with three information units in a clause has been observed, but too late to include it in this paper. In that example one constituent is repeated three times.

4. Joseph E. Grimes and Naomi Glock report a similar situation in Satamacaan: Joseph E. Grimes and Naomi Glock, A Saramaccan narrative pattern, *Language* 46:2.413 (1970).
5. The verb *su kill, hit* takes an indirect object in Oksapmin.
6. This is usually cumulative focus in Halliday's terms. I have not yet determined whether this could also be contrastive or not.
7. A period symbolizes final intonation (section 2.1.1.).
8. A repetition as the outer or inner periphery is what Thurman calls 'linkage', Robert C. Thurman, *Chuave medial verbs*, forthcoming.
9. Sample paradigm of the far past tense suffixes, M. Lawrence, *Structure and function of Oksapmin verbs*, forthcoming.
- (1) Those indicating agent's viewpoint:
- | | | |
|--------------|-----------|-----------|
| Punctiliar | -p (sg) | -paa (pl) |
| Continuative | -suh (sg) | -she (pl) |
- (2) Those indicating observer's viewpoint:
- | | | |
|--------------|--------------|--------------|
| Punctiliar | -ngop (sg) | -ngopaa (pl) |
| Continuative | -nipaat (sg) | -nipti (pl) |
10. I have not been in a situation where a person is talking at night about an event that took place that afternoon, thus I do not know what tense would be used in that situation.
11. Helen Lawrence, *Viewpoint and location in Oksapmin*, forthcoming.
12. -paat and -pti are present tense suffixes. When used on a nonfinal verb they express a sequential relationship between two clauses, not a tense.
13. As with most relational suffixes -porhan and -perhan consist of a tense morpheme plus another morpheme. In this case the two morphemes are the first person imperative tense morpheme -por(aa) (sg) -per(aa) (pl) and -han. -han is a suffix used to mark background information, or to express a conditional relationship. As with other relational suffixes it is the combination of the two morphemes that marks the relationship, so that it is not profitable to separate the morphemes.

14. The durative suffix consists of the present tense morpheme plus *-in*, used only in this construction.

15. The temporal suffix consists of the near past punctiliar morpheme *-Ø* (sg) *-yaa~aa* (pl) plus the morpheme *-rit*, used only in this construction.

16. The nonsequential suffixes consist of the near past punctiliar morpheme plus the morpheme *-ham*, used only in this construction, or *-oh*, the demonstrative pronoun.