IDENTIFICATION OF PARTICIPANTS IN DISCOURSE

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IDENTIFICATION OF PARTICIPANTS IN DISCOURSE: A STUDY OF ASPECTS OF FORM AND MEANING IN NOMATSIGUENGA

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IDENTIFICATION OF PARTICIPANTS IN DISCOURSE: A STUDY OF ASPECTS OF FORM AND MEANING IN NOMATSIGUENGA

by

Mary Ruth Wise

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Act active
ag agent
Anim animate
App apposition
ben beneficiary
Bitran bitransitive
Ch chapter
Cl clause
co-ag co-agent
Comp complement
Cpd compound
Cx complex
D or Demon demonstrative
Develop developmental
F focus
Fac factitive
g goal
G- or G grammatical, e.g., G-sentence for grammatical sentence
G^0 ego's generation
G^2 second generation from ego
G^{+1} first ascending generation
G^{-1} first descending generation
H head
i g indirect goal
Inam inanimate
Ind independent
init initiator
Inter interrogative
inst instrument
Intran intransitive
L- or L lexemic, e.g., L-sentence for lexemic sentence
Lk linked sentence variant
M modifier
masc masculine
Mot motion
n unit can be repeated with no apparent structural limit
Neu neutral
non-masc non-masculine
O opening sentence variant
Obs observer
Para paragraph
partic participant
Pf prefix
Ph phrase
Poss'd possessed
Poss'r possessor
Pred predicate
Pro pronoun
pu purpose
Qtn quotation
Qtv quotative
Redun redundant sentence variant
ref referent
S successive sentence variant
Sen sentence
Sf suffix
Soc social setting
Sub subject
Subor subordinate
T terminative sentence variant
Tran transitive
U unmarked sentence variant
V verb
Vbl verbal
Voc vocative
¶ paragraph
- in examples separates morphemes considered pertinent to the discussion; in formulas indicates deletion or that the unit cannot occur

_ in glosses joins two or more English words translating single vernacular unit

... in glosses where translation of a morpheme is not considered pertinent to the discussion

\+ obligatory occurrence of a unit

: used in some formulas and examples to separate function from manifesting unit

= contrastive form of unit named at left equals formula to right

~ phonologically conditioned alternate

∞ grammatically conditioned alternate

∅ zero allomorph

‿ joins units manifested simultaneously by a single form, e.g., referent‿focus

(+x ±y) y can optionally occur if x occurs

[ ] encloses agreement rules and other features of constructions

( ) joins complex manifestations of a single unit

{ } one of the enclose units is to be selected

/ __x occurs in the environment of following x

/s__ occurs in the environment of preceding x

> becomes

1st first person

2nd second person

3rd third person

[αpartic] [αpartic] the two units must refer to the same participant

[αpartic] [-αpartic] the two units must refer to different participants

α1, α2, α3, etc., identifies participants when more than two are involved

± optional occurrence of a unit

PREFACE

This study was undertaken with a two-fold goal in view. The first was to show the factors which must be accounted for in any language in order to identify pronominal antecedents, i.e., to identify participants, in discourse. Or, conversely, it was to show the factors which control the occurrence of nouns, free pronouns, and pronominal affixes referring to participants. Since lexemic, grammatical, and phonological structures are each relevant factors, it has been necessary to delineate the nature of lexemic structures more fully than has been done in previous tagmemic studies.

The second goal was to provide a partial description of Nomatsiguenga for which no previous descriptions are available. Nomatsiguenga is representative of the Campa languages in which pronominal affixes occur far more frequently than nouns or free pronouns in narrative discourse. Since the problem of pronominal reference is accentuated in Nomatsiguenga, the data have provided the stimulus for the theoretical developments made in attempting to meet the first goal. The accentuation of the problem also provides one rationale for studying little known languages: In more widely known languages there are similar problems of referrence, but, in general, they do not appear to be so acute that one is driven to seek a more comprehensive model of language than most of those currently available to the linguist.

The language name "Nomatsiguenga" is spelled in Spanish orthography and means 'my (no-) people (matsiguenga)'. It is a Campa language of the Pre-Andine group of Arawakan languages and is spoken by approximately 1,000 persons living on the eastern slopes of the Andes in Peru.

Data for this study were gathered from September, 1966 through June, 1967 and are supplemented by data gathered by Mr. and Mrs. Harold Shaver working under the auspices of the Summer Institute of Linguistics. I am deeply indebted to Mr. and Mrs. Shaver for their hospitality during my own field work among the Nomatsiguenga and for the free access which they granted to their field notes. Much of the clause analysis presented here is based on data painstakingly gathered by Mr. Shaver.

The data include approximately 500 pages of narratives--including myths, explanations of beliefs, and accounts of events relevant to the lives of the narrators--and conversations transcribed from magnetic recordings. About 75 pages of the corpus were transcribed by Mr. Shaver, and the remainder were transcribed by Alberto Chimanca Mabanca, Raul Casancho Charlti, and Alfredo Casancho Legia. The narrators included Julio Mishicuri, Roberto Casancho, Ricardo Casancho, Sra. Rosa de Mishicuri, Pablo Chimanca Mabanca, Julian Chimanca Mabanca, and Andres Chompati. Julian Chimanca Mabanca and Pablo Chimanca Mabanca were the principal informants for analytical stages of the study.

IDENTIFICATION OF PARTICIPANTS

An IBM concordance of approximately 150 pages of Nomatsiguenga text has been useful in the analysis. The concordance was done under the sponsorship of National Science Foundation grant GS-1605. The field work was sponsored in part by a Doctoral Dissertation Research Grant GS-1137 from the National Science Foundation. A Horace H. Rackham Dissertation Fellowship from the University of Michigan made the completion of this dissertation possible.

My gratitude to Kenneth L. Pike for his counsel and encouragement cannot be adequately expressed. I am also grateful to the other members of my doctoral committee and to A. L. Becker for many helpful suggestions. I have profited from discussions with Charles Elliott, David Fox, Albert Wakeman, and Patricia Townsend.

I wish to acknowledge also the competent help of Ann Niemeyer, Beverly Cook, and Grady Hope in typing this dissertation and of Arlene Gusman in typing the manuscript for the concordance project.

INTRODUCTION TO THE PROBLEMS

[1] kara-ri kara hirai aiti basini [2] kara
WHEN-BUT WHEN BEFORE THERE_IS ANOTHER WHEN

i-ogaino-ka-ig-aka-ri hiraira
HE-ASCEND-ACCOMPANIMENT-PLURAL...HIM BEFORE

[3] i-nianteti-ri hirai [4] kara ini
HE-SEE-HIM BEFORE WHEN HE_EXIST

ogeri-hegi amaigari-hegi [5] i-ngantingani
KILLER-PLURAL AMAIGARI-PLURAL HE-IS_SAID_OF

[6] i-nianteti-ri [7] i-ogo-ba-ka kara hirai
HE-SEE-HIM HE-KILL-RECIPROCAL... WHEN BEFORE

[8] i-nianteti-ri [9] i-mantsagainteta-ro
HE-SEE-HIM HE-SHOOT_AND_MISS-IT

abatsitsa hirai kanta honoganta
ROAD_ROPE BEFORE THERE ABOVE

The preceding paragraph gives the vernacular forms and a quite literal, incomprehensible translation of the first few lines of a Nomatsiguenga myth. The following is a freer translation:

> '[1-2] There is another (story about) long ago when he ascended with them long ago. [3-4] He saw him long ago when the killers, the Amaigari, existed. [5] It's said of him. [6] He saw him. [7] They kill each other long ago. [8] He saw him. [9] He shot and missed the road of rope (rope ladder) which was there above long ago.'

A completely free, understandable translation of these lines cannot be given until the referents of the pronouns are identified. In [2] does 'he' refer to the 'killers' or someone else; to whom does 'him' refer? In [3] did the 'killers' see someone else, or vice versa, or did a third character see someone else?

Both in the above lines and throughout the remainder of this typical Nomatsiguenga discourse there are many points where the referents of the

pronominal affixes are apparently ambiguous. There are twelve characters, i.e., animate participants, as well as four inanimate things such as the road of rope in this myth. Yet only sixty nouns and thirty free pronouns occur in its 236 clauses. In the majority of the clauses only pronominal affixes, distinguished for person and gender, refer to the participants and inanimate things involved in the action.

One of the main questions which we shall seek to answer in this study is, "How are the referents of pronominal affixes identified throughout a discourse, i.e., how are the participants in each action of the discourse identified?" We shall attempt to show that three aspects of form in discourse--lexemic form, grammatical form, and phonological form--provide cues for the identification of participants. Phonological forms will not be considered in detail, but the forms of lexemic and grammatical structures will be discussed more fully.

Lexemic structure, as the term is used here, is a variety of deep structure. For example, "logical subject" and "logical object", i.e., agent and goal, are constituents of lexemic constructions on the clause level. In levels beyond the sentence the lexemic order of constituents is, in general, the chronological order of events in the narrative. Paraphrase and synonymy are important for the analysis of lexemic sentences and phrases as well as for the analysis of lexemes which are posited as the minimum lexemic units.

In contrast, grammatical structure is a variety of surface structure. For example, "grammatical subject" and "grammatical object", i.e., subject and complement, are constituents of grammatical constructions on the clause level. In levels beyond the sentence, the grammatical order of constituents is the actual surface order in which the narrative is told. Morphemes are posited as the minimum grammatical units.

The nature of constituent units in lexemic constructions is radically different from that of constituent units in grammatical constructions, but the boundaries of the two kinds of constructions frequently coincide. However, the boundaries are not always isomorphic so that the lexemic and grammatical constructions cannot be mapped onto each other in a direct, one-to-one manner.

The identification of participants through grammatical, lexemic, and phonological forms in a problem of decoding. The converse problem of encoding is, "What forms for referring to participants, e.g., a noun or pronoun, should be used at various places in a discourse?" We shall attempt to show that three aspects of meaning in discourse--the plot of the events

narrated,[1] the observer's viewpoint in telling the story, and the social setting--control the forms for referring to participants.

1.1 Aspects of Form and Aspects of Meaning Illustrated. In this section we shall ask the following questions and suggest answers by illustrations: What cues for identification of participants are provided by each aspect of form? How does each aspect of meaning determine the forms for referring to participants?

The allomorphs of the morpheme 'arriving' are an example of grammatical forms which help to identify participants. If the subject is the participant arriving, then -p occurs as in illustration (1a). If the complement is the participant arriving, then -b occurs as in (1b).

(1) (a) i-nio-p-ë-ri
HE-SEE-SUBJECT_ARRIVING...HIM[2]
'upon arriving he saw him,' or 'the one who arrived saw him'

(b) i-nio-b-ë-ri
HE-SEE-COMPLEMENT_ARRIVING...HIM
'he saw him arriving,' or 'he saw the one who arrived'

Taken in isolation, however, these grammatical forms are insufficient to identify participants definitively. The context in which the forms occur must be considered first in order to know which of the participants arrived. For example, if the decoder knows from the context that Joe went to visit Bill, then (1a) identifies Joe as the one who saw Bill whereas (1b) identifies Bill as the one who saw Joe.

One of the assumptions underlying this study is that there are units beyond the sentence which form the relevant context within which participants are identified. Therefore, a subsidiary question will be added to the two listed above and considered in its turn: What kinds of units beyond the sentence provide cues for the identification of participants?

---

[1]The plot of the events narrated can be equated with that which has often been called referent in linguistics. Jacobson says of this aspect of meaning: "A set toward the referent, an orientation toward the CONTEXT ... is the leading task of numerous messages." (1960.353).

[2]Since the emphasis in this study is on identification of participants, ordinarily only those affixes which are relevant to the problem are glossed in examples. The symbol"..." covers other affixes, but their meanings are reflected in the free translation. For example, the occurrence of the completive affix -ë in (1), when taken in consideration with other elements in the context, is one of the reasons for using the past tense in the free translation.

Some lexemic forms give a participant's name, e.g., Shompa or Shora, and thus identify him clearly. Others, however, characterize a participant and the characterization in turn becomes a cue to identification. For example, the usual pattern for introduction of participants in the chapters of a myth is to introduce the villain first; any other pattern is clearly indicated in the opening lines of the chapter. A participant such as Snail--who used to be a person--is characterized as the villain by the order in which he is introduced. Subsequently, the decoder can identify the agent of certain of the actions to be Snail since they are typical actions of villains rather than of victims. Thus, he identifies Snail as the one who carried off a girl while she was out gathering snails for dinner.

Phonological forms do not, in general, provide as many cues for identification as lexemic and grammatical forms. In a myth about the buzzard, however, a cue is provided by the neutralization of contrasts between all alveolar consonants when the buzzard is quoted. Thus /t, ts, n, s, r/ become [š] /si/ when the buzzard speaks. For example, nati 'my nephew' is pronounced [šaši] by the buzzard, and iroro 'she' becomes [išoš̌o] .[3]

Speaker and addressee are usually referred to only as 'he' or 'she' and 'him' or 'her', e.g., i-kanke-ri 'he-said_to-him' when a dialogue is quoted in a Nomatsiguenga story. In this particular story, however, one speaker is identified by the fact that phonological forms in his speech differ from those in the speech of other participants.[4]

Plot meaning is often the factor which controls the form for referring to participants. It determines, for example, that the topic must be the first participant introduced by a noun in a story. In the introduction to a myth given on page one, the Killers are referred to by the noun phrase ogerihegi amaigarihegi, and all other participants in [1-8] are referred to by pronominal affixes. The non-topic participant who saw someone (Clause [3]) is a deity named Parenti, but he is not named until Clause 19 and is referred to only by pronominal affixes until that point. A study of all of the narratives in the data shows that if a participant rather than an activity is the central topic of the story, then the first noun names that participant.

[3]Sapir (1949.186) describes a similar phenomenon which apparently runs throughout Nootka mythology: "In the speech of the Deer and Mink all sibilants, whether of the s or c series, are transformed into the corresponding lateral."

[4]Other phonological forms which contribute indirectly to the identification of participants will be discussed in Sec. 6.2. Halliday (1967b) describes "given" and "new" information as distinguished phonologically in English: "The information unit consists of an obligatory new element, realized as tonic, optionally, preceded by a given element realized as pretonic" (1967b.204). If further study should show this distinction is also made in Nomatsiguenga, it would be an important phonological cue for identification.

Conversely, nouns do not refer to non-topic participants until after the topic is introduced by a noun.[5]

The observer's viewpoint as an aspect of meaning also controls the forms for referring to participants. In some biographical narratives, for example, the lexemic clause construction points to one of the participants as the observer's focus of attention. An illustration is seen in (2) which is taken from an account of a plane trip.

(2) na-manantë-ne-ro kayeta
I-BUY-BENEFACTIVE-HER CRACKER
'I bought crackers for her (the sick woman)'

The beneficiary unit, glossed as 'for her', points to the sick woman as the focus of attention. Actually the crackers were bought for all of the passengers on the plane and were shared among them all, but since the narrator's attention is focused on the patient, she alone is referred to as the beneficiary.

The observer's viewpoint also controls certain grammatical forms: in myths some variant of the passive clause 'he (or it) was said of' normally occurs periodically; the subject of the passive always refers to the topic in the plot. For example, in the myth cited on page one ingantingani 'he was said of' in Clause [5] refers to the Killers as the topic. The passive form as a whole, however, means that the speaker is an uninvolved observer, i.e., he is reporting the story as he heard it rather than focusing attention by his own choice on certain participants.

Passive forms, in general, provide independent evidence for considering the clause 'he was said of' to mean that the observer is uninvolved. Both masculine and non-masculine third person passive forms occur in the data and can be elicited freely. First and second person passive forms, however, do not occur nor can they be elicited.[6] A first person participant and a meaning of uninvolved observer are obviously mutually exclusive.[7]

The social setting as an aspect of meaning can also determine forms referring to participants, i.e., the social roles of participants are specifically represented by the choice of certain forms. For example, one narrator frequently refers to his wife as oniro nasinto 'the mother of my daughter'

[5]This is evidently different from normal English patterns as described by Gleason: "When a discourse is initiated, noun phrases are used to introduce the dramatis personae. Thereafter, pronouns are substituted in the majority of possible occurrences" (Gleason 1965.346).

[6]Machiguenga, a language closely related to Nomatsiguenga, has similar restrictions in the passive, i.e., only third person forms occur. This fact is noted with no attempt at explanation in Snell and Wise (1963.126).

[7]The close relationship between speaker and addressee in the speech event may explain why a second person participant and a meaning of uninvolved observer are also mutually exclusive.

rather than nahina 'my wife'. The form *iniro notomi 'the mother of my son' could also have been used, according to one informant, but there is not a single occurrence of it in the data. I interpret this usage to reflect Nomatsiguenga social organization in which there is matrilocal residence with some bride service expected.[8] When a man has a marriageable daughter who will soon bring a son-in-law to help with the work, he is more likely to refer to his wife by the form which stresses her role as the girl's mother.

The three aspects of meaning--the plot of the events narrated, the observer's viewpoint, and the social setting--are phenomena in the "real world", independent of linguistic form, i.e., they are non-language specific and remain invariant under paraphrase or translation. They intersect with the aspects of form--lexemic, grammatical, and phonological--which are often language specific. At the intersections there are linguistic units each of which is a composite of an aspect of form and an aspect of meaning.

Chart 1 is a schematization of the relation between form and meaning. The units in the cells are those which were described above to illustrate either an aspect of form abstracted from meaning or an aspect of meaning abstracted from form.

The aspects of form are each relevant for the identification of participants, while the aspects of meaning are each relevant for controlling the forms selected for referring to participants. When the three aspects of form and the three aspects of meaning are considered in a grammar which does not stop at the sentence but which accounts also for structures beyond the sentence they are sufficient to answer the problems posed in the introduction to this chapter.

1.2. Structures Beyond the Sentence and Related Concepts: Basic Hypotheses. In this section we shall consider first the relation of structures beyond the sentence to the problem of identification of participants. Next, we shall cite some supporting evidence for the concept of structures beyond the sentence. Finally, we shall consider some concepts which will be utilized in the description of those structures as well as in the description of structures below the sentence.

What kinds of units beyond the sentence provide cues for the identification of participants? I have posited paragraphs as one such kind of unit. In the example in (3) the first new verb root from each sentence is repeated as the connective in the next. Thus, the verb root poka in [1] is

[8]My necessarily superficial observation of Nomatsiguenga social organization leads me to believe that it is similar to that of the Amuesha where matrilocal residence and bride service are expected during the early years of a girl's first marriage. Stefano Varese reports a similar pattern among the Campa of the Pajonal who are closely related linguistically to the Nomatsiguenga (private communication).

CHART 1.--Schematization of the relation between aspects of form and aspects of meaning. Units in the cells result from the intersection of an aspect of form with an aspect of meaning. The units listed are those described above to illustrate an aspect of form or meaning.

Aspects of Meaning		Aspects of Form		
		Lexemic	Grammatical	Phonological
	Observer Viewpoint	Beneficiary unit pointing to participant in focus	Passive referring to topic with meaning 'uninvolved'	
	Plot of the Events Narrated	Chapter within which villain is characterized	Topic referred to by first noun phrase	Special units in buzzard's speech[a]
		Naming of participants	-p ∞ -b to indicate subject or complement arriving	
	Social Setting	'The mother of my daughter' determined by social role		

[a]Two phonological cells are not filled in since a detailed study of Nomatsiguenga phonology has not been carried out. In Sec. 3.4 grammatical forms determined by the social setting are suggested.

connective in [2]; the verb root katsa in [3] is repeated in [4] as the connective; and the verb root montia in [5] is repeated in [7]. Intsome 'let's go' is a direct quotation and is not thus connected, and poka in [10] returns to the original verb root in [1]. (Sentences in the example are separated by periods.)

(3) [1] aro ni-poka-ig-apai.
NOW I-COME-PLURAL...

[2] ni-poka-ig-apai
I-COME-PLURAL...

[3] aro na-katsatapai-ri. [4] na-katsatapai-ri
NOW I-TAKE_BY_HAND-HIM. I-TAKE_BY_HAND-HIM

[5] ka ni-montia-ig-apaa [6] na-mapai-ne-ri
WHEN I-CROSS_RIVER-PLURAL... I-CARRY-BENEFACTIVE-HIM

i-tsagine. [7] n-ogi-montia-ig-ai-ri
HIS-BAG I-CAUSATIVE-RIVER_CROSS-PLURAL...HIM

[8] ni-tsonga-ig-ai. [9] intsome.
I-FINISH-PLURAL... LET'S GO.

[10] ni-poka-ig-apai
I-COME-PLURAL...

'[1] Then we came. [2-3] When we came I took his hand (to help him wade across the river). [4-6] Taking his hand when we crossed the river, I carried his bag for him. [7-8] Causing (helping) him to cross the river, we finished (crossing). [9] (I said,) "Let's go." [10] We came.'

This pattern which occurs fairly often is one type of grammatical paragraph--complex, developmental--which is discussed in more detail in Section 3.6. The feature of this paragraph type which helps to identify participants is that the subject of each clause must be the same. Consequently, if one knows by other means the identity of the subject in one clause of the paragraph, the subject of all of the clauses is identified.

We turn now to the reaction of a Nomatsiguenga informant, Julian Chimanca, which would seem to confirm the psychological reality of structures beyond the sentence. In my first attempt to elicit reaction to boundaries between units beyond the sentence, I played for him a recording on magnetic tape of an account of a fiesta. Then I pointed out that while the whole story was about the fiesta, there were points at which the story "changes a little": I pointed out that the narrator told first about felling the tree, next about bringing the orchestra, then about pulling the duck to see who would get it for a prize, and last about the other two trees which the wind blew down before they could be felled. After this explanation, I played an account of a trip from the village of Miana to the Anapati River, several days away by trail, and requested the informant to indicate where the story "changes a little". His first response was: "It's all good; it's all one story." After playing back the fiesta story again, I pointed out that it, too, is all one story but nevertheless has change points. Then, he said, "Now the story about the trip to Anapati is told day by day;" and he proceeded to tell me the breaks as best he remembered them. Subsequently, I played other stories to him and, at his insistence, read them to him. As I read, he pointed out where the story "changes a little".

Mr. Chimanca was completely illiterate at the time; therefore, his reaction could not have been based on any notion of paragraphing in written Spanish or any other literary tradition. Of course, the term "paragraph" or its equivalent was never used with him. Nevertheless, the breaks he indicated are remarkably close to those I would choose as paragraph breaks on the basis of structural features such as the occurrence of free pronouns or nouns or a change of time.

In many cases the informant also indicated boundaries of units somewhat like chapters; "almost another story," he said. These units were larger than paragraphs but smaller than the total discourse. I conclude that his reaction supports the hypothesis that there are structures beyond the sentence.

The concept of structures beyond the sentence grows out of the concept of hierarchical levels of structure in language. Neither of these is new in tagmemic studies: some commonly posited levels of the grammatical hierarchy are word, phrase, clause, sentence, paragraph, and discourse. Roughly equivalent hierarchical levels will be delineated in this study for lexemic structures also.

Hierarchical levels are not equatable with successively larger—or smaller—groupings of immediate constituents. On the contrary, each hierarchical level comprises a system of contrastive construction types which are differentiated from the constructions of another level by the different functional relations of constituent units in each. Constituents of the grammatical clause level, for example, are related to one another by functions such as subject, predicate, complement, and adjunct, while constituents of the grammatical phrase level are related to one another by functions such as head and modifier or possessed and possessor.

Since the functions of constituent units are crucial to the distinction of hierarchical levels, the units in constructions posited in this study will be named by their functions, but classes which manifest the units will also be described. For example, class names such as "noun phrase" and "verb phrase" will be used for describing the manifestations of subject and predicate units in grammatical clauses, while class names such as "L-participant phrase" and "event phrase" will be used for describing the manifestations of agent and action units in lexemic clauses.

Hierarchical levels of structure, systems of contrastive construction types, function, and manifestation of units are the concepts which will be utilized in considering lexemic and grammatical structure with reference to the identification of participants.

The hypotheses underlying the analysis of these structures are:

1) Three aspects of form--lexemic, grammatical, and phonological--

contribute to the identification of participants in a discourse.

2) Three aspects of meaning--the plot of the events narrated, the observer's viewpoint, and the social setting--simultaneously exercise control over the forms selected for referring to participants.

3) The intersection of one of these aspects of form with an aspect of meaning composes units at hierarchical levels above the sentence as well as below.

In Chapter 2 several theoretical models will be examined with reference to these hypotheses. In Chapter 3 the grammatical hierarchy of Nomatsiguenga will be described with reference to the identification of participants and the ways in which the aspects of meaning control the forms for referring to them. In Chapter 4 the lexemic hierarchy will be described with reference to the same problems. Readers who are interested only in the question of identification of participants will find the cues contributed by each level summarized in the introductory paragraphs of each section and in the summary sections of Chapters 3 and 4. The system of constructions of a level within which the cues to identification operate is given in the main portion of each section of those chapters. In Chapter 5 a partial analysis of two discourses will illustrate the ways in which participants are identified and the factors which control the forms for referring to them. In Chapter 6 some relations between grammatical and lexemic forms which refer to participants will be shown. Also in that chapter narrative discourse types--as the highest level relevant for the identification of participants--will be distinguished by contrasting the ways in which aspects of form and aspects of meaning intersect at that level.

VIEWS OF FORM AND MEANING IN DISCOURSE

The decoding problem of identification of participants in discourse and the encoding problem of how to refer to them was first brought to my attention through the work of Lauriault. He states with reference to translating materials into Shipibo, a Panoan language of Peru:

> I discovered I did not know how to signal referent ties (i.e., when or how to use pronouns) .... When on the analogy of English I omitted a subject pronoun in a specific Shipibo clause, the informant would at times misunderstand the subject to be other than what I intended. But, on the other hand, if I tried to correct this by putting a pronoun in, it would never refer to the referent I intended (Lauriault 1957a.1).

Others also have mentioned identity of referents in discourse. Hockett, for example, mentions the mechanisms of person sequence in a discourse and personal categories which keep them apart (1939.244-245). Similarly, Hill discusses "identical reference" with regard to the definite article in English (1958.415). Although these and others have referred to the problem and suggested partial solutions, I believe Lauriault is the first to point the way toward paragraph structure as a major factor in the solution. Unfortunately, his published materials are not detailed, but they do mention paragraphs and other units beyond the sentence: "Paragraph after paragraph of text material showed definite logical structures, whose parts were signaled by the conjunctive elements" (Lauriault 1957b.168). "Some conjunctions meant: 'This sentence has the same subject as the preceding'" (Ibid., p167).[1]

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[1]Loos also posited paragraphs in Capanahua, a language closely related to Shipibo, and described briefly their relation to nominal and pronominal forms, e.g., "In the first occurrence of the subject tagmeme in the paragraph, it must be manifested by a noun-class filler" (Loos 1963.702). In his more recent work (1967), however, Loos has rejected the notion of structures beyond the sentence.

Studies which recognize linguistic structures beyond the sentence but which are not particularly relevant to the main problems treated here include the following:

Weir: "In applying these six functions [Jakobson's speech functions] operating in different hierarchical orders... the unit of the paragraph becomes well defined" (1962.102).

Stennes: "Each higher level is described as being composed of lower level units plus the function words that relate them" (1961.68).

S. W. Becker, Bovelas, and Broden: "Sentences are also collected within another structure, paragraphs, leading one to assume that there might be some meaning associated with the interaction of all the sentences forming the paragraph that is not given by the sum of the meaning of the separate sentences" (1961.140).

Levin: "Some account must be given of linguistic relations whose domain is greater than the sentence" (1962.14).

The cues for identification of participants are not limited to grammatical paragraph structures, and the specific cues in Nomatsiguenga discourse are quite different from those in Shipibo. Nevertheless, this study builds on Lauriault's work in that structures beyond the sentence are considered to be relevant to identification.

Works within the framework of various current linguistic models also contribute important insights relevant to the identification of participants and selection of forms for referring to them. Four of these models--stratificational grammar, transformational grammar, Halliday's scale-and-category grammar, and tagmemic grammar--will be discussed in Section 2.1. No attempt will be made to give a complete explication of these models; rather, relevant works will be examined with reference to the main hypotheses of this study. In Section 2.2 some works within further theoretical models or in other disciplines will be commented on with reference to one or more of these hypotheses. In Section 2.3 a summary of similarities and differences between the works discussed and the model proposed in this study will be given.

2.1. Current Models in Relation to the Basic Hypotheses of this Thesis. The following hypotheses will serve as the basis for discussing the models examined in this section: 1) Three aspects of form--lexemic, grammatical, and phonological--contribute to the identification of participants in a discourse. 2) Three aspects of meaning--the plot of the events narrated, the observer's viewpoint, and the social setting--simultaneously exercise control over the forms selected for referring to participants. 3) The intersection of one of these aspects of form with an aspect of meaning composes units at hierarchical levels above the sentence as well as below.

2.1.1. Stratificational Grammar. Since two recent stratificational studies--Taber's description of Sango, an African lingua franca, and Cromack's description of Cashinawa, a Panoan language related to Shipibo which was mentioned earlier--treat the problem of identification of participants at some length, the discussion will begin with that model.[2]

The concept of structures beyond the sentence is incorporated into both stratificational grammar and tagmemic grammar. Therefore, we shall discuss the third hypothesis first.

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[2]The work of Taber and of Cromack was not available to me until a draft of this study was essentially complete. I find many parallels between their work within a stratificational framework and this one within a tagmemic framework. This is a rather startling demonstration of the fact that theories which appear to be quite different on the surface begin to merge when a serious attempt is made to account for actual language data.

Stratificationalists explicitly state that structures beyond the sentence must be accounted for in an adequate linguistic theory. Gleason says, for example: "We cannot claim to have accounted for the sememics-to-phonemics transduction, much less the event-to-sound transduction until we can handle the linguistic features of whole narratives satisfactorily" (Gleason 1964. 94-95). His phrase "the sememics-to-phonemics transduction", however, exemplifies one of the crucial differences between that model and the third hypothesis stated above: in stratificational grammar meaning and form are separate. The sememic stratum--or hypersememic stratum in later formulations--is located at the interface with semantics in real world experience, while the phonemic stratum is at the interface with real world sound. "The linguistic structure [i.e., strata between semantics and phonetics] relates the semantic stratum to the phonetic" (Lamb 1965.39).

In tagmemics, on the other hand, each linguistic unit is considered to be a form-meaning composite. The difference in the way the two theories view the relation between form and meaning no doubt accounts for differences with respect to our other two hypotheses.

Turning now to the first hypothesis, we find that in stratificational grammar identification is considered to take place in semological structures which are in turn realized by lexemic structures. Taber states:

> If, as we have claimed, at the upper of whatever the two levels of the semology are, the network represents all references to a particular object as a point, then it follows that all pertinent identification for that object will have to be attached at that point, including that identification which is implicitly assigned by contrast with identification furnished for another object (Taber 1966.125, quoted by permission of the author.)

> Objects are identified once, with all necessary specificity, in the higher network. They are then distributed, with the necessary information to ensure unambiguous local realization in the lexemic stratum, to the appropriate events in the lower level (Ibid., p. 134).

In stratificational grammar, then, the cues for identification are all lexemic realizations of sememic structures identifying participants. Although our evidence suggests that the cues in different strata or hierarchies operate in a manner at least partially independent of one another, stratificationalists consider that lexemic and sememic cues do not operate independently. Consequently, lexemic paragraphs contribute to identification only in the sense that they realize sememic discourse blocks; i.e., the boundaries of the two are necessarily coterminous so that one does not find one kind of cue in discourse blocks and another in lexemic paragraphs.

Identification of participants in some languages is fairly simple. For example, in Cashinawa, as described by Cromack, there is a system of enclitics which signal 'same subject' or 'different subject'. These enclitics provide most of the cues when no noun occurs. In that language cues from the lexemic stratum alone may be adequate. A comparable system of enclitics does not occur in Nomatsiguenga. Consequently, cues in both lexemic deep structure paragraphs, i.e., cues from discourse blocks in stratificational terms, and in grammatical surface structure paragraphs, i.e., lexemic paragraphs in their terms, will be shown to be necessary for the identification of participants in Nomatsiguenga discourse.

As we have seen, Taber assigns all identification to one point in the upper level of semology. There are limitations in this approach, one of which we discussed above. Another limitation is the fact that no mention is made of roles or functions as characterizations of participants which, in turn, help to identify them (cf., for example, villain in Chapter 4 of this study). In spite of these limitations however, Taber's approach provides interesting insights. For example, the assignment of all identification of a particular participant to one point shows the unity or connectedness of the sentences in a discourse in contrast to random, isolated sentences.

Turning now to the second hypothesis, we find some parallels as well as differences in the way the two theories view aspects of meaning. The distinction between core systems and cohesion systems posited by Cromack seems to be equatable with the distinction between langue and parole. However, there are some parallels in the cohesion systems with observer viewpoint as an aspect of meaning in our model. There are, according to Cromack, three groups of semolexic realization rules

> which communicate information about the real world [i.e., plot in our terms] and the speaker's intended view of it [i.e., the observer in our terms]...The three systems...[and] their area of accountability are...
>
> DETAIL FOCUS (Breadth): { Delimitation / Identification }
>
> ATTENTION FOCUS (Depth): { Predication-line / Topic Prominence }
>
> MODALITY (Filters): { Moods / Affect }
>
> (Cromack 1968.16)

Thus, the plot and observer aspects of meaning are at least tacitly distinguished in this stratificational study. But no provision seems to be made by either Cromack or Taber for the social setting as an aspect of meaning which also conditions the forms for referring to participants.

In Chapter 1 we illustrated three aspects of meaning which control the forms selected for referring to participants, and in Chapters 3 and 4 we shall show further that there are in each different kinds of relations between participants which must be accounted for. Focus and non-focus relations are relative to the observer's viewpoint; relations such as agent and goal are plot relations; and relations such as initiator and follower are relative to the social setting. These three kinds of relations do not appear to be distinguished in stratificational grammar, although relations between participants are mentioned. Taber, for example, says: "What kinship terms refer to specifically is not an object but a relationship between objects" (Taber 1966.126).

As evidence of the confusion of different kinds of relationships, we quote Lamb:

> The valences are separately labelled aqt. ('agent') and gl. ('goal'). For BS/parent-child-relationship/ one could use some symbol like BS/par./ and label the two valences p and c. (Lamb 1965.57).

In other words, parent-child relations which are a kind of social relation are not viewed differently from agent and goal relations in the plot.

Lamb's statement illustrates the failure of stratificationalists to make another distinction: kinship terms which characterize participants by enduring 'real world' relations are not distinguished from relations such as agent and goal which are inherently expressed in constructions and reflect 'real world' relations which may change with each successive action. The distinction between these two kinds of relations is important in Nomatsiguenga since they contribute differently to identification.

In Sango the rules for referring to participants, as described by Taber, are fairly simple. They apparently can be specified by consideration of the plot aspect of meaning alone: "With four exceptions, which are marked by asterisks, the rule governing the use of nominal vs. pronominal forms is very simple: a nominal form is used each time there is a switch of ag from one participant to another." (Taber 1966.113). As we shall show, this is not the case in Nomatsiguenga. Observer and social aspects of meaning, as well as plot, exercise control in the selection of forms for referring to participants.

In sum, the way in which Taber shows the unity of discourse and the way Cromack shows how the observer's viewpoint affects the telling of the story

are valuable contributions to the study of discourse. However, for Nomatsiguenga the problem of identification is accentuated. It has, therefore, been necessary to formulate a more comprehensive model--one in which the social setting as an additional aspect of meaning is incorporated and in which both lexemic and grammatical structures are considered to provide cues to identification.

2.1.2. Transformational Grammar. The position of transformationalists with respect to structures beyond the sentence is, in general, negative and is summarized by the following from Chomsky: "By a generative grammar I mean simply a system of rules that in some explicit and well-defined way assigns structural descriptions to sentences" (Chomsky 1965.8). Nevertheless, there are some transformational studies which have dealt with discourse.

Williams, for example, asserts that an utterance such as, "'*Tom succeeded in leaving. Instead he wanted to be.' is in some sense an ungrammatical utterance in English, despite the fact that it consists of two emminently [sic]grammatical sentences" (Williams 1966.536). He adds that the judgment as to whether or not sentences are correctly conjoined in discourse must be accounted for as part of the native speaker's competence.

His assumptions differ from the third hypothesis stated above with respect to the place of structures beyond the sentence. I have posited paragraphs and discourse as hierarchical levels above the sentence which should be accounted for in the same manner as structures below the sentence. Williams, on the other hand, considers discourse structure to be another stratum of language--the rhetorical stratum--rather than a part of syntax. Consequently, his study deals mainly with that which he considers relevant to syntax--sequence signals within a sentence--rather than the structure of discourse. He does, however, add that "the most important goal is a... description of the constitutes of discourse" (Ibid., p. 534).

Adverbials such as 'additionally' which signal discourse relations are distinguished in his work from those such as 'hopefully' which comment on the primary event. The former are derived from verb roots, i.e., 'add to' and 'additionally' are shown to be related, while the latter are derived from a sentence asserting something about the truth value of the content. A further type of adverbial such as 'lushly' is distinguished as contributing directly to the primary content of the sentence.

This distinction between adverbs which comment on the truth value of the content and those which contribute directly to the primary content parallels the distinction in this study between the observer and plot aspects of meaning. It differs from the treatment here, however, in that Williams derives 'hopefully' from a sentence such as 'I hope' whereas I consider

the observer comment to be simultaneous with the whole of a 'plot sentence'. A transformational treatment similar to the way Weinreich handles questions and imperatives would be analogous to the treatment in this study. Weinreich says of questions and imperatives: "Since, however, these (English) elements have no segmental representation on any level, it is natural to introduce them as semantic features of the sentence as a whole" (Weinreich 1966.442).

Bever and Ross have also dealt with some aspects of discourse structure. They state: "To compose a discourse a sequence of sentences must be connected and structured. A set of sentences is connected if all share a sufficient amount of semantic material" (Bever and Ross, n.d., p. 3). They conclude that "only a device with access to extralinguistic material can explain the notion of connectedness in discourse" and, therefore, the problem cannot be solved "within the confines of linguistics" (Ibid., p. 8).

It is not the purpose of this study to explain the notion of connectedness in discourse. One of the purposes is, however, to show how different aspects of meaning control forms. The aspects of meaning are phenomena of the "real world" and, hence, they are "extralinguistic" to Bever and Ross. In this study, however, they are brought into linguistics in that each linguistic unit is viewed as a form-meaning composite. Since "linguistic" and "extralinguistic" material are united in tagmemics rather than rigidly separated, the theory can potentially handle the problems posed by Bever and Ross more adequately than transformational grammar.

Fillmore's studies developing the notion of "case" in transformational grammar are concerned primarily with structures below the sentence. Furthermore, he considers the anaphoric processes used in simplifying sentences connected by conjunction or subjunction "to be exactly the same as those used in sentences connected in discourse" (Fillmore 1967.87) so that he apparently would not grant our third hypothesis that there are structures beyond the sentence.

However, the lexemic or deep structures posited at the clause level in this study parallel in many respects his deep structure sentences, while the grammatical or surface structure clauses parallel his surface structure. For example, "subject" is considered to be a surface structure phenomenon in both treatments (cf. Section 3.1 of this study and Fillmore 1967.32).

Furthermore, his division between proposition and modality constituents of sentences is similar to the distinction between units having a plot aspect of meaning and those having an observer aspect of meaning:

> This latter [the modality constituent] will include such modalities on the sentence as-a-whole as negation, tense, mood and aspect...It is likely, however, that certain 'cases' will be directly related to the modality constituent as others are related to the proposition itself (Ibid., p. 44).

One case directly related to modality, i.e., the observer in my view, is focus. Agent and goal, on the other hand, are related to proposition, i.e., plot, in the lexemic clauses described in Section 4.1.

Fillmore comments on the parallels between his work and tagmemics: "A case grammar diagram could simply be read off as a tagmemic formula, as long as certain symbols were designated as function indicators" (Ibid., p. 132).[3] As he rightly notes, typical tagmemic studies have often not dealt with deep structure. In Pike's original formulation, however, "actor-as-subject" and "recipient-of-action as subject" were distinguished (Pike 1954. 131). Pike gives more systematic attention to actor and goal as "situational roles" and subject and object as "grammatical roles" in his discussion of discourse analysis (Pike 1964b). In this study both actor and subject are included, but the former is considered to be the function of a deep structure tagmeme and the latter to be the function of a surface structure tagmeme.[4]

Padučeva's study of anaphoric relations in text is an example of a transformational study concerned with the way participants are referred to. She suggests rules for deriving different names of the same object in a text. The first group of transformations she terms "syntactic" and illustrates with "Proper name ==> pronoun" and "a pretty girl with blue eyes and black hair ==> the girl".

Other classes of transformations involve information retrieval of a semantic sort. For example, in order to account for "Jane was the daughter of Peter. Jane adored her father," she synthesizes "father" from deep structure in which the first sentence is, "Peter was father of Jane."

Ross also has dealt with pronominalization as one aspect of anaphora. He states:

> Certain facts about anaphoric pronouns in English can be easily accounted for...[by] an obligatory, cyclically ordered transformation.
>
> .....
>
> This rule replaces some noun phrases (NP) in a structure by a definite pronoun...when the first NP is in the environment of another NP which is identical to the first (Ross, forthcoming).

No attempt has been made in this study to formalize rules for pronominalization, but cyclically ordered transformations offer interesting possibilities. However, one would need to add to Ross's rule the condition

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[3]Thomas' "clause roots" in a battery of transformations parallel Fillmore's "propositions" and my "basic lexemic clauses". (See Thomas 1964.)

[4]Just as we commented earlier that stratificational grammar and tagmemic grammar are parallel in many respects, so here we note the convergence of transformational grammar and tagmemics.

that both noun phrases refer to the same participant. The condition that the second noun phrase be identical with the first is not sufficient since two identical noun phrases might occur if they refer to different participants; Padučeva illustrates this with "word after word". Furthermore, the observer viewpoint, the plot, and the social setting would all need to be accounted for as factors which control pronominalization. Neither Ross's formulation nor other current formulations of transformational theory adequately account for these three aspects of meaning which simultaneously control participant reference.

2.1.3. Scale-and-Category Grammar. Halliday states, in agreement with our third hypothesis: "It can be taken for granted... that the description will not be restricted to below the rank of sentence" (Halliday 1964.302). This statement implies a treatment of hierarchical levels both above and below the sentence which would be similar to this study. His more recent work, however, is closer to Williams' position stated within a transformational framework in that he apparently distinguishes the grammar of discourse from the grammar of sentence. He says, for example: "Theme is the grammar of discourse" (Halliday 1967b.199).

In scale-and-category grammar form and meaning are united in partial agreement with our third hypothesis. There is a difference between the two, however, since in that theory meaning in the sense of "real-world experience" is mediated through formal linguistic meaning rather than serving directly as a component of linguistic units.

> Language has "formal meaning" and contextual meaning... The formal meaning of an item is its operation in the network of formal relations.
>
> ....The contextual meaning of an item is its relation to extratextual features; but this is not a direct relation of the item as such, but of the item in its place in linguistic form: contextual meaning is therefore logically dependent on formal meaning (Halliday 1961.244-5).

Turning to the treatment of transitivity, mood, and theme in scale-and-category grammar, we find many parallels with the aspects of meaning which we have posited as controlling the way participants are referred to. Halliday's discussion is limited to the way they are referred to within the clause, although the principles of clause organization within "theme" tie the clause to the discourse as a whole.

He defines transitivity as "the grammar of experience" and mood as the "grammar of speech function" (Halliday 1967b.199). The former closely parallels the plot aspect of meaning on the clause level and the latter the observer aspect. His "contextual meaning" (see above) appears to cover parts of both plot and social aspects of meaning. Spencer and Gregory, in an application of the model to stylistics, make a more definite place for social,

i.e., cultural meaning:

> A text may...be regarded as an 'utterance' which is part of a complex social process...Recourse to factors such as these [social and ideological circumstances] may be termed cultural contextualization (Spencer and Gregory 1964.100).

Within transitivity Halliday speaks of participant roles such as actor and goal which are similar to the cases posited by Fillmore and to the functional units which characterize participants in lexemic clause structure in this study. His treatment of participant roles, however, differs in that he does not consider them to be the functions of units within a clause. Each is rather "one feature of the clause in question" (Halliday 1967a.49). This treatment is possibly adequate when discussion is limited to the clause level, but for identification and characterization of participants throughout a discourse it is more satisfactory to posit units in which both the role which characterizes the participant and the manifesting form can be specified.

Halliday says of mood, i.e., the observer: "Mood represents the organization of participants in speech situations, providing options in the form of speaker roles: the speaker may inform, question, or command" (Halliday 1967b.199). Since he separates the grammar of discourse from the clause, certain kinds of organization which reflect the speaker's attitudes are assigned to theme rather than to mood. These include information focus, identification which highlights or indicates observer focus, and the contrast between given and new information.

Parallels can also be shown between his discussion of transitivity, mood, and theme and the three aspects of form posited in our first hypothesis. For example, he describes given versus new information and information focus as indicated phonologically, i.e., by intonation and stress, in English. However, his assignment of transitivity entirely to syntax--grammatical structure in our terms--is more like Becker's treatment of four-aspect grammatical tagmemes (cf. Sec. 2.1.4.1) than the division made in this study between lexemic and grammatical clauses. Although Halliday's model appears on the surface to exclude the kind of lexemic deep structure posited in this study, in fact the same kinds of phenomena are accounted for some place in the theory.

A further resemblance between the scale-and-category model and our tagmemically-oriented hypotheses is seen in the way the various systems of language are interrelated. Transitivity, mood, and theme systems are viewed as "interrelated in complex ways" (Halliday 1967b. 243) so that there is no direct mapping from one to the other by realizational

or transformational rules. Similarly, in this study the aspects of form and aspects of meaning are considered to be simultaneous and interlocking so that the structures of one hierarchy cannot be mapped in a one-to-one manner onto those of another.

2.1.4. Tagmemic Grammar. The tagmemic model, beginning with its original formulation by Pike in the first edition of Language in Relation to a Unified Theory of the Structure of Human Behavior (1954, 1955, and 1960), has included all of the basic elements of the three hypotheses underlying this study. We shall discuss these elements as originally formulated first and follow with a discussion of the way they have been incorporated into our basic hypotheses. Later we shall comment on some tagmemic studies which are relevant to the problems of this study.

2.1.4.1. Original Formulation. Pike has consistently stated that both verbal and nonverbal behavior are hierarchically structured:

> There is in behavior a HIERARCHICAL STRUCTURE... in which smaller emic wholes may be viewed as parts of larger emic wholes, which in turn are parts of still larger ones (Pike 1954.32).

> Once linguistic study deals with units larger than the sentence a bridge may be built between linguistics and some kinds of literary study (Ibid., p. 74).

> Beyond the sentence lie grammatical structures available to linguistic analysis (Pike 1964a.129).

The units of each level in each hierarchy have been considered to be form-meaning composites: "Our present theory would not allow us to say... that a linguistic item 'is the bearer of a meaning', since there would be no available linguistic units to 'bear' meanings, in view of the fact that there are only form-meaning composites" (Pike 1954.24).

The three hierarchies originally posited are lexical, grammatical, and phonological. Units at the lowest level of each hierarchy were the morpheme (lexical), the tagmeme (grammatical), and the phoneme (phonological). The following summarizes this view:

> The phonological hierarchy, in my view, is best considered as beginning with the phoneme at the lowest level. Contrastive features then appear as components of this phoneme unit rather than as primitive units comparable to phoneme, syllable, and stress group....

> The lexical hierarchy has as its minimal unit the morpheme. Upper layers of this hierarchy include units made up of morpheme

> sequences, including idiomatic expressions with their own meanings....
>
> The grammatical hierarchy must be differentiated from the lexical hierarchy inasmuch as, for example, the sentence type must be distinguished from a specific sentence. Any one specific sentence is a member of the lexical hierarchy, whereas the sentence type as such in all its manifestations constitutes a structural unit within the grammatical hierarchy (Pike 1958.372, quoted by permission of Universitetsforlaget, Oslo.)

Observer, plot, and social or cultural elements have also been an inherent part of the model. The observer component was illustrated by an analogy to photography where height, depth, and breadth of focus are each relevant in the composition of a picture of a "real world" experience (Pike 1954.48-55). The following later comments on the observer illustrate the way this aspect of language is viewed in the model:

> We seem, then, to be left with some relativity of phenomena--a relativity due to and limited by the fact that the nature of the observer inevitably in part structures his observation of the matrix of his behavior (Pike 1960.115).
>
> Observers differ and hence their reports differ (Pike 1964a.129).

While no mention of the plot as such was made in earlier discussions, the "universe of discourse" is a close equivalent. For example, central meanings of lexical items are distinguished from a specialized meaning in a particular universe of discourse (Pike 1960.85).

The social setting was included as the matrix of verbal behavior:

> But what was the largest linguistic act to be distributed within? Here we were inevitably committed to the relevance of culture, or nonverbal behavior, as a distributional matrix for large linguistic units (Pike 1954.156).

2.1.4.2. Some Modifications. As shown by the quotations in the preceding section, none of the basic elements in our three hypotheses are additions to the tagmemic model. That which is different from the original formulation is the particular way in which observer, plot, and social elements are integrated into the model and the particular distinction drawn between lexical structures--termed lexemic here--and grammatical structures. Growing out of this distinction is an attempt to delineate the nature of units at each level of the lexemic hierarchy. Previous treatments of the lexical hierarchy have been programmatic and quite limited in scope.

The incorporation of the observer, the plot, and the social setting as simultaneous aspects of meaning is an extension of Pike's discussion of the

relationships of phonological suprasegmentals such as intonation to segmentals such as consonants and vowels and to subsegmentals such as voice quality (Pike 1963). Since intonation usually indicates the attitudes of the speaker, i.e., observer, I have by analogy incorporated all indications of observer attitude and viewpoint in a manner similar to that which he suggested for phonology. Thus, lexical and grammatical indications of the observer's focus of attention, as well as phonological indications of his attitudes are considered to be "suprasegmental" to the discourse. The plot of the events narrated, i.e., reference, is analogous to segmental phonemes while the social setting is analogous to subsegmental voice quality in phonology.

The terms "speaker" and "addressee" rather than the single term "observer" could be used for the specific phenomena attributed to observer meaning in this study. Since it would not include other phenomena such as native reaction which are also included in the tagmemic model as pertaining to the observer, I have used Pike's term as a cover term.

Most of the discussion of the "subsegmental" social setting in this study will be limited to social roles as they affect the way participants are referred to. However, other phases of the social setting, including the shared values of the society are included in the model underlying the presentation and may affect lexemic, grammatical, and phonological form.[5]

An illustration of the way moral values shared by the members of a society may affect the overall phonological form of a language may help to clarify the reasons for incorporating social meaning as "subsegmental":

Anger is the worst moral offense to the Amuesha, and since raising the voice signifies anger to them, they usually speak in a quiet, low manner. Shouting is acceptable only in calling to someone at a distance; unacceptable shouting, of course, occurs in spite of the sanctions against it. The reaction of the Amuesha to the Aguaruna, who speak in a very loud manner, gives evidence of this control of phonological form by social meaning; one Amuesha commented: "Those Aguarunas speak as though they are angry all the time." The Aguaruna, on the other hand, react in the opposite way: "The man who is quiet is probably doing something bad."[6]

In sum, the elements are not new, but the way in which the observer, the plot, and the social setting have been incorporated as simultaneous aspects of meaning is a modification of the model.

The difference in the distinction drawn here between lexemic and grammatical structures and lexical and grammatical structures in the Pikean model

[5]Pike has mentioned also the relevance of values: "EPISTEMOLOGICAL ATTITUDES or ACTIVELY-HELD BELIEF SYSTEMS...provide this integrating organization" (1960.50). See Aberle et al. (1950) for a discussion of role differentiation and shared values as functional prerequisites of a society.

[6]Amuesha is an Arawakan language of Peru and Aguaruna a Jivaroan language. The Aguaruna comment is reported by Mildred Larson, private communication.

is illustrated by the difference between the way A. L. Becker--following Pike--describes English subject tagmemes and the way I describe lexemic clause units and grammatical clause units. Becker posited a four-aspect tagmeme shown in the following diagram.

	Grammar	Lexicon
Form	A (e.g., Subject)	B (e.g., Noun Phrase)
Meaning	C (e.g., agent)	D (e.g., single, male, human, etc.)

(Becker 1967.6).

The diagram "reveals two basic assumptions: 1) that all grammatical units are form-meaning composites and 2) that tagmemes are correlatives of syntactic slot and lexical filler" (Ibid.). Elsewhere Becker says that grammatical form is surface structure and grammatical meaning is deep structure (Ibid., p. 153).

The division between surface structure and deep structure in this study parallels Becker's. The difference in the two models is that I consider surface structure to be grammatical structure and deep structure to be lexemic structure. In other words, I incorporate his four aspects in the manner shown in the following diagram:

	Function	Manifestation
Grammatical Unit	A (e.g., Subject)	C (e.g., Noun Phrase)
Lexemic Unit	B (e.g., agent)	D[a] (e.g., single, male, human, etc.)

[a]In the discussion below the nature of this aspect will be modified somewhat.

When clauses are considered in isolation, the difference in the two divisions is not crucial. Within discourse, however, the sequence of functional roles of a participant in events chronologically ordered is a major factor in identification. Since the chronological order of deep structure does not always match the actual surface order, it is important to separate units such as agent

and goal from units such as subject and complement. Analogous distinctions between surface structure and deep structure units have been made at other hierarchical levels and are discussed in Chapters 3 and 4, respectively.

In Pike's original formulation, tagmemes were posited as units of the grammatical hierarchy only. Crawford (1963) added phonotagmemes for the phonological hierarchy. By splitting the four-aspect tagmeme posited by Becker into lexemic units and grammatical units, I have added lexico-tagmemes.[7] Longacre has previously referred to lexical tagmemes also. The principal difference between the lexemic structures posited here and those he suggests is that I have posited lexemic systems of structure for the language as a whole, as well as specific lexemic systems in a particular discourse. Longacre, on the other hand, says: "It is significant that L-syntagmemes [e.g., L-clauses] and L-tagmemes [e.g., units such as agent] are relevant to particular texts rather than to a language as a whole" (Longacre 1964b.18).

There is a further difference in this model and that proposed by Becker: in his diagram above, he implies that aspect D includes subcategorization features of noun phrases. Elsewhere in his discussion, however, he says: "That aspect of a grammatical unit which we have called (D) lexical meaning indicates (in part) a particular reference in a discourse" (Becker 1967. 21; cf. also pp. 65, 71, 85, and 86). The exact relation between features of subcategorization and a particular reference in a discourse is not specified in his work. Both are relevant to meaning and he labels aspect D as lexical meaning, but the problem of their relation was left unresolved.

In this study I have relabelled Becker's second column as manifestation. As a result meaning, including reference to participants, has to be treated in another way. I shall attempt to show in Chapters 3 and 4 that both surface structure grammatical units and deep structure lexemic units refer to the participant and help to identify him. Therefore, reference is part of the meaning component of two different kinds of unit rather than of a single unit as in Becker's model.

In a given lexemic clause a participant may be referred to by a unit such as agent manifested by a kinship lexeme--or more precisely manifested by an L-participant phrase--while in another clause he may be referred to by agent manifested by a different phrase, e.g., one which names him. I would, therefore, replace Becker's aspect D with these different lexemic manifestations.

The features which Becker lists in aspect D are considered here to be the contrastive features of the meaning component of lexemes which I

[7]One of the major contributions of Becker's work is the specification of the notion of equivalence and its relation to conjoining rules. That aspect of his study is relevant to the topic of this study but has not been incorporated in any consistent way.

have posited as the minimum units of the lexemic hierarchy. The meaning component of lexemes parallels the "hyper-meanings" discussed by Pike (1960.91ff). He defines "hyper-meaning" as "the meaning of two or more utterances or parts of utterances" (Ibid., p. 91) and illustrates with "wire" and "telegram" (Ibid.) and other instances of synonymy or paraphrase. The form component of a lexeme is comprised of the allolexes which manifest it. For example, the English lexeme meaning 'male parent' may be manifested by father, dad, papa, daddy, etc.[8] The occurrence of these variant manifestations may be conditioned by the social roles of speaker and addressee, formality of the occasion, or other factors.

2.1.4.3. Some Relevant Tagmemic Studies. In "Discourse Analysis and Tagmeme Matrices" (1964b), Pike discusses the way participants are referred to throughout a text and the way both plot and focus of attention of the speaker are relevant to the problem. He suggests there the techniques of eliciting stories told as if from different viewpoints in order to find out how focus of attention affects the forms for referring to participants. In the field work stage of the study of Nomatsiguenga this technique was used with some modifications. An informant was requested to narrate each story in a set of stories about a fishing trip from the viewpoint of a different participant. Another informant was requested to narrate each story in a set of stories about a plane trip from the viewpoint of different participants and another set about a village project in the same manner. Comparison of these three sets of stories made it possible to see more easily the ways observer focus and social roles, as well as the plot, control lexemic and grammatical forms in a discourse. Although the control is more clearly seen in these sets of stories than in narrations told from a single point of view, the latter were checked and similar ways of referring to a participant in focus and to the initiator of an action were found to occur.[9]

Ways in which focus of attention may affect the form in certain African languages are pointed out in Pike's report of a research project in Nigeria and Ghana. He says, for example, "The character out-of-focus is quoted indirectly whereas the character in focus would be quoted directly" (Pike 1966.91).

Wheeler also describes the way focus of attention is the controlling factor in the occurrence of certain enclitic forms in Siona, a language spoken in Ecuador and Colombia:

[8] A similar view of lexemes was suggested by Longacre (1964b), although the relation to Pike's hyper-meanings was not discussed. Following Longacre (1964b. 6,16) I have posited morphemes as the minimum units of the grammatical hierarchy.

[9] The purpose in this study of comparing stories told from different observer viewpoints is to see the ways in which focus of attention affects the forms for referring to participants. A half century ago Cummings suggested another interesting use of stories told from different views. He suggested that the language student should tell the same story from the standpoint of different characters since "this change of person, time and circumstance will give most fruitful practice, and all within range of the known vocabulary" (1916.48).

> The main theme of the narrative, and the importance of particular elements...are signaled by the enclitic markers selected within the framework of a grammatical category, either subject, object, or goal...The degree of focus...relates to whether the nominal element has a central or peripheral role in the discourse (Wheeler 1967.69).

Some tagmemic studies which include discussion of the way the plot affects reference to participants include the following:

Grimes (1964) says with reference to Huichol syntax that a referent once introduced is not mentioned again in full form except for emphasis or to forestall ambiguity.[10] He summarizes the relationship between clauses in which the participants are referred to in the full form and those which lack such constituents by means of a set of transformational rules of reduction.

Crymes (1965) in describing systems of substitution in English links the kind of substitution to position, i.e., grammatical function. On the other hand, Cowan (1965) describes substitutions of lexical items in a Mazatec text in terms of equivalence sets referring to a single item whether or not the grammatical functions are the same.

Lockwood (1965) describes the boundaries of a pronoun concord domain in English as limited by the occurrence of the original noun or a substitute. The rules which indicate whether pronouns or nouns occur are based on the stratificational concept of realization rules since he considers pronominal substitution to be grammatical and nominal substitution to be lexical.

Bock's studies of the relation of social roles to dimensions of space and time are descriptions of nonverbal behavior. There are important implications, however, for further development of the relation of social meaning to language form. For example, in Chapter 1 we illustrated how certain actions are appropriate for participants performing a plot role such as villain. The characterization of a given participant as villain thus becomes an important cue to identification. Bock's studies lead us to expect also that certain actions are appropriate for a participant performing a specific social role since there are "interrelated behavioral expectations making up any given role" (Bock 1964.394). These, too, might be important cues for identification.

Just as in this study we posit structures beyond the sentence as a major factor in identification of participants, so Bock posits a larger matrix for identification:

> The key to the identification of roles and the attributes which underlie them is the recognition of the social space/time matrix (situation) as an integral part of the description....

[10]Grimes' study is tagmemically oriented but also incorporates concepts from other models.

> for... the expected interpersonal behaviors which constitute the attributes of roles ... function, in part, to contrast 'kinds of persons' (Bock 1962.181).

In contrast to Bock who applies tagmemic concepts to nonverbal behavior, Scott (1965) distinguishes riddles from other genres by contrasting the discourse level tagmemes of riddles with those of other genres. He concludes, however, that the nonverbal social matrix in which riddles are told is also a necessary component of definition of the genre and that linguistics cannot describe this. Thus, he fails to see that within the tagmemic model verbal and nonverbal behavior are integrated rather than rigidly compartmentalized.

On the other hand, Bridgeman (1966) uses the contrastive social settings within which different discourse types occur as a defining criterion. One of the main contributions of her work is that it is the first fairly detailed description of grammatical paragraph types and variants in a given language. Although it is not the main theme of her work, she also describes the occurrence within a paragraph of units such as subject and object which refer to participants and relates their occurrence to the sociolinguistic situation.

The studies mentioned in this section illustrate the fact that the concepts in this present study are not new in tagmemic theory. Similarly, we showed in Sections 2.1.4.1 and 2.1.4.2 that the concepts utilized here are not new. That which is different from previous formulations is the particular way in which they are incorporated in the model underlying this study.

2.2. Some Further Relevant Studies. In this section we shall discuss relevant contributions of other studies beginning with some linguistic works not mentioned in Section 2.1. Some insights of stylistic and literary studies will follow, and the contribution of folklore studies to an understanding of structures beyond the sentence will be discussed last.

2.2.1. Further Linguistic Contributions. We shall discuss first several recent linguistic studies based on computer recognition of elements in monologue and conversational discourse since they have also dealt specifically with the problem of identification of participants. Some parallels between aspects of those studies and this study of Nomatsiguenga are: 1) the recognition of social roles as important for understanding, 2) the recognition of discourse topic, i.e., an element of the plot, and 3) the recognition of elements outside the sentence in which a word occurs as being important for identification of referent. The following works discuss these points.

Weizenbaum reports a program whereby a computer assumes the role of psychiatrist and "converses" with a human subject who assumes the role of patient. The computer's "understanding" of the subject's comments depends on the limitations imposed by these social roles: "It is remarkable how quickly they [the computer's responses] deteriorate when he[the subject] leaves his role" (Weizenbaum 1967.475).

Jacobson's program was designed so that computer recognition of "lexical equivalents", i.e., synonyms, in a text served as the basis for "assumptions about the topics it deals with" (Jacobson 1966.300).

Olney and Londe have as one goal in their research "the grouping together of each anaphoric expression with its appropriate antecedent" (Olney and Londe, n.d., p. 3). In another article Olney describes this aspect of the program as based on computer recognition of specialized word senses which are due to text elements outside the sentence in which the word occurs (Olney 1963.22). This recognition of sense by elements outside the sentence seems to parallel the identification of participants through previous characterizations.

We turn now from these studies based on computer techniques to linguistic studies which have contributed insights relevant to the solution of the problems posed in Chapter 1.

Harris' technique of discourse analysis, using an array which shows the equivalence classes in one sentence on the horizontal dimension and the succession of sentences on the vertical dimension, has been useful in the analytical stage of this study. I have added to his technique, however, by arranging the "kernel" sentences in chronological order. One result of this addition was the emergence of patterns of role sequence which contribute to identification. Although Harris concludes that relations among sentences are not visible in terms of what is subject, etc. (1952.30), the patterns of role sequence in Nomatsiguenga provide evidence to the contrary. I have found that both in the deep structure of texts and in the surface structure one of the most striking relations is in terms of who is agent and who is subject in successive sentences (cf. Sec. 3.6 and Sec. 4.6). The fact that Harris considers the technique to deal with a "type of structure that can be investigated by inspection of the discourse without bringing into account other types of data, such as relations of meanings" (Harris 1963.7) perhaps accounts for his failure to realize the relevance of the technique to a problem such as identification of pronominal referents (Ibid., p. 15).

In contrast to Harris' exclusion of meaning, most linguists who have dealt with structures beyond the sentence have included both form and meaning. Nida, for example, says: "Semantics cannot be divorced from formal structural units" (Nida 1951.3). Furthermore, the kinds of meaning discussed by Nida closely parallel the three aspects distinguished in this study. He describes referential meanings, i.e., plot, as "extralinguistic, extrasomatic, and situational" and emotive meanings, i.e., observer meaning, as "extralinguistic, somatic, and behavioral" (Nida 1964.70). He mentions also the importance of the social setting "including the relationships of the participants [in the speech act] to the code, and their relationship to one another as members of a communicating society" (Ibid., p. 51). While the social roles of the participants in the narrated event are discussed most

in this study, the relations of the participants in the speech act are also considered important. In Chapter 6 we shall show their relevance to contrasts in discourse types.

Prague School linguists, both of an earlier era and the present also, consider the study of language to be impossible apart from meaning. Furthermore, they consider "semantic content" to include "not only the reference to extralingual reality usually covered by what is called the lexical component of language but also facts of more abstract, often relational, character, i.e. those of the grammatical level" (Vachek 1966.30). Thus, their position is close to that taken here that all linguistic units are form-meaning composites.

The observer and plot aspects of meaning are included in their discussions of the emotive and communicative functions of language (e.g., Vachek 1966.34ff). The concepts of foregrounding and automatization are applied primarily to special forms in poetry. They are also related, however, to the observer's focus of attention. For example, in his discussion of novels Mukařovský says: "The structure is the total of all the components, and its dynamics arise precisely from the tension between foregrounded and unforegrounded components" (Mukařovský 1955.23). An element in focus is "foregrounded" while those out of focus are "automatized".

The concept of "theme-rheme" as developed by the Prague School is one of their most valuable contributions for study of structures beyond the sentence. Firbas defines the theme as follows: "The theme is constituted by the sentence element (or elements) carrying the lowest degree(s) of CD [communicative dynamism] within the sentence" (1966.272). The theme is, then, the part of the sentence which contributes least to the development of communication. Rheme is defined as "those sentence elements which convey the new piece of information...the communicative nucleus...of the sentence" (Firbas 1959.39). Curiously, I find no examples of the application of the theme-rheme concept to connected discourse although Hausenblas' statement that "grammatical and lexical structures do not develop...by parallel steps and with equal speed [in a text]" may be a move in that direction (Hausenblas 1966.69).

In Section 3.6 I have used the term "theme" in a way related to that of "theme-rheme" developed by the Prague School. It is related in that repeated verb roots in developmental paragraphs have the least amount of "communicative dynamism", i.e., they carry the least amount of information (cf. Firbas 1964.272). My usage differs from theirs, however, in that I have posited "theme" as a variety of paragraph topic introduced in the first sentence where it has the most communicative dynamism. When it is repeated in succeeding sentences it carries the least amount of information.

"Theme" in this study is also more restricted than the concept as used by the Prague School in that I have limited the concept to developmental paragraphs rather than positing a unit with the least amount of communicative

dynamism in every sentence of a text. However, the way in which information is distributed could be a very fruitful topic for further study of Nomatsiguenga discourse. If such a study were undertaken, I would apply the concept to levels above the sentence; more specifically, I consider the distribution of information to be a phenomenon of grammatical surface structure in units above the sentence. Prague linguists, on the other hand, posit another level of analysis: besides semantic and syntactic levels, they posit the level of functional sentence perspective where "communicative dynamism" and "theme" and "rheme" are relevant (cf. Firbas 1965.170 and Trnka 1966).

Jakobson, in developing certain aspects of theory in accord with Prague traditions, states explicitly that linguistic structures go beyond the sentence: "Insistence on keeping poetics apart from linguistics is warranted only when the field of linguistics appears to be illicitly restricted, for example, when the sentence is viewed by some linguists as the highest analyzable construction" (Jakobson 1960.352). An illustration of his viewpoint is seen in his study of Russian poetry in which he points out that there are not only sequences of two parallel lines but also, in the poem as a whole, there are two parallel paragraphs (Jakobson 1966).

The distinction between the speech event and its participants and the narrated event and its participants made by Jakobson (1957) has influenced my own thinking regarding the parallel distinction between observer and plot meanings. Certain aspects of Jakobson's distinction, e.g., mood and tense, will not be discussed at length in this study, but the distinction between the participants in the speech event and those in the narrated event is discussed and illustrated in Section 4.8. In other contexts, he discusses the emotive and conative functions of language. The emotive function expresses the speaker's attitude toward what he is speaking about, whereas the conative function is orientation toward the addressee and includes vocatives and imperatives (Jakobson 1960.354-355). Both of these functions are ascribed in this study to the observer viewpoint.

While Jakobson distinguishes primarily between what we have called observer and plot meaning, Firth distinguishes primarily between social and plot meaning. However, his mention of relevant features of personalities in the "context of situation" (Firth 1957.82) results in a fairly close parallel to the three aspects of meaning posited here. He says of semantics:

> The central concept of the whole of semantics considered in this way is the context of situation. In that context are the human participant or participants, what they say, and what is going on... It is for this situational and experiential study that I would save the term semantics (Firth 1964[1935].66).

In other words, "context of situation" parallels aspects of meaning in this study. On the other hand, his "modes of meaning" (Firth 1957) in phonology,

syntax, and lexicon are parallel to our assertion that there is a meaning component--either observer, plot, or social--in phonological, grammatical, and lexemic units.

Burling's position on the place of meaning in language and his discussion of the kinds of meaning have influenced my own thinking on the subject. He summarizes his view, which is close to Firth's in many respects, as follows:

> So the choices which bear upon our use of language fall into at least four major categories--grammatical, referential, situational and idiosyncratic...all but the strictly grammatical choices are meaningful. To understand these choices, we... will have to consider features of the world outside language (Burling, forthcoming).

His position differs from that taken here in that I have affirmed that all linguistic units are form-meaning composites, whereas he affirms only that the "extralinguistic environment may [italics mine] impinge" upon both syntax and phonology as well as on the obvious lexical level.

Friedrich's studies of Russian kinship terms and pronominal usage are an interesting illustration of the ways in which aspects of meaning control forms. Changes in the Russian social structures, for example, are reflected in changes in the lexical system of kin terms (Friedrich 1967.56). In his discussion of pronouns he shows how all three aspects of meaning affect the form: "The speaker had mentally to associate the selection of pronouns with the TOPIC OF DISCOURSE [i.e., plot]; two officers might exchange vy while discussing military tactics, but revert to ty when chatting about women" (Friedrich 1966.229). He says further: "Switching and what I have called 'pronominal breakthrough' are...motivated by an interplay of the aforementioned cultural principles [e.g., social roles and status] with what were essentially psychological forces of hostility, affection, ambivalence...[the observer]" (Ibid., p. 252).

The semological units proposed by Southworth are similar to the meaning component of lexemes and units of other lexemic levels proposed in this study. The paraphrases which he relates to these units are here considered to be the manifesting form component of lexemic units. His statement that "FOR ANY SET OF UTTERANCES WHICH ARE PARAPHRASES OF EACH OTHER, THERE IS A SINGLE BASIC STRUCTURE" (Southworth 1967.352) corresponds to our description in Section 4.4 of units with a meaning such as 'finish' whose manifestation may be, in the surface structure, either clauses or particles.

In describing "focus" Southworth illustrates with the contrast between John's car is fast and John has a fast car. He points out that the first implies that the audience already knows that John has a car. Thus, "they differ in that what is presented as new information in one, appears as old information in another" (Ibid., p. 355). That which is presented as new

information by appearance in the predicate in the surface structure is termed "focus" (Ibid., p. 354). This use of focus is parallel to "rheme" as opposed to "theme" in Prague School terminology rather than to the observer's focus of attention as the term is used in this study.

In a recent study Garvin, Brewer, and Mathiot have also used paraphrase in semantic analysis. The predication types which they describe, e.g., "statement of acquisition" (1967.43) are similar to specific examples of basic lexemic clauses described here. The type is arrived at by a paraphrasing schema such as "A is acquired by B" (Ibid.) for the above example. A paraphrasing schema is similar to the meaning component of a lexemic clause. They document extensively (Ibid., p. 57-104) the fact that the grammatical forms for indicating a predication may range from verbs to prepositions. They conclude that "grammatical parallelism is not a necessary ingredient in spontaneous paraphrasing" and, therefore, the grammatical and lexical dimensions of language are separate (Ibid., p. 37). This is very close to our conclusion that both lexemic deep structure and grammatical surface structure must be accounted for, but the two cannot be mapped onto each other in any direct one-to-one manner.

Each of the studies mentioned in this section have either contributed some insights toward the solution of the problems faced in this study or illustrate some facet of the model proposed for solving these problems. The computer studies and Friedrich's studies illustrate the different aspects of meaning which must be accounted for in discourse. Harris' discourse analysis technique provided a starting point for the analysis of lexemic structures in discourse. Other studies mentioned have contributed toward the distinctions drawn between different aspects of meaning and the relation of meaning to language form in the model proposal here.[11]

2.2.2. Contributions from Stylistic and Literary Studies. Stylistic studies are in the main concerned with that which I have termed "observer meaning" in language as it impinges on the plot aspect of meaning in literature.

Spitzer vividly describes the role of the observer in a literary work: "The linguistic perspectivism of Cervantes is reflected in his invention of plot and characters" (Spitzer 1948.50). "Perspectivism suggests an Archimedean principle outside of the plot and the Archimedes must be Cervantes himself" (Ibid., p. 58). This is not unlike Pike's statement that "observers differ and hence their reports differ" (Pike 1964.129).

Terms such as "emotive" and "expressive" are often used for observer meaning and "reference" for plot meaning. Ullmann, for example, says:

[11]Southworth's article became available after my thinking on the nature of lexemic units had already crystallized in the way it is presented in this study. The parallels between the lexemic units posited here and his semological units in relation to a set of paraphrases are again an encouraging illustration of the convergence of linguistic theories.

> Expressiveness covers a wide range of linguistic features which have one thing in common: they do not directly affect the meaning of the utterance, the actual information which it conveys. Everything that transcends the purely referential and communicative side of language belongs to the province of expressiveness (Ullmann 1964.101).

He states further: "Stylistics is...concerned not with the elements of language as such, but with their expressive potential" (Ibid., p. 111). Similarly, Riffaterre says:

> Style is understood as an emphasis...added to the information conveyed by the linguistic structure, without alteration of meaning. Which is to say that language expresses and style stresses (Riffaterre 1959.155).

In other words, both restrict "meaning" to the plot or reference and consider observer meaning to be the domain of stylistics rather than of linguistics. Both plot and observer components are considered here to belong to the domain of linguistics. Of course, this does not exclude their study from the viewpoint of stylistics also.

Discussion of observer meaning in this study is limited primarily to focus of attention, while most stylistic studies deal with observer attitudes in a more general sense. Therefore, the contributions of stylistic studies have not been extensively incorporated. Nevertheless, for a detailed linguistic study of observer meaning related to form, the groundwork has been laid, I think, by stylistic studies. Ullmann's work is particularly significant for study of observer meaning in discourse since he has emphasized the importance of study of a whole work of art in order to recognize "the significant recurrence of a stylistic feature" (Ullmann 1957.37).

While emphasis in some studies is placed on "expressiveness," other literary scholars have emphasized the inseparability of form and meaning. For example, Wellek says: "It is no overstatement to say that there is wide agreement today that the old distinction between form and content is untenable" (Wellek 1958.2). Similarly, Kridl says: "There is no place for a dualism of what is called content and form as entities separate and different" (Kridl 1951.21). In other words, our description of linguistic units as form-meaning composites is in agreement with the position of some literary scholars.

Allen's application of linguistic techniques to a literary analysis of the Poema de Mio Cid is based on the notion of the inseparability of form and meaning (Allen 1959.345-6). There are many parallels between her study and this one. For example, just as certain actions are considered in this study to be appropriate for particular participants, so she says: "The identification of a character with his group [pro-Cid or anti-Cid] is made by the formal statement of his action" (Ibid., p.364).

The social setting is related to the analysis by showing how the activities of the Cid and his group conformed to the code of conduct of feudal Spain while those of the anti-Cid group did not conform (Ibid., p. 362).

Allen's three levels of analysis are the taxemic, the morphemic, and the phonemic. Foreground and background are the primary components of meaning in her literary taxemic level which is somewhat analogous to lexemic structure here. The forms of units on this level are sets of equivalence classes. Information and redundancy are the meanings on the morpheme level which is analogous to grammatical structure here. Rhythm and rhyme are the meanings on the phonemic level (Ibid., p. 351).

Gilman's analysis of the Cid emphasizes more the ways in which focus of attention is shown. He demonstrates by extensive tabulation of forms that the preterite tense is generally used for actions of the Cid and his band whereas the imperfect is used for actions of less important characters: "El Cid y su bando de héroes actúan--e incluso piensan--en preterito" (Gilman 1961.89). He points out also that the hero is singular but other characters are introduced in pairs, e.g., Raquel y Vidas and the Cid's daughters (Ibid., p. 93). In other words, the contrasts in tense and the contrasts in number serve to identify the Cid as the focus of attention and the others as nonfocal.

2.2.3. Contributions from Folklore Studies. In the discussion of lexemic chapters in myth in Section 4.7, I have drawn heavily on folklore studies. Propp's work, originally published in 1928 but not widely known in this country until it appeared in English in 1958, has been the most fruitful starting point.

He posits functions as basic in folklore analysis. Function is, in his usage, a block of actions in a portion of a tale roughly equivalent to a lexemic paragraph. Any specific action may be a part of a variety of functions since "function must be taken as an act of dramatis personae, which is defined from the point of view of its significance for the course of action of a tale as a whole" (Propp 1958.20).[12]

Propp stated that in Russian fairy tales the sequence of functions is always identical (Ibid.). In Nomatsiguenga myth, on the other hand, I have found variant orders of functions in the surface structure. If events are rearranged chronologically, however, as I have done for lexemic or deep structure, then the contrastive order can be presented as invariant. Propp evidently analyzed Russian tales in their surface order, but Levi-Strauss' method may be closer to that which I have followed. He describes it as "breaking down its story into the shortest possible sentences, and writing each such sentence on an index card bearing a number corresponding

[12]Propp posited a limited number of functions some of which could be omitted in any given tale. Dundes reduced the number to four. I have not attempted to follow their analyses in detail and have, therefore, posited only three functions in each chapter of myth. (Cf. discussion in Section 4.7).

to the unfolding of the story" (Levi-Strauss 1955.53).[13]

The significance of characteristic actions for the identification of participants in this study is also a reflection of some of Propp's ideas:

> Many functions unite together into certain spheres. These spheres correspond entirely to their respective performers....
>
> The sphere of action of the villain constituents: villainy (A); a fight or other forms of struggle with the hero (H); pursuit (Pr) (Propp 1958.72).

Lakoff (1964) adapted this concept to a transformational presentation. He showed that it is not only "grammaticality" which makes the tale coherent but also selectional restrictions between actions and characters.

Turning to other folklore studies, we find that several have emphasized the importance of the social setting. Bascom, for example, discusses the place of folklore "in the daily round of life...when and where...who tells them...who composes the audience" (Bascom 1954.281). Jacobs discusses these same points but goes on to show how social relations affect the characterizations of participants in the tale:

> Why is Coyote the greedy and mean older brother in the Clackamas comedy, the sharing brother or friend in Sahaptin versions? Some pertinent socio-cultural factor may have brought about the difference in sibling relationships... [perhaps] the domineering role of wealthy Chinook villagers in relation to members of their own family... (Jacobs 1959.24).

Dundes' studies, which incorporate some tagmemic concepts, are concerned primarily with universals in folklore. He emphasizes the view that the structure of a tale remains the same regardless of the language in which it is told:

> The first serious error in Lévi-Strauss's structural approach is his confusion of the structure of folklore with the structure of language...The structure of myth is <u>independent</u> of the structure of any particular language (Dundes 1964. 43).

By "structure" Dundes evidently means plot, which I consider, along with the other aspects of meaning, to be non-language specific and to remain invariant under paraphrase and translation. Thus, the position taken here is in partial agreement with Dundes. The agreement is only partial, however; he objects to the inclusion of folklore structure in language structure, but I have applied concepts from folklore studies to lexemic structures of the

[13]Buchler and Selby, building on the insights of Propp and others, give formal rules which "allow him [the analyst] to go from the recognition of formal relations within and among sequences and between variants to specific characterizations of underlying structures for sequences of those types" (Buchler and Selby 1968.157).

Nomatsiguenga language. I consider this application legitimate since the folklore "structure" is an integral part of each lexemic unit as a form-meaning composite.

2.3. Summary of Similarities and Differences in Views of Form and Meaning. In this chapter we have shown rather extensively some of the similarities and differences between studies undertaken within other theoretical frameworks and the model proposed here. The views of the relation of form to meaning can be divided into two basic types: those which consider meaning, in the sense in which it is employed in this study, as extralinguistic and those which consider form and meaning to be inseparable. The views in stratificational grammar, transformational grammar, and Harris' work belong to the first type. The views in tagmemics, scale-and-category grammar, Prague School linguistics, and in the work of Firth, Nida, Burling, and the literary scholars cited belong to the second type.

The various models can also be divided into different sets with respect to the place of structures beyond the sentence. In the transformational studies in which the relevance of linguistic units beyond the sentence is granted, in scale-and-category grammar, and in Prague School linguistics, the grammar of discourse is considered to be a different kind of organization from the grammar of the sentence. In one sense, stratificational grammar also belongs to this set since discourse blocks are treated in the sememic stratum and the sentence is considered to be the highest tactic level of organization in the lexemic stratum. In contrast, structures beyond the sentence are treated within the same framework as structures below the sentence in tagmemic grammar. One advantage of this approach is that no new concepts need to be introduced in order to treat structures beyond the sentence; the same concepts are utilized for the description of both lexemic and grammatical paragraphs as for lexemic and grammatical clauses and sentences.

At various points in the discussion inadequacies in the models considered have been mentioned. Nevertheless, there are many points at which the various theories converge, and each model has contributed in some measure to the one proposed here. Just as we showed in Section 2.1.4.2 that the basic concepts in our hypotheses are not new to tagmemic theory but have been incorporated differently, so also various concepts from other models and other disciplines have been incorporated. The result is a more comprehensive model of language than most of those discussed. The model comprehends lexemic, grammatical, and phonological aspects of form which contribute to the identification of participants and observer, plot, and social aspects of meaning which control the forms for referring to them.

PARTICIPANT IDENTIFICATION IN RELATION TO THE GRAMMATICAL HIERARCHY (SURFACE STRUCTURE)

Seven hierarchical levels of grammatical units are posited for Nomatsiguenga. They are G(rammatical)-discourse, G(rammatical)-paragraph, G-sentence, G-clause, G-phrase, G-word, and morpheme.[1]

When a noun phrase--from the G-phrase level--occurs, the participant referred to is ordinarily clearly identified by the nature of the morphemes within the phrase. Since noun phrases occur infrequently, however, forms of other levels must be examined to see what contribution they make to the identification of participants. At each of the levels of the grammatical hierarchy there are one or more forms which potentially contribute to identification. These are pointed out in the introductory discussion of each level in the sections of this chapter. Then, for the clause level and levels above the clause these forms are described within the framework of the system of the level under attention.

The description of the grammatical hierarchy will begin at the clause level in Section 3.1 since tagmemic descriptions of clauses may be more familiar to some readers than tagmemic descriptions of other levels. Levels below the clause will be described briefly in Section 3.2 through Section 3.4. Levels above the clause will be described, working from sentence to discourse, in Section 3.5 through Section 3.7. A brief summary of the characteristics which distinguish the levels from one another, a summary of the kinds of contributions made by grammatical forms to the identification of participants, and a summary of the kinds of control exercised by the three aspects of meaning over grammatical forms referring to participants will be given in Section 3.8.

3.1. The G-clause Level. The dimensions of contrast in the system of G-clauses are transitivity, voice, and verbal or nominal structure. Each of these dimensions is important for the identification of participants, although not all of the categories of each dimension are relevant.

The transitivity contrasts are relevent to the participants who can be referred to within a given clause. For example, the complement in a G-transitive clause can refer to the same participant as the subject, whereas the complement in a G-motion clause cannot. These restrictions on reference within a clause are shown by agreement rules in Chart 3.

[1]In a detailed study of verbs and nouns it might prove fruitful to posit at least one level, G-stem, intermediate between G-word and morpheme. Cf. Wise (1963) for levels below the word in a related language.

On the other hand, the contrasts in voice and verbal or nominal structure are more directly relevant to identification when considered within higher-level contexts. For example, the subject function in verbal active clauses is important since in simple and complex developmental paragraphs (discussed in Section 3.6) the subject of each clause--or the pronominal prefix agreeing with a deleted subject--must refer to the same participant.

In verbal active clauses, the occurrence of a free pronoun manifesting subject or complement often indicates that the participant referred to is either a new participant in the discourse or that he is a different one than those referred to in immediately preceding clauses. For example, iriro in i-atahe iriro 'he-went he' indicates that the one who went is a different participant than the ones who made the dam in the preceding paragraph of the Mabireri myth, G42 in Section 5.2.

In nominal stative clauses also new participants are often introduced. For example, ainta isari 'there is his relative' introduces a new participant in the opening lines of the same myth in Section 5.2.

A nominal active clause, on the other hand, frequently occurs in order to contrast the actions of participants rather than to introduce new participants. The action of the subject of the nominal active clause is contrasted with the action of another participant in a preceding or following clause.

The subject of passive clauses in myth refers to the topic of the plot. The passive form as a whole, however, is more directly related to observer attitude than to identification of participants. The meaning of the passive is that the observer, i.e., speaker, takes an uninvolved attitude toward the participants in the events narrated.[2]

We turn now from particular cues to identification to the over-all system of grammatical clauses within which they operate. Specifically, we shall show how subjects, complements, and pronominal affixes referring to participants operate within the constructions of the system as a whole. We shall return to specific cues to identification on another level in Section 3.2.

The system of clauses comprises verbal clauses in contrast with nominal clauses (rows in Chart 2).[3]

Another set of contrasts which intersects with the preceding comprises active, passive, and stative clauses (columns in Chart 2). The third

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[2]In Siona discourse structure, as described by Wheeler (1967), the involvement of the speaker is indicated by mode rather than voice. The indefinite detachment mode, for example, occurs in myths.

[3]Nominal clauses are roughly parallel in meaning but not in form to the identifying clauses posited by Halliday for English: "Any clause can be organized in this equative form through the nominalization of one set of its elements ...'what John saw was the play'" (1967b.223).

dimension of contrast--transitivity--is described as a sub-system operating within each of the classes except nominal stative. Formulas for verbal active clauses constrasting in transitivity are given in Chart 3.

CHART 2.--System of G-clauses with contrastive features of form of each clause class listed in the cells.

	Active	Passive	Stative
Verbal	A ±Sub / __Pred or Pred__ Pred:Finite ActiveV ±Comp	B ±Sub / __Pred or Pred__ Pred:Finite PassiveV	C ±Sub[a] / Pred __ Pred:Finite StativeV
Nominal	D +Sub/__Pred Pred:Non-finite ActiveV ±Comp	E +Sub/__Pred or Pred__ Pred:Non-finite PassiveV	F +Sub /Pred__ Pred:NounPh

[a]Subject is listed as ± here and in Chart 6 to indicate that it can be deleted within a higher level context, whereas it cannot be deleted in nominal clauses except in some response forms.

In verbal clauses the predicate is manifested by a finite verb, whereas in nominal clauses the predicate is manifested by a non-finite verb or a noun phrase. Finite verbs are distinguished from non-finite verbs in that the former include a pronominal affix in concord with the subject (illustration 1), whereas the latter do not (2).[4]

(1) i-poke Pablo yaka
HE-COME PAUL HERE
'Paul came here'

(2) Pablo boka-tsi yaka
PAUL COME-UNSPECIFIED_PERSON HERE
'Paul (is the one who) came here'

In (1) the prefix i- 'he' is in concord with the subject, Pablo. In (2) Pablo is subject, but no pronominal prefix occurs in the verb.

[4]See Section 3.1.3 for one variant of verbal stative clauses in which no pronominal affix occurs.

Nominal clauses differ further from verbal clauses in that a subject is obligatory in the former, except in some response forms in conversation, whereas it can be deleted in appropriate places within a paragraph or other higher-level context in the latter. For example, Pablo can be deleted from (1) within an appropriate context but cannot be deleted from (2).

Active clauses differ from passive clauses in that the predicate in active clauses is manifested by an active verb, whereas it is manifested by a passive verb in the latter. In (3) i-ogë-ri is an active verb with the pronominal suffix -ri in concord with the complement Juan. In (4) i-ogë-ngani is a passive verb with no pronominal suffix, but it includes the passive suffix -ngani.

(3) i-ogë-ri Pablo Juan
HE-KILL-HIM PAUL JOHN
'Paul killed John'

(4) i-ogë-ngani Juan
HE-KILL-PASSIVE JOHN
'John was killed'

They differ further in that active clauses include complements--except G-intransitive and G-impersonal--whereas only G-bitransitive passive clauses include them.

Stative clauses differ from both active and passive clauses in that the predicate in verbal stative clauses is manifested by a stative verb, e.g., sobiaki-na SEATED-I 'I'm seated'. In nominal stative clauses the predicate is manifested by a noun phrase, e.g., iroro abatsi in (5).

(5) iroro abatsi iabatsia
IT ROAD RIVER
'the river was the road'

3.1.1. Verbal Active Clause Types. There are seven verbal active clause types, i.e., Cell A of Chart 2 summarizes the contrastive features of a whole class or sub-system of clauses. The members of this sub-system differ from one another in transitivity. The verbal active types are named and the contrastive forms of each are shown by formulas in Chart 3. The constituent units within each G-clause type are named by their functions in the top line of each numbered section of the chart, and the manifestations of each are listed in indented columns below the functions. The formula in Section 1 of Chart 3 for G-transitive clause should be read as follows:

> G-transitive clause comprises an obligatory subject unit, an obligatory predicate unit, and an obligatory complement unit. The subject unit is manifested by a noun phrase, relative clause, or a pronoun. The predicate unit is manifested by a complex unit comprising an obligatory pronominal prefix, an obligatory transitive verb stem, and an optional pronominal suffix. The complement unit is manifested by a noun phrase, relative clause, or a pronoun.

The reading given above for the G-transitive clause formula is an example of the way in which the other formulas in Chart 3 and similar formulas elsewhere in this chapter and in Chapter 4 should be read.

In Chart 3 and other charts giving grammatical formulas, the contrastive forms represent an emic, underlying form and not necessarily the etic form which would occur in discourse.[5] Usually, however, the contrastive form can be illustrated by elicited material.

As seen by comparison of the formulas in Chart 3, verbal active clauses differ from one another as to whether or not complements occur, and whether or not they occur optionally or obligatorily. For example, no complement occurs in G-intransitive clauses whereas one complement occurs in both G-neutral and G-transitive clauses. However, G-neutral and G-transitive clauses contrast with each other in that a complement is obligatory in the former but optional in the latter.

Verbal active clauses also differ from one another in that the verbs manifesting the predicate unit in each are different in internal composition. The primary differences in the verbs are different lists of stems and the occurrence of pronominal suffixes in agreement with clause-level complements. Since all of the verbs obligatorily include aspect suffixes, these are not indicated in the formulas.

Differences in agreement rules between constituent units of G-clauses are another way in which the clause types differ from one another. These rules are given where pertinent in the formulas in Chart 3 and are intended to state whether or not the manifestation of one unit must refer to the same participant or to a different one than the manifestation of another unit in the clause.[6] For example, in G-motion clauses--Section 5 of Chart 3--the

[5]The notion of deep structure developed in transformational grammar, e.g., in Chomsky (1965), is primarily paralleled by the structure assigned to the lexemic hierarchy in this study (Cf. Sec. 2.4.2). However, it partially corresponds to the notion of emic--in contrast with etic--structure in tagmemic grammar. The notion of emic and etic is relevant for both lexemic and grammatical structure. Therefore, in order to distinguish between "deep structure" as lexemic structure and "deep structure" as emic structure, the terms "deep structure" or "underlying structure" will hereafter be reserved for lexemic structure, and the term "contrastive form" will be used in the sense of emic structure. "Variant" will be used for etic form.

[6]The agreement rules for G-clauses (surface structure) appear to be imposed by the form of L-clauses (deep structure). In the kind of division made here between deep structure and surface structure it appears to be necessary to state such constraints for both G-clauses and L-clauses. In order to avoid stating these constraints twice it would be advantageous to retain the four-aspect tagmeme proposed by Becker (1967) rather than to split the four aspects into lexemic tagmemes, i.e., lexemic units, and grammatical tagmemes as I have done.

CHART 3.--Formulas showing the contrastive forms of verbal active G-clauses (Cell A of Chart 2) with the constituent units of each named by their functions, e.g., subject, and the manifestations of each listed in indented columns below the functions. Complex manifestations of a single clause-level unit, e.g., predicate, are enclosed in parentheses. Agreement rules are given in square brackets.

1. G-transitive	=	+Subject NounPh RelativeCl Pronoun	+PredicateTransitive (+ProPf + TranVStem +ProSf)	+Complement NounPh RelativeCl Pronoun	
2. G-bitransitive[a]	=	+Subject NounPh RelativeCl Pronoun	+PredicateBitransitive (+ProPf + BitranVStem +ProSf [αpartic])	+Complement NounPh Pronoun [αpartic]	+Complement NounPh RelativeCl Pronoun [-αpartic][b]
3. G-intransitive	=	+Subject NounPh RelativeCl Pronoun	+PredicateIntransitive (+ProPf + IntranVStem)		
4. G-neutral	=	+Subject NounPh RelativeCl Pronoun	+PredicateNeutral (+ProPf + NeuVStem ±ProSf	±Complement NounPh RelativeCl Pronoun	

5. G-motion =	+Subject	+Predicate Motion	+Complement	
	NounPh Pronoun RelativeCl [αpartic]	(+ProPf + MotVStem +ProSf)	NounPh Pronoun [-αpartic]	
6. G-factitive =	+Subject	+PredicateFactitive	+Complement	±Complement
	NounPh RelativeCl Pronoun	(+ProPf + FacVStem ±ProSf	NounPh RelativeCl Pronoun [αpartic] [βNounPh]	NounPh [αpartic] [-βNounPh]
7. G-imper-sonal =		+PredicateImpersonal		
		(+3rdNon-mascProPf +ImpersonalVStem)		

[a]The term "ditransitive" is used by Longacre (1964a.46) for clauses in which there are two "objects". We substitute here "bitransitive".

[b]Fries (1952.188ff) symbolized this kind of agreement of "referents" by letter exponents added to his Class 1 words. The convention used in this chart and in other charts throughout this study is adapted from transformational grammar. (See, for example, Chomsky (1965.174-6). The sequence [αpartic] [αpartic] is intended to indicate that the two constituents must refer to the same participant whereas the sequence [αpartic] [-αpartic] is intended to indicate that they cannot refer to the same participant.

participant referred to by the complement cannot be the same as the participant referred to by the subject. Consequently, a reflexive form cannot replace the complement in G-motion clauses (cf. Sec. 3.1.2 for discussion of reflexive replacing complement). One cannot, for example, "arrive at one's self" in Nomatsiguenga. Where no such restriction is stated, e.g., G-transitive clauses in Section 1 of Chart 3, the participant referred to by the complement can be the same as the participant referred to by the subject. Consequently, a reflexive form can replace the complement. One can, for example, cut one's self: i-tok-a-ni HE-CUT-REFLEXIVE...'he cut himself'.

Examples of each of the verbal active G-clauses are given in Chart 4. The order of units follows that in the formulas of Chart 3.

CHART 4.--Examples of verbal active G-clauses. The numbers in the left column correspond to the numbered sections of Chart 3, and the order of units follows that in the formulas given there.

1. G-transitive	Pablo i-niake-ro inato PAUL HE-SEE-HER MOTHER 'Paul saw mother'
2. G-bi-transitive	Pablo i-pë-ri Ariberito kireki PAUL HE-GIVE-HIM ALBERT MONEY 'Paul gave Albert money'
3. G-in-transitive	Pablo i-kamakeni PAUL HE-DIE 'Paul died'
4. G-neutral	Pablo i-aagë-ri tiapa PAUL HE-EAT-HIM CHICKEN 'Paul ate the chicken'
5. G-motion	Pablo i-areeka-ri Ariberito PAUL HE-ARRIVE-HIM ALBERT 'Paul arrived at Albert's'
6. G-factitive	Pablo i-hiti-ro irisinto Irosa PAUL HE-NAME-HER HIS DAUGHTER ROSE 'Paul named his daughter Rose'
7. G-impersonal	o-tsitinitanë IT-NIGHT 'night fell'

In addition to the units listed in the formulas in Chart 3 and illustrated in Chart 4, one or more adjuncts can occur optionally in G-clauses. These are illustrated in (6).

(6) (a) i-ogo-ba-ka kara hirai
HE-KILL-RECIPROCAL... WHEN BEFORE
'they killed each other a long time ago'

(b) i-riboke yaka
HE-COME HERE
'he will come here'

(c) p-aga-ig-anaki-na ka n-ina-ig-abitaka sitamenkorintsi-kë
IT-TAKE-PLURAL...ME WHERE I-EXIST-PLURAL... FLOOR-ON
'it (rain) caught us there where we were on the floor, i.e., we were rained on'

(d) naro-ke osiakagantagebirike-ri kara i-obiitageta-ig-ë-ri
I-AND PHOTOGRAPH-HIM WHEN HE-GATHER-PLURAL...HIM
'and I took pictures of them while they gathered them (the fish)'

(e) n-areeka basini-kë no-matsiguenga
I-ARRIVE ANOTHER-AT MY-PEOPLE
'I arrived at (the house) of another of my people'

Adjuncts may be manifested by an adverb (6b), an appositional adverb phrase (6a), a noun phrase plus -kë 'at' phonologically attached to the first word of the phrase (6e), or a dependent clause (6c) and (6d). Adjuncts are often associated with a time or location unit in L-clauses: (6a), (6b), and (6e). When they are manifested by a dependent clause, however, they are usually associated with an entire L-clause.

3.1.2. Subject and Complement Units in G-clauses. Subject and complement, i.e., "grammatical subject" and "grammatical object", are in general, associated with functional units manifested by L-participant phrases in L-clauses (see Section 4.1.3). In verbal active G-clauses, the subject is ordinarily associated with agent and the complement is associated with all other units such as goal, indirect goal, beneficiary, purpose, etc. If, however, the L-clause is marked for initiator but not for focus, then the subject is associated with the initiator, whereas the complement is associated

with the agent as well as the other units.[7] (Cf. Sec. 6.1.2 for further discussion of mapping units in L-clauses onto units in G-clauses and vice versa.)

Subject and complement differ from each other in that there is a pronominal prefix in verbal active and in verbal passive clauses which agrees in person--and in gender also in third person--with the subject, whereas there is a pronominal suffix in verbal active clauses which agrees in person and gender with a complement. There are other verbal affixes which relate to either the subject or to the complement in the clauses. For example, the distribution of the alternates of the verbal suffix -pœ -b 'arriving' is conditioned by whether or not the subject or complement is arriving. If the subject is arriving, -p occurs; if the complement is arriving -b occurs. In (7a) the occurrence of -p indicates that Pablo arrived, and in (7b) the occurrence of -b indicates that Juan arrived.

(7) (a) Pablo i-nio-p-ë-ri Juan
PAUL HE-SEE-SUBJECT_ARRIVING...HIM JOHN
'upon arriving Paul saw John'

(b) Pablo i-nio-b-ë-ri Juan
PAUL HE-SEE-COMPLEMENT_ARRIVING...HIM JOHN
'Paul saw John upon the latter's arrival'

The examples in Chart 4 are arranged with the subject preceding the predicate and the complement following the predicate so that one might infer that subject and complement differ in order also. However, the order was merely chosen as the most convenient for showing the contrasts in the examples. It is not the usual order in connected discourse, nor is it the only order in elicited forms. Order, rather than being one kind of contrast between clause-level units, is primarily conditioned by paragraph structure, although it may be conditioned also by structures of lower levels such as phrase. (See Sec. 3.2 for an example of clause-level order conditioned by phrase-level structure.)

Complements do not, in general, differ formally from one another except when two complements referring to different participants occur in a single G-clause; then they differ in that the pronominal suffix agrees with only one of them. The pronominal suffix agreement is marked in the formulas of Chart 3. For example, in G-bitransitive clauses the pronominal suffix refers to the same participant as the first complement.

One further difference between complements is the fact that the complement in G-motion clauses--Siointi in (8a)--can be transformed to an adjunct

[7] Halliday relates actor and initiator to subject in English as follows: "Insofar as the distribution of roles between subject and complement is concerned, there is an ordering determining which of the roles...[lexemic functions] is expressed in any given clause type, in the subject: initiator if present; if no initiator, then actor, if present; if no actor then goal or attribuant" (Halliday 1967a.45).

by deletion of the pronominal suffix in the verb and addition of an adjunct marker such as -kë 'at' to the noun phrase (8b). Complements in other G-clauses cannot be transformed in this manner.

(8) (a) n-areeka-ri siointi
I-ARRIVE-HIM SHOINTI
'I arrived at Shointi's'

(b) n-areeka siointi-kë
I-ARRIVE SHOINTI-AT
'I arrived at Shointi's'

In spite of the differences in complements described in the preceding paragraph, they are considered to be a single type of unit for the following reason: If two complements occur in a clause and one of them is a first or second person pronoun rather than a third person noun phrase, then two pronominal suffixes may occur in the verb as in (9).

(9) i-pëna-ben-ti-na-ro mabesi naro
HE-PAY-REFERENTIAL...ME-IT PINEAPPLE I
'he paid for the pineapple for me'

i-pë-mi-ri tiapa obiro
HE-GIVE-YOU-HIM CHICKEN YOU
'he gave you the chicken'

The first or second person form always precedes the third person suffix so that the order is conditioned by person and not by any difference which may be attributed to complements as distinguishable from each other. No examples occur in the data in which first person and second person suffixes occur together in a verb.

Additional complements, not listed in Chart 3, occur in verbal active G-clauses if a member of a class of affixes which includes -si 'purposive' and -kaga 'accompaniment' occurs in the verb. An added complement is, in general, mutually obligatory with this class of affixes. Exceptions seem to be related to the lexemic form of the clauses in which the suffixes occur. Examples of verbal active clauses with added complements are given in Chart 5.

If a complement in the contrastive form of a clause (shown in Chart 3), or an additional complement, refers to the same participant as the subject, then the complement and pronominal suffix agreeing with it are replaced by -a 'reflexive':[8]

[8]When the subject and a complement refer to the same participant, the reflexive form always replaces the complement. However, some occurrences of the reflexive are not replacements of a complement but are required by the verb root class. In general, these are verbs in which the subject is physically involved in the action of the verb. For example, the roots siga 'run' and singi 'to be drunk' require a reflexive suffix as in i-siga-nak-a HE-RUN...REFLEXIVE 'he ran' and i-singi-t-a HE-DRUNK...REFLEXIVE 'he was drunk'.

CHART 5.--Examples of verbal active G-clauses (Cell A of Chart 2) with added complements. The numbered sections correspond to the sections of Chart 3. Cf. Chart 4 where only complements of the contrastive clause forms are illustrated.

1. G-transitive	Pablo i-hoka-te-tabeka-ri Ariberito i-gotsirote PAUL HE-THROW-TOWARD...HIM ALBERT HIS-KNIFE 'Paul threw his knife toward Albert'
2. G-bi-transitive	Pablo i-pë-ne-ri Ariberito tiapa singi PAUL HE-GIVE-BENEFACTIVE-HIM ALBERT CHICKEN CORN 'Paul gave the chickens corn for Albert'
3. G-in-transitive	Pablo i-samë-ko-ke-ro i-gisere PAUL HE-SLEEP-INCLUDED...IT HIS-COMB 'Paul went to sleep with reference to the comb (he was making and dropped it)'
4. G-neutral	Pablo i-komoto-ko-ke-ri pabati otsegoha PAUL HE-DAM_STREAM-INCLUDED...HIM FATHER RIVER_BRANCH 'Paul dammed the river branch with reference to father'
5. G-motion	Pablo i-ogi-montia-ig-ai-ri Juan PAUL HE-CAUSATIVE-RIVER_CROSS-PLURAL ...HIM JOHN 'Paul (and the ones with him) helped John across the river'

Pablo i-toke-ri Pablo > Pablo i-tok-a-ni
PAUL HE-CUT_HIM PAUL PAUL-HE-CUT-REFLEXIVE...
'Paul cut himself'

3.1.3. G-Clause Classes Other Than Verbal Active. The ways in which passive, stative, and nominal active clauses differ from verbal active clauses are summarized in Chart 2. Each lettered cell of Chart 2 corresponds to a section of the same letter in Chart 6. In the latter the forms of passive, stative, and nominal active clauses are summarized as changes made in deriving these clauses from verbal active clauses--or from verbal passive clauses in the case of nominal passive. The form of nominal stative, i.e., equative, clauses is also given in Chart 6, although it is not derived from one of the other classes. Subordinate and relative clauses are also discussed in this section and the forms are shown in Chart 6 in Sections G and H.

CHART 6.--Summary of contrastive forms of G-clause classes. Sections A-F here correspond to the cells of Chart 2. A separate formula is given for nominal stative clauses in Sec. F since they are not derived from any of the other classes. The forms of other classes are stated as changes from verbal active clauses--or secondarily from verbal passive in Sec. E and from nominal active in Sec. H.1. Changes are listed as features in square brackets, and the order of changes is indicated by letters in parentheses. Since the differences in transitivity types parallel those of verbal active clauses shown in Chart 3, they are not repeated here.

A. Verbal Active =	± Sub: NounPh | RelativeCl | Pronoun	+ Pred: FiniteActiveV ; ± Comp: NounPh | RelativeCl | Pronoun
B. Verbal Passive =	+ VerbalActive except G-intransitive and G-impersonal	+ [a) -Sub; b) Comp and ProPf > Sub and ProPf; c) -Other Comp and ProSf; d) +PassiveSf -gani ∞ -ngani]
C. Verbal Stative =	+ VerbalActive except G-transitive, G-bitransitive, and G-factitive	+ [a) -Comp and ProAf; b) Sub / Pred___; c) +ProSf agreeing with 1st or 2nd person Sub]
D. Nominal Active =	+ VerbalActive except G-impersonal	+ [a) -ProPf; b) +Sub /__Pred; c) + -tsi if no ProSf]
E. Nominal Passive =	+ VerbalPassive except G-bitransitive and G-factitive	+ [a) -ProPf; b) +ka-; c) PassiveSf > -ge ∞ -genga]
F. Nominal Stative = (Equative)	+ Pred: NounPh | Modifier | Pronoun	+ Sub: NounPh
G. SubordinateCl =	+ Verbal Active	+ [Adjunct clause-initially: iroti | ka]
H. Relative Clause =	1. + NominalActive	+ [Sub: DemonstrativePro]
	2. + VerbalActive	+ [Comp clause-initially: DemonstrativePro | Indefinite Pro | -ProSf]

The differences in transitivity which distinguish verbal active clauses from one another were shown in Chart 3. The clause classes described in this section, except nominal stative, also include types with parallel transitivity distinctions. However, not all of the transitivity types occur in each clause class. The verbal passive class, for example, does not include a G-intransitive or a G-impersonal clause. Therefore, in Charts 7-11, the examples are given the same section numbers as in Charts 3 and 4 so that the same transitivity type may be compared in other classes.

Verbal passive clauses are derived from verbal active clauses in the following manner: The subject is deleted and a complement becomes subject. All other complements are deleted except in G-bitransitive and G-factitive clauses in which a complement can occur. All pronominal suffixes are deleted in the verb and a passive suffix -gani ∞ -ngani is added. A passive clause cannot be derived from a G-intransitive or a G-impersonal clause and can only be derived from a G-motion clause if an additional complement--not listed in the contrastive forms in Chart 3 but discussed in Section 3.1.2--occurs. Examples of verbal passive clauses are given in Chart 7.

CHART 7.--Examples of verbal passive G-clauses (Sec. B of Chart 6). Since the numbering of these passive sections follows that of corresponding verbal active G-clauses in Chart 3 and there is no intransitive passive, there is no Section 3 in this chart.

1. G-transitive verbal passive	inato o-nia-gani MOTHER SHE-SEE-PASSIVE 'mother was seen'
2. G-bitransitive verbal passive	birakotsia i-pa-bake-ngani kireki WHITE HE-GIVE-GROUP/RECIPROCAL-PASSIVE MONEY 'the Whites were given money'
4. G-neutral verbal passive	kaniri pa-pa-gani MANIOC IT-EAT-PASSIVE 'the manioc has been eaten' or 'manioc is edible'
5. G-motion verbal passive	Pablo i-ri-a-to-mo-ti-ngani PAUL HE-WOULD-GO-IN_PRESENCE_OF...PASSIVE 'Paul was gone in the presence of, i.e., someone went to where he was'
6. G-factitive verbal passive	i-ina ige o-hita-gani Irosa HIS-WIFE BROTHER SHE-NAME-PASSIVE ROSE 'my brother's wife's name is Rose' or 'my brother's wife is named Rose'

Since verbal passive clauses have the meaning 'uninvolved observer' added to the plot meaning, the subject can only be a third person form (cf. Sec. 1.1). A further restriction in passive derivation is that an added complement occurring with the suffix -ko 'included' cannot become subject in passive. Since such a complement is associated with the lexemic unit 'referent' and simultaneously focus of attention of the observer, it is not surprising that it is mutually exclusive with the meaning 'uninvolved observer'. (Cf. Section 4.1.3.3 for discussion of 'referent'.)

Verbal stative clauses are derived from verbal active G-intransitive, G-motion, G-neutral, and G-impersonal clauses in the following manner: Complements and pronominal affixes are deleted. The subject follows the predicate and a pronominal suffix agreeing with the subject is added if the subject is first or second person. If the subject is third person, however, no pronominal suffix occurs. No examples of G-transitive, G-bitransitive, and G-factitive stative clauses have been found.[9] Examples of verbal stative clauses are given in Chart 8.

CHART 8.--Examples of verbal stative G-clauses (Section C in Chart 6). The numbering of the sections follows that of corresponding verbal active clauses in Chart 3.

3. G-intransitive verbal stative	kamake Pablo DEAD PAUL 'Paul is dead'
4. G-neutral verbal stative	hagake Pablo EATEN PAUL 'Paul has eaten'
5. G-motion verbal stative	hatake Pablo GONE PAUL 'Paul is gone'
7. G-impersonal verbal stative	harini mayana FLOODED MIANA 'the Miana River is flooded'

[9] A form such as pi-tsotanak-a piari IT-DRANK-REFLEXIVE MASATO 'the masato (a native beverage) drank itself, i.e., the masato has all been drunk' might conceivably be a G-transitive stative clause. It would differ from other statives, however, in that there is a prefix rather than a suffix agreeing with the subject.

The expression hatake inanë 'gone he existed, i.e., he was gone' is tentatively considered to be a verb phrase manifesting the predicate in an intransitive verbal stative clause.

Nominal active clauses are derived from verbal active clauses in the following manner: The pronominal prefix is deleted from the verb and a subject obligatorily occurs preceding the predicate. If no pronominal suffix occurs in the verb, the suffix -tsi 'unspecified person'--indicating the lack of an affix agreeing with the subject--occurs. Examples of nominal active G-clauses are given in Chart 9.

CHART 9.--Examples of nominal active G-clauses (Section D in Chart 6). The numbering of the sections follows that of corresponding verbal active clauses in Chart 3.

1. G-transitive nominal active	Pablo niobë-ro inato PAUL SEE-HER MOTHER 'Paul is the one who saw mother arriving'
2. G-bi-transitive nominal active	Pablo pë-ri Alberto kireki PAUL GIVE-HIM ALBERT MONEY 'Paul is the one who gave Albert money'
3. G-intransitive nominal active	Pablo kama-tsi-ne PAUL DIE-UNSPECIFIED_PERSON... 'Paul is the one who died'
4. G-neutral nominal active	Pablo hagë-ri tiapa PAUL EAT-HIM CHICKEN 'Paul is the one who ate the chicken'
5. G-motion nominal active	Pablo hata-tsi-ne PAUL GO-UNSPECIFIED_PERSON 'Paul is the one who went'
6. G-factitive nominal active	Pablo pega-tsi-a PAUL CHANGE_INTO-UNSPECIFIED_PERSON-REFLEXIVE 'Paul is the one who changed himself, or the one who got lost'

Nominal passive clauses are derived from verbal passive clauses in the following manner: The pronominal prefix is deleted and the prefix ka- is added. The passive suffix -ge ∞ -genga is substituted for the verbal passive suffix. Examples of nominal passive clauses are given in Chart 10. The predicate of nominal passive clauses is somewhat like a passive participle. The meaning 'uninvolved observer' is not so clear in nominal passives as in verbal passives.

CHART 10.--Examples of nominal passive G-clauses (Section E in Chart 6).

1. G-transitive nominal passive	iroro ko-sonka-ta-ge sonkari IT UNSPECIFIED-PLAY_PIPES...PASSIVE PANPIES 'they are played, the panpipes'
4. G-neutral nominal passive	iroro ko-pa-ge IT UNSPECIFIED-EAT-PASSIVE 'it is edible'
5. G-motion nominal passive	te ko-montia-genga anabati NOT UNSPECIFIED-RIVER_CROSS-PASSIVE ANAPATI 'the Anapati River was not crossable (because it was flooded)'

Nominal stative clauses differ from all other G-clauses in that the predicate is manifested by a noun phrase (10) or adjective rather than by a verb form.[10] The adjective may be one such as otiomihani 'little' which also occurs as a modifier in noun phrases, or it may be a form which occurs only in nominal stative clauses. These latter include the following:

ai- 'existing' plus { -ti 'inanimate' (11) / -nta 'over there' (12) / -ni-ro 'animate-characteristic' }

aro 'now' plus -sonori 'true, genuine' (13)

kanta 'like' plus { -ka 'here' / -nta 'over there' (14) }

tigeti 'not existing' with optional -nta 'over there'

(10) iroro abatsi iabatsia
IT ROAD RIVER
'the river was the road'

(11) ai-ti patiro sintipoa
EXIST-INANIMATE ONE BALSA_RAFT
'there was one balsa raft'

[10]Inabita 'it was' in iriro mitiri inabita HE FISH WAS is tentatively considered to be an optional constituent of the predicate in a nominal stative clause.

(12) ai-nta basini
EXISTS-THERE ANOTHER
'there is another'

(13) aro-sonori hetari haanta
NOW-TRUE FISH FAR_AWAY
'there were really lots of fish there'

(14) kanta-nta matsiguenga
LIKE-THERE PEOPLE
'it looks like a person'

Subordinate clauses manifest adjunct units within G-clauses. They are derived from verbal active clauses by the obligatory (rather than optional) occurrence of an adjunct manifested by iroti 'as far as' (15) or ka- 'place' plus -ra (16) 'there', -nta 'over there', or -ni 'the other day'.

(15) nogaganaka iroti ni-konteti kara ingantaigë
kiripihiri
I_WALK_ON AS_FAR_AS I-COME_OUT THERE
HE_SAY_PLURAL... DWARFS
'I went on until I came to (a village) they call
dwarf (village)'

(16) kara i-kanta-ig-ë fiesta hiraini omagarosonori
ni-a-ig-ë
WHEN HE-DO-PLURAL... FIESTA BEFORE ALL_TRULY
1-GO-PLURAL...
'when they had the fiesta sometime ago every
one of us went'

The adjunct subordinates the clause to the independent clause within which it is included and simultaneously is a unit within the subordinate clause.

Relative clauses manifest subject or complement units within G-clauses. They are derived from active clauses by the substitution of a demonstrative pronoun for a noun phrase within the clause, or by the substitution of an indefinite pronoun for the head in an appositional noun phrase. (Cf. Section 3.3 for the internal composition of demonstrative and indefinite pronouns.) If the demonstrative manifests subject within the relative clause, then there is a nonfinite verb manifesting the predicate, i.e., the relative clause differs from a nominal active clause only in that a demonstrative pronoun manifests the subject (Sections 3 - 6 in Chart 11). If the demonstrative manifests a complement within the relative clause, then there is a finite verb manifesting the predicate, i.e., the relative clause differs from a verbal active clause in that a complement is clause-initial and is manifested by a demonstrative (Sections 1 and 2 in Chart 11). Adjuncts and the added complements discussed in Section 3.1.2 occur very infrequently in relative clauses.

CHART 11.--Examples of relative G-clauses (Section H in Chart 6).

1. G-transitive	i-ra i-ogë HE-THERE HE-KILL 'which he will kill'
2. G-bitransitive	o-ni po-pa-gan-tabitaka-ri hiraini IT-OTHER_DAY YOU-GIVE-MEDIATIVE... HIM BEFORE 'that which you sent him before'
3. G-intransitive	o-ka inageta-tsi yaka IT-HERE STAY-UNSPECIFIED_PERSON HERE 'that which is here'
4. G-neutral	i-ra kingaigi-ri HE-THERE NARRATE-HIM 'who narrated about him'
5. G-motion	i-ra paniapëngi-tsi-a komate HE-THERE COME-UNSPECIFIED_PERSON... DOWNRIVER 'who came from downriver'
6. G-factitive	o-ra un aparato hita-tsi-a negativo IT-THERE AN APPARATUS NAME-UNSPECIFIED_ PERSON... NEGATIVE 'that an apparatus named negative'

In (17) the demonstrative manifests subject of the relative clause, but the relative clause as a whole manifests complement of the independent clause.

(17) aitosa i-apatotë-ri i-nta tima-ig-a-tsi-nta hirai
RIGHT_THERE HE-GATHER-HIM HE-OVER_THERE
LIVE-PLURAL...UNSPECIFIED_PERSON-OVER_THERE
BEFORE
'also he gathered right there the ones who
lived there a long time ago'

In (18) the demonstrative manifests complement of the relative clause, and the relative clause as a whole manifests complement of the independent clause.

(18) o-ngota-ig-ëkara i-ra i-aaga-ig-ë
SHE-COOK-PLURAL... HE-THERE HE-EAT-PLURAL...
'the women cooked that which they (mixed group) ate'

If a pronominal suffix agreeing with the relative clause manifesting complement occurs within the verb of the independent clause, the demonstrative is occasionally omitted. In (19) the demonstrative is omitted, but nokomotaiga-bitaka is considered to be a relative clause manifesting the complement.

(19) p-aganai-ro no-komota-ig-abitaka
IT-TAKE-IT I-DAM_STREAM-PLURAL...
'it (the flood) carried away the dam which I had made in the stream'

3.2. The G-phrase Level. Grammatical phrases, i.e., surface structure phrases, include noun phrases, adverb phrases, and verb phrases. Adverb phrases are illustrated in (20) and verb phrases in (21) but neither of these will be discussed; instead noun phrases will be discussed as illustrative constructions of the G-phrase level.

(20) iriraike yamai tsiopi 'recently now yesterday'
hiraini ka ihanaitë 'before when he_was_sick'
iroti toonkë 'as_far_as upriver'

kanta atiraka kara pine tsiamëro kanta haanta
THERE LIKE THERE IT_STAY CHAMUERO_VINE THERE FAR
'there about as far as where the chamuero vine is, far'

(21) përoka igisëgotari
CONTINUE HE_ANGRY_INCLUDE_HIM
'he continues to be angry with him'

The occurrence of a noun phrase ordinarily identifies clearly the participant referred to. However, if the phrase is associated with an L-clause rather than an L-participant phrase, then it often does not contribute to identification. For example, in the noun phrase irasi ikamane HIS HIS_DEATH, there is the same problem of pronominal reference as in G-clauses in which participants are referred to by pronominal forms only.

In Section 3.3 the contribution of the head of the noun phrase will be pointed out. Here we are concerned with the contribution of other constituents in a noun phrase. The demonstrative ira in ira maonti 'that Maonti' identifies the participant as the Maonti referred to earlier although he may not have been named yet. (See Section 3.7 for a different use of the demonstrative in discourse topic.) The occurrence of basini in antsiato pite basini 'tree two another, i.e., two other trees' signals that the trees which will now be discussed are new inanimate participants in the discourse and not the trees referred to earlier.

The contrastive forms of noun phrases are shown in the formula column of Chart 12, and additional features and distributional restrictions are stated in the right hand column. Examples are given in Chart 13.

CHART 12.--Contrastive forms of noun phrases shown by formulas in conjunction with additional features.

Phrase Type	Formula	Additional Features
1. G-modified NounPh	$\pm M_2$ = basini 'another' | $\pm M_1$ Adjective | ±Deictic DemonPro, Indefinitepro | +Head Noun, RelativeCl	Order is HDM_1M_2 or M_2M_1DH /Pred__ if HDMM /__Pred or Pred__ [a] if MMDH
2. G-nominalizedNounPh	= +Deictic DemonPro | +Head (+Adverb +-sati)	/Pred__ unless Sub, then may precede
3. G-possessive NounPh	A = +Possessed Noun, ModNounPh | +Possessor Noun, ModNounPh B = +Possessor Possessive Pro | +Possessed Noun	/Pred__
4. G-compound NounPh	= +Head[n] Noun, ModNounPh, Poss'd NounPh	/Pred__ usually manifests App in AppNounPh rather than Sub or Comp
5. G-appositionalNounPh	= +Head Noun, Pronoun, NounPh, RelativeCl | +Apposition Noun, Pronoun (if H:noun), NounPh, RelativeCl	/Pred__ or H PredApp

[a] /Pred__ or /__Pred indicates order of noun phrase in relation to predicate regardless of whether the noun phrase manifests subject or complement.

Noun phrases may sometimes determine the form of units of a higher level. For example, G-possessive phrases always follow the predicate (22), i.e., the form of the noun phrase determines the order of units in the clause.

(22) aro p-obasitanë-ro iri-sinto maonti
NOW SHE-SHUT_UP-HER HIS-DAUGHTER MAONTI
'now she shut up Maonti's daughter (in a hut)'

CHART13.--Examples of noun phrases, with constituent units identified in parentheses.

1. G-modified NounPh	(M_1) antagaisati (D) ira (H) nahanekite ALL THAT MY_CHILDREN 'all my children' (M_1) poro (H) ibari ONE HIS_LEG 'one of its legs (of a tapir)' (H) pongotsi (M) okibe HOUSE BIG 'a big house' (H) antsiato (M_1) pite (M_2) basini TREE TWO OTHER 'two other trees'
2. G-nominalizedNounPh	(D) ira (H) hiraini-sati THAT BEFORE-PERSON 'the ancient ones' (D) ira (H) anabati-sati THAT ANAPATI-PERSON 'the people, or person, from the Anapati River'
3. G-possessiveNounPh	(Poss'd) tatasia (Poss'r) kanirisia BRANCHES MANIOC 'branches of manioc (leaves)' (Poss'd) ora iina (Poss'r) ora ireinti THAT HIS_WIFE THAT HIS_BROTHER 'his brother's wife' (Poss'd) oniro (Poss'r) nasinto HER_MOTHER MY_DAUGHTER 'my daughter's mother' (Poss'd) irisintoete (Poss'r) nasi paba HIS_DAUGHTERS OUR FATHER 'the daughters of our father, i.e., God'

CHART 13.--continued

G-possess-siveNounPh	(Poss'r) irasi (Poss'd) ianekite HIS HIS_CHILDREN 'his children' (Poss'r) pasi (Poss'd) pikamane[a] YOURS YOUR_DEATH 'your death'
4. G-compound NounPh	(H) kaniri (H) sabiro (H) sonko (H) ora sapi (H) singi 'manioc, bananas, sugar cane, that papaya, corn' (H) timoteo, (H) andres (H) simati 'Timothy, Andrew (and) Simati'
5. G-appositional NounPh	(H) oniro nasinto (App) iroro HER_MOTHER MY_DAUGHTER SHE 'my daughter's mother, she' (H) ora iniro (App) santomariatatsi THAT HIS_MOTHER SAINT_MARY_WAS 'his mother who was Saint Mary' (H) koki sianke (App) tsomonte UNCLE SIANKE FAT_MAN 'Uncle Sianke, the fat man' (H) kaniri sabiro sonko ora sapi singi (App) omagaro MANIOC BANANAS SUGAR CANE THAT PAPAYA CORN ALL 'manioc, bananas, sugar cane, papaya, corn, all (of them)'

[a]In its surface structure 'yours your-death' is a G-possessive noun phrase and may manifest subject or complement but in its lexemic structure it is an L-intransitive clause comprising agent and action units.

Similarly, G-appositional noun phrases usually follow the predicate as in (23), especially if a compound noun phrase is either the apposition or head.

(23) i-ntempai-ri itomi timoteo antirisi simati
HE-BRING-HIM HIS_SON TIMOTHY ANDREW SIMATI
'he will bring his sons--Timothy, Andrew, and Simati'

In general, if more than one word manifests subject or complement, then the noun phrase occurs after the predicate, but occasionally a noun phrase including two or three words may precede the predicate (24) if it manifests the subject.

(24) ira anabatisatiegi i-pega-ig-anaka
THAT ANAPATI_PERSON_PLURAL HE-CHANGE_INTO-PLURAL...
'the people from Anapati change themselves
into other forms'

On the other hand, variant forms of noun phrases are partially conditioned by higher level units. For example, the head of a modified noun phrase or the possessor of a possessive noun phrase can be deleted in appropriate contexts. In (25) antagaisa manifests the modifier in a noun phrase from which the head has been deleted.

(25) antagaisa i-kanta-ig-aka
ALL HE-DO_PLURAL...
'all (of them) are doing (that)'

Some discontinuous noun phrases, illustrated in (26), are another example of conditioning by context. When a noun phrase manifests sentence connective and simultaneously complement within the clause, then it is often discontinuous since more than one word as complement seldom occurs preceding the predicate.

(26) ironti i-api kibatsi ika katsikori-kengitsi
IT_ONLY HE-EAT DIRT THIS WORM-BECAME
'(and) the (ones who) became worms ate only dirt'

pairoraka i-tsatageke basini
WHATEVER HE-TIE_ON ANOTHER
'whatever other (things) they tied on'

poro nomanante kintoro
ONE I_BUY PARROT
'I bought one of the parrots'

3.3. The G-word Level. Of the grammatical word classes, nouns and pronouns are especially related to the problem of identification of participants:

The occurrence of a noun as the head of a modifying noun phrase often identifies the participant referred to by the nature of the morphemes in the stem, e.g., tiso 'buzzard' and siompati 'Shompati (a name)'. However, in a form such as i-bango 'his house' the possessor of the house is not identified in the immediate context unless ibango occurs in a possessive noun phrase.

The occurrence of a pronoun within certain clause classes often indicates the introduction of a new participant or refers to a different participant than those referred to in preceding clauses, but a third person pronoun

still leaves the specific identification unclear.[11] Similarly, the pronominal affixes in verbs (see Section 2 of Chart 15) are insufficient for identification although they are often the only way participants are referred to in a clause.

We turn now to consider the internal structure of grammatical word classes from which cues to identification are drawn, as well as the structure of other word classes. The classes posited include nouns, pronouns, verbs, adjectives, adverbs, and connectives. In a more detailed analysis perhaps others should be distinguished.

The system of noun stem classes, shown in Chart 14, comprises a class of noun stems which are obligatorily possessed--either by a pronominal prefix or by the suffix 'unspecified person'--in contrast with a class of stems which are optionally possessed. A further set of contrasts intersects with

CHART 14.--System of noun stem classes with each class illustrated in the cells.

	+Possession	±Possession
-PossessedSf	ketsi-tsi NOSE-UNSPECIFIED_PERSON 'a nose' na-getsi 'my nose'	ani 'brother-in-law' n-ani 'my brother-in-law'
+PossessedSf /i or o/ > e	pangiri-ntsi PLANT-UNSPECIFIED_PERSON 'a plant' no-bangir-e MY-PLANTS-POSSESSED 'my plant'	kaniri 'manioc' na-ganir-e MY-MANIOC-POSSESSED 'my manioc'
+PossessedSf = (-ne ~ -te ~ -e) ∞ -re	pian-tsi BOW-UNSPECIFIED_PERSON no-bian-e MY-BOW-POSSESSED 'my bow'	omegi 'cotton' n-omegi-re MY-COTTON-POSSESSED 'my cotton'

[11] A possible parallel use of free pronouns occurs also in Hebrew. Gesenius-Kautzch (1898.459) describes separate pronouns as occurring "only to give special express emphasis to the subject".

the above and includes a set of noun stems in which a 'possessed' suffix does not co-occur with a possessive prefix, a set in which the form of the possessed suffix is -e replacing stem-final /i or o/, and a set in which the form of the possessed suffix is (-ne ~ -te ~ -e) ∞ -re.

Features of internal structure sufficient to distinguish the other G-word classes from one another are listed in Chart 15 with examples of each given in the right column.

CHART 15.--Contrastive features of form of G-word classes other than noun. Examples are given in the right column.

G-Word Classes	Contrastive Features of Form	Examples
1. Pronouns a. Personal	+FreeForm of Pro + {-ro, -nti, -rai, -neni}	iri-ro 'he' iro-nti 'she-only' iro-rai 'she-recently' na-neni 'I-myself,' (in Nominal ActiveCl only)
b. Possessive	+Possessive Form of Pro + -asi	n-asi 'mine'
c. Demonstrative	+3rdPersPf Form of Pro i- or o- + {-ka, -ra, -nta, -ni}	i-ka HE-HERE 'this' i-ra HE-THERE 'that' i-nta HE-OVER_THERE 'that' i-ni HE-OTHER_DAY 'that past one'
d. Interrogative	+InterRoot +Gender	pai-ri 'who-masc'
e. Indefinite	+InterPro + {-raka, -rangi, -roko}	pairi-raka 'whoever' pairi-rangi 'whoever-on-earth' pairi-roko 'who-maybe'

CHART 15.--Continued.

G-Word Class	Contrastive Features of Form	Examples
2. Verbs a. FiniteActive	+ProPf +Stem +Aspect +ProSf	i-nia-k-e-ri HE-SEE...COMPLETIVE-HIM 'he saw him'
b. FinitePassive	+ProPf +Stem +Passive -gani ∞ -ngani	i-nia-gani HE-SEE-PASSIVE 'he was seen'
c. FiniteStative	+Stem +Aspect +ProSf if 1/2 person	hatak-i-na GO-COMPLETIVE-I 'I'm gone, leaving'
d. Non-finite Active	+Stem + {-tsi / ProSf}	hata-tsi GO-UNSPECIFIED_PERSON 'went'
e. Non-finite Passive	+ka- +Stem +Passive -ge ∞ -genga	ka-tsima-ge UNSPECIFIED_PERSON-EAT (FRUIT) -PASSIVE 'edible (a fruit)'
3. Adjectives a.	+Gender +Root	i-kibe 'masc-big'
b.	+Root +Gender	basini-ri DELICIOUS-MASC 'delicious (meat)'
c. (numeral)	+Root +Animate or Inanimate	maba-ti 'three-inanimate'
4. Adverbs a.	+Root +Modifying Clitics	agabeni-sonori HARD-TRUE 'very hard or intensely'
b.	+Bound Root +Adjunct Clitics	ya-mai 'now' ya-ka 'here'
c.	+Root	anabati 'Anapati River'

CHART 15.--Continued.

G-Word Class	Contrastive Features of Form	Examples
5. Connective		
a.	+Root +Connective Clitic	ai-ke 'then-and'
b.	+Root	akaa 'but'
c.	+Clitic	-nta 'since'

3.4. The Morpheme Level. A detailed description of the morpheme level will not be given in this section. However, some of the morphemes which are especially pertinent to the identification of participants will be pointed out. An inventory of affixal morphemes is given in Appendix B, and some morphophonemic rules are given in Appendix A for the benefit of readers who wish to break down examples into morphemes. Morphemes are also discussed briefly in Section 4.4 where they are contrasted with lexemes.

The suffixes -ni and -ti occur in 'progressive verbs' and help to identify participants. If a complement occurs, then -ti indicates that the complement is inanimate whereas -ni indicates that the complement is animate. If no complement occurs, i.e., in G-intransitive clauses and often in G-motion clauses, then -ni or -ti indicate whether the subject is animate or inanimate. These suffixes also occur in numeral adjectives and nouns and contribute to the identification of participants. For example, if maba-ni 'three-animate' occurs rather than maba-ti 'three-inanimate', it identifies the participants as animate although it does not name them.

The occurrence of the allomorph -p when the subject arrives and -b when the complement arrives was discussed in Section 1.1 and in Section 3.1.2. When the subject and complement are deleted within a paragraph, then the occurrence of one of these allomorphs provides an important cue to identification.

Among other verb suffixes which provide cues to the identification of participants are -ig 'plural' and -garan 'partitive'. The plural distinguishes 'he' from 'they'. On the other hand, -garan 'partitive' indicates that some but not all of the participants previously mentioned are involved: i-pogiria-garan-tĕ-ri HE-KILL-PARTITIVE...HIM 'he killed some of them.'[12]

Since participants in a discourse are frequently referred to by pronominal morphemes both in free forms and in affixal forms, the allomorphs of pronominal morphemes are listed in Chart 16.

[12]The partitive morpheme and -ig 'plural' are mutually exclusive.

When there are several third person participants in a narrative, the distinction between masculine and non-masculine helps to identify the participants.

CHART 16.--Pronominal morphemes.

	Form in Free Personal Pronoun	Form in Affix		Form in Possessive Pronoun
		Prefix	Suffix	
First Person (Sg. or Pl.)	na-	(na- ~ no- ~ n-) ∞ ni-	-na	n-
First Person Pl.	ei-	a- ~ o-	-i	∅
Second Person	obi-	(pa- ~ po- ~ p-) ∞ pi-	-mi	p-
Third Person Masculine	iri-	(i- ~ ir-) ∞ iri- ∞ ira-	-ri	ir-
Third Person Non-masculine	iro-	o- ∞ po- ∞ ∅	-ro	∅

(27) aro i-kanti-ro yamai inanë kaniri
NOW HE-SAY_TO-HER NOW EXIST MANIOC
'then he said to her, "now there is manioc"'

In the portion of the legend from which (27) is cited, the moon, who is masculine in Nomatsiguenga, and the girl are the only participants. Therefore, the speaker is identified as the moon by the masculine pronoun and the addressee as the girl by the non-masculine pronoun.

Affixal forms of pronominal morphemes are obligatory as constituent units of finite active verbs, a kind of grammatical form, and the distinction between masculine and non-masculine third person pronouns helps to identify participants. Occasionally, however, the cues clash. The clash indicates that the observer's focus of attention has changed to a different participant. For example, a mixed group of participants is ordinarily referred to by the masculine pronominal prefix i- with the plural suffix -ig. If, however, the non-masculine pronominal prefix o- with the plural suffix -ig refers to the group, it indicates that the observer's focus of attention is upon a woman who is part of the group.

Similarly, singular and plural cues may clash in order to indicate the social roles of the participants. At certain points in a discourse in which a group of participants work together, the plural suffix -ig does not occur along with the pronominal prefix to refer to them. Instead the singular form occurs and refers to the particular participant who is the initiator of the action.

Consider now the data cited in the last two paragraphs from the opposite point of view--what determines the choice of forms? From this viewpoint we see that the choice of cues is determined by the observer's focus of attention and the social roles of the participants, as well as by the plot of the events narrated. Furthermore, focus of attention and social roles often have priority over the plot in the choice of the way participants are referred to.

3.5. The G-sentence Level. The dimensions of contrast in the system of G-sentences are manner of conjoining of constituent clauses and narrative or quotation structure. At least one cateogry from each of the dimensions is important for the identification of participants.

Of the contrasts in manner of conjoining, the paratactic category is more relevant to identification. In paratactic narrative sentences the subject of each constituent clause must refer to the same participant, whereas in compound and complex sentences the subject of the included clauses may refer to the same or different participants.

(28) o-katsisematanë-ṇa po-magotanë-na kibatsi
IT-HURT-ME IT-TIRE-ME DIRT
'the dirt made me ache; it tired me

ka n-agapininke
WHEN I-GET
when I brought (it)'

(29) i-hiti-ri somantosi ira mitiri aka iriro
HE-THINK-HIM LEAVES THAT FISH BUT HE
'he thought the fish was leaves, but it

mitiri inabita
FISH EXIST
was fish'

The subject of both independent clauses in the paratactic sentence illustrated in (28) is kibatsi. In contrast, 'he (Mabireri)' is the subject of the first clause in the compound sentence illustrated in (29), but iriro 'he (the fish)' is the subject of the second clause.

In indirect quotation sentences, which parallel paratactic narrative sentences, the occurrence of a nominal active clause manifesting the quotation signals that the subject of that clause and the complement of the clause manifesting quotative refer to the same participant as in (30).

(30) i-gati-ri komota-tsi
HE-SEND (COMMAND) -HIM DAM_STREAM-UNSPECIFIED_PERSON
'he sent him to dam the stream'

If, however, the subject of the quotation and the subject of the quotative refer to the same participant, then the quotation must be a verbal active clause as in (31).

(31) pairoraka ininti irisitoriatë basini
WHATEVER HE_WANT HE_STUDY ANOTHER
'whatever else he wants to study'

The quotative in direct quotation sentences often includes only pronominal affixes referring to the speaker and addressee of the quotation, e.g., i-kanke-ri 'he said to him'. The addressee, however, is usually identified by name or by his kinship relation to the speaker, e.g., notomi 'my son', if a vocative occurs within the quotation. When the vocative is manifested by a reciprocal kin term such as ani 'brother-in-law', however, the identity of the addressee is not always clear.

3.5.1. Contrastive G-sentence Types. We turn now to consider the sentence structures which contribute to the identification of participants against the background of the system of grammatical sentences as a whole. This system comprises narrative sentences in contrast with G-quotation sentences. Narrative sentences are further sub-divided into simple, complex, paratactic, and compound sentences. Quotation sentences are further subdivided into direct and indirect quotation sentences, which may be viewed as paralleling compound and paratactic sentences, respectively. The contrastive forms of these sentences are given by formulas in Chart 17.

There is a single unit--sentence base--in simple sentences (32). However, the clause manifesting sentence base may include a relative clause as subject or complement (33) or a subordinate clause as adjunct (34).

(32) no-tononga-ig-ë-ro baakasi
I-POUND-PLURAL...IT POISON
'we pounded the poison'

(33) i-gata-si-ki-na-ro ora i-ti-an-taka-ro kibatsi
HE-SEND-PURPOSIVE...ME-IT THAT HE-FILL_IN-IN-
STRUMENT...IT DIRT
'he sent me for dirt with which he would fill in
(the holes)'

(34) na-batetobë ka i-konatë-ro
I-GATHER-COMPLEMENT-ARRIVING... WHEN
HE-POUR-IT
'after he poured (the poison), I gathered
(the fish) that arrived, i.e., came to the surface'

In complex sentences there is a base and a periphery. The periphery is manifested by an independent clause plus a connective such as -ka 'if' (35) or -nta 'since' (36).

(35) Base:IndCl, Periphery:(+IndCl + -ka)
no-ngomokeni naramani, aro-ka i-robariake
I-DAM_STREAM TOMORROW NOW-IF HE-FALL
'I'll dam the stream tomorrow if he falls, i.e., if the sun shines'

(36) Base:IndCl, Periphery: (+IndCl +-nta)
i-tongabeki-ne-ri, iriro-nta i-gati aisa hiraini
HE-SHOOT-BENEFACTIVE-HIM, HIM-SINCE HE-SEND ALSO BEFORE
'he shot (him, the monkey) for him (the lieutenant) since he had commanded him to some time ago'

In parataxtic and compound sentences there are two or more base units. In parataxtic sentences the base units are conjoined by parataxis, and the subject of each of the clauses refers to the same participant (37).[13] In compound sentences the base units are conjoined by a connective, and the subject of each clause may refer to the same participant or to different ones (38). The connectives in compound sentences include karari 'but', aroke 'now-and', and akaa 'but'.

(37) Base:IndCl, Base:IndCl
ni-ata-kaga-beka-ri, te na-nia-kagi-ri
I-GO-ACCOMPANITIVE...HIM NOT I-SEE-ACCOMPANITIVE-HIM
'I went with him, but I didn't see with him (a monkey)'

(38) Base:IndCl, Connective:aroke, Base:IndCl
n-aaga-i-sega-p-ë-ri aroke o-tsitinitanë
I-EAT-PLURAL...SUBJECT_ARRIVING...HIM NOW_AND IT-NIGHT
'night had already fallen when we ate him (the fish) upon arriving'

Parataxtic sentences and compound sentences further differ from each other in that the second base of a parataxtic sentence may be manifested by an ideophone rather than an independent clause (39), or it may be manifested by a negative (40), which I interpret as an independent clause in which all units have been deleted except the negative. The content of the deletions when the

[13]McCarthy (1965.59) describes strings of clauses in Kanite which show inter-clause concord and agreement in the relationship of time and person as "clause chaining", whereas I have treated them as exemplifying a separate sentence type.

negative occurs alone as the second base can only be recovered by consideration of that which would be appropriate in the context.[14]

CHART 17.--Contrastive forms of G-sentences.

Simple G-sentence =	+Base IndCl		
Complex G-sentence =	+Base IndCl	±Periphery (+IndCl + {-ka, -nta, ...})	
Paratactic G-sentence =	+Base IndCl [S:αparticipant]	+Base IndCl [S:αparticipant] Ideophone Negative	
Compound G-sentence =	+Base IndCl	+Connective karari aka ...	+Base IndCl
DirectQuotationG-sentence (Compound) =	+Quotative[a] VerbalActive G-neutralCl [QtvVerbRoot] NominalActive G-neutralCl [QtvVerbRoot] [Indicative]	+Quotation (±Vocative + Quotation Proper) NounPh	Discourse Paragraph Sentence Clause Phrase Word
Indirect Quotation G-sentence (Paratactic) =	+Quotative NominalActive G-neutralCl [QtvVerbRoot] VerbalActive G-neutralCl [QtvVerbRoot] [Contingent] VerbalActive G-transitive Cl [nin verb root]	+Quotation IndCl[2] SubCl[2] Pro-quote	

[a]The term "quotative" is used for the part of the sentence in which speaker and addressee are mentioned, e.g., 'he said to her'. Grimes (1964) uses the term "quotational" for this part of a quotation sentence.

[14]Cf. Harris (1965.388ff) for a discussion of 'appropriate' in context.

(39) Base:IndCl, Base:ideophone
aro i-pëake-ri, tok
NOW HE-NAIL-HIM, SOUND OF BLOW
'now he nailed him; tok'

(40) Base:IndCl, Base:Negative
ni-ata-ig-abita, te
I-GO-PLURAL..., NO
'we went in vain, (we could) not (dam the stream)'

In paratactic sentences a unit may be shared by the constituent clauses whereas it cannot in compound sentences. In (41) hompiki is the complement of both clauses.

(41) Base:IndCl, Base:IndCl
i-agë hompiki i-pë-ri
HE-TAKE MEDICINE HE-GIVE-HIM
'he took the medicine and gave it to him'

The quotation in direct quotation sentences is manifested by a verbal active G-neutral clause with a member of the quotative sub-class of verb roots in the predicate (42). Or, the quotative may be manifested by a nominal active G-neutral clause with a quotative verb root and the indicative mode in the predicate (43). The quotative in direct quotations may precede, follow, or precede and follow the question.

(42) Quotative:VerbalActiveG-neutralCl, Quotation:
ParatacticSentence
na-kanta-ig-abi-taka, intso naramaninta o-ngomota-
ig-ë
I-SAY-PLURAL... LET'S_GO TOMORROW WE-DAM_
STREAM-PLURAL...
'we said to one another, "let's go, tomorrow we
will dam the stream"'

(43) Quotative:NominalActiveG-neutralCl, Quotation:IndCl
iriro kan-të-ro, intsome
HE SAY...HER LET'S_GO
'he is the one who said to her, "let's go"'

The quotative tagmeme of direct quotation sentences may be deleted at certain points within narrative discourse. The quotations without a quotative are considered to be variants of quotation sentences in which the quotative is deleted--possibly according to the social relations of the participants to one another. It may prove to be more fruitful, however, to consider quotations without a quotative to be a contrastive type of sentence--something like a drama sentence.

The quotation unit of a direct quotation sentence comprises an optional vocative and a quotation proper. The vocative is manifested by a noun phrase and the quotation by a unit from any of the levels of the grammatical hierarchy, i.e., it may be manifested by a word, a phrase, or by a paragraph, etc. In (42) it is manifested by a paratactic sentence and in (43) by an independent clause.

In contrast to the comparatively free order of constituents in direct quotation sentences, the quotative in indirect quotation sentences always precedes the quotation and is manifested by a nominal active G-neutral clause with a member of the quotative sub-class of verb roots in the predicate (44). Or, the quotative may be manifested by a verbal active G-neutral clause with a quotative verb root and the contingent mode in the predicate as in (45) and (46). Or, the quotative may be manifested by a verbal active G-transitive clause with nin 'want' as the verb root (47).

(44) iriro kan-tẽ-ro nasinto o-sigima
HE SAY...HER MY_DAUGHTER SHE-RUN
'he is the one who told my daughter to run'

(45) i-ngoman-ti-ri aroro kanta aro-ka i-ninti i-ribokẽti
HE-ADVISE...HIM HAROLD THERE NOW-IF HE-WANT HE-COME
'he would advise (ask) Harold if he wanted to come'

(46) pi-nganti-ri i-me-na-ro
YOU-TELL-HIM HE-GIVE-ME-IT
'tell him to give it to me'

(47) i-ninti i-ribokẽti
HE-WANT HE-COME
'he wants to come'

If the subject of both the quotative and quotation refer to the same participant, then both are manifested by verbal active clauses as in (47). If the subject of the quotation refers to the participant who is the complement of the quotative, then the quotation can be a nominal active clause as in (48) or, it can be a verbal active clause as in (44).

(48) i-gati-ri komota-tsi
HE-SEND-HIM DAM_STREAM-UNSPECIFIED_PERSON
'he sent him to dam the stream'

In (48) -ri 'him' can be considered to be shared by both the quotative and the quotation. In the quotative it agrees with the deleted complement, and in the quotation it agrees with the deleted subject. This potential for sharing units is one reason for considering indirect quotation sentences to be parallel to paratactic non-quotation sentences.

The quotation in indirect quotation sentences is manifested by one or two clauses as in (44-47) or by a pro-quote as in (49) where basini is a pro-quote.

(49) yamai no-ngomantë-mi basini
NOW I-ADVISE-YOU ANOTHER
'now I will tell you another'

3.5.2. Distributional Variants of G-sentences. The contrastive forms of sentences were described in Section 3.5.1. Any variants described there were conditioned by the internal structure of the constituent units. There are other variants, however, which are conditioned by paragraph structure, i.e., by units of higher levels. These variants include unmarked, linked, anaphoric, and redundant sentences. The distribution of each of these variants, except for the anaphoric ones, is shown in the formulas for G-paragraphs in Chart 18.

Unmarked sentence variants are the same in form as the contrastive forms described in Section 3.5.1 and have the widest distribution. For example, they may manifest either the start or progression units in progressive paragraphs whereas linked sentences may manifest only the progression unit.

Linked sentence variants are derived from unmarked sentences by the addition of a connective such as aike in (50).

(50) aike i-atokotahi komate tsobinikë
THEN HE-GO_INCLUDED DOWNRIVER CHAVINI_AT
'then he was carried downriver to Chavini'

The linkage is between sentences as a whole rather than between particular units within them.[15]

On the other hand, in anaphoric sentence variants the linkage is between units of lower levels within the sentences rather than between the sentences as a whole. Anaphoric sentences are derived from unmarked sentences by the deletion of units within the constituents of the sentence. In (51) the head of the noun phrase manifesting complement within the clause is deleted and only the modifier basini remains.

(51) no-komota-ig-abitapaa basini ironti arosiata
I-DAM STREAM-PLURAL... ANOTHER IT_ONLY LITTLE
'we dammed another, but it was just little'

Redundant sentence variants are derived from unmarked sentences by the repetition of the verb root of a previous sentence (cf. discussion of developmental paragraphs in Section 3.6) in the predicate of the first clause. In simple redundant sentences the new information is in a unit other than predicate, e.g., adjunct in (52).

[15]P. M. Healey describes linkage of sentences "which is not pertinent to the internal structure of the sentence, but to the larger structure of which it is a part" (1966.41) as obligatory for all sentences except the first in a discourse in Telefol of New Guinea.

(52) no-giatanë-ri ..... no-giatanë-ri iroti komatenta
I-FOLLOW-HIM I-FOLLOW-HIM AS_FAR_AS DOWNRIVER
'I follwed him .... I followed him downriver.'

In paratactic and compound redundant sentences, the new information is a complete clause as in (53).

(53) no-giatanë-ri .... no-giatanë-ri antagaisa
ige na-karatanë
I-FOLLOW-HIM I-FOLLOW-HIM ALL BROTHER I-GO_
TOGETHER
'I followed him .... I followed him, all we
brothers went together.'

In paratactic redundant sentences which occur paragraph initially in progressive paragraphs, the subjects in the two constituent clauses do not necessarily refer to the same participant, whereas in other variants of paratactic sentences they do. Thus, in illustrations (37) and (41) a single participant is referred to as subject, whereas in G6 and G7 in Diagram 2 of Section 5.2.1 two participants are referred to.

A sentence may be both redundant and linked, as in (54) where the verb root a 'go' is repeated from the preceding sentence and aike is the connective.

(54) ni-ake .... ni-aa aike no-komantane-ri aroro
I-GO I-GO THEN I-ADVISE-HIM HAROLD
'I went .... Going, I advised Harold.'

3.6. The G-paragraph Level. The dimensions of contrast in the system of G-paragraphs are the number of participants referred to as subject and developmental, progressive, or dialogue structure. Of the latter, developmental paragraphs are more relevant to identification.

Simple and complex developmental G-paragraphs contribute to the identification of participants since the subject of each clause in the theme (see definition of "theme" in Section 2.2.1) and the development units must refer to the same participant. Consequently, once the subject of one clause has been identified the others are automatically identified.

In compound developmental paragraphs two participants are referred to as subject in theme and development units, but the agreement rules, shown in Chart 18, make it possible to identify which participant is subject of a given clause whether or not a noun phrase occurs. On the other hand, in compound progressive and compound dialogue paragraphs there do not appear to be agreement restrictions between the participants manifesting subject in constituent units.

We turn now to consider the over-all system of G-paragraphs in which these forms operate.

Grammatical paragraphs, i.e., surface structure paragraphs, are in the actual order in which the text is spoken, whereas lexemic paragraphs (discussed in Section 4.6) are deep structure units seen after the text is rearranged chronologically. The consequence of this difference in order between surface structure paragraphs and deep structure paragraphs is that the borders of G-paragraphs and those of L-paragraphs are not necessarily co-terminous. For example, a G-developmental paragraph may cover the same amount of text as one L-sentence within an L-narrative paragraph. In the diagrams of specific discourses in Chapter 5, the borders of G-paragraphs and L-paragraphs can be compared.

The system of G-paragraphs comprises developmental, progressive, and dialogue paragraphs. This set of contrasts is intersected by a further set comprising simple, complex, and compound paragraphs. Formulas showing the contrastive forms of non-dialogue G-paragraphs except compound progressive paragraphs are given in Chart 18.

The way in which the formula for simple developmental paragraphs in Chart 18 is to be read is given below as an illustration of the way in which the others are to be read:

> A simple developmental paragraph comprises an obligatory theme unit, and an optional addition unit. The theme unit is manifested by an unmarked or linked simple sentence variant or by an unmarked paratactic sentence in which the subject of each constituent clause refers to the same participant and in which the verb root in each is the same. The development unit is manifested by a redundant sentence in which the subject of each constituent unit refers to the same participant ($\alpha 1$) as in the theme, and in which the first verb root ($\beta 1$) is the same as the verb root in the theme but the second is different ($\beta 2$). The manifestation of the second development unit is the same as that of the first except that a third verb root ($\beta 3$) occurs in the second clause. In a third development unit a fourth verb root occurs in the second clause, etc. The parenthesis unit is manifested by a quotation sentence or a simple dialogue paragraph. The addition unit is manifested by a linked simple sentence variant in which the subject refers to a different participant ($\alpha 2$) than the subject in theme and development units. The verb root, however, is the same is in the theme ($\beta 1$).

Compound paragraphs are distinguished from simple and complex paragraphs by the number of animate participants referred to as subject. Complex paragraphs, on the other hand, are distinguished from simple paragraphs by the fact that other features are complex. For example, in complex progressive paragraphs there are multiple settings.

Developmental paragraphs contrast with progressive paragraphs in that sentences manifesting the obligatory development unit in the former are introduced by a clause in which the verb root is repeated from a previous sentence, i.e., redundant sentence variants manifest the development units. Sentences within the obligatory progression unit in progressive paragraphs are not introduced in this way. However, the start unit and the optional parenthesis unit in progressive paragraphs may be introduced by a clause in which the verb root is repeated as in (61). In addition, there are constraints in developmental paragraphs as to whether or not the subject must refer to the same participant or to a different one than the subject in the preceding clause. There do not appear to be such constraints in compound progressive paragraphs, although they differ from other progressive paragraphs by the fact that more participants are referred to as subject.

Dialogue paragraphs differ from both developmental and progressive paragraphs in that the constituent units are manifested by a succession of quotation sentences. Occasionally, however, a non-quotation sentence, i.e., a narrative sentence, functions as a response in a dialogue paragraph. For example, isigopë iriri 'his father ran' in (63) functions as a response.[16]

The developmental paragraph types will be discussed and illustrated first, the progressive paragraph types will be discussed next, and simple and compound dialogue paragraph types will be discussed last.

An example of a simple, developmental paragraph is given in (55).

(55) Theme:UParatacticSen
ni-ake katinga inasegi paba, katinga ni-ata-ig-ë.
I-GO STRAIGHT EXIST FATHER, STRAIGHT I-GO-PLURAL...
'I went when the sun was straight up, straight up (mid-day) we went.'

Parenthesis:UDirectQuotationSentence
na-kanta-ig-anake intsome o-ngomota-ig-ë pairiroko
a-haga-ig-ë na-kanta-ig-anake
I-SAY-PLURAL... LET'S_GO WE-DAM_STREAM-PLURAL
WHATEVER WE-EAT-PLURAL... I-SAY-PLURAL
'We said, "Let's go dam the stream, (if we don't) what on earth will we eat," we said.'

Development:RedunLkCompoundSentence
ni-aa aike no-komantanë-ri aroro
I-GO THEN I-ADVISE-HIM HAROLD
'Going, I advised Harold (that we were going).'

[16]Another possible analysis is to consider non-quotation sentences as filling parenthesis units when they occur in dialogue paragraphs.

CHART 18.--Contrastive Forms of G-paragraphs.

Simple Developmental	=	+Theme |U/LSimpleSen |UParatacticSen [Sub:αPartic, Sub:αPartic] [β_1VerbRoot, β_1VerbRoot]		+Development^n |RedunSen [Sub:αPartic, Sub:αPartic] [β_1VerbRoot, β_2VerbRoot]
Complex Developmental	=	+Theme |U/LSimpleSen [Sub:αPartic] [β_1VerbRoot]		+Development^n |RedunParatacticSen [Sub:αPartic, Sub:αPartic] [β_1VerbRoot, β_2VerbRoot]
Compound Developmental	=	+DualThemes |(+U/LSimpleSen [Sub:α_1Partic] [β_1VerbRoot]	+U/LSimpleSen) [Sub:α_2Partic] [β_2VerbRoot]	+Development^n |RedunSentence ... [Sub:α_2Partic, Sub:α_2Partic] [β_2VerbRoot, β_3VerbRoot]
Simple Progressive	=	+Setting |AdverbPh of first Sen Verb of Motion in first Sen G-impersonalCl^n -p/-b 'arriving'	+Start |U/RedunSen	+Progression^n |U/LSen
Complex Progressive	=	+PluralSettings |(AdverbPh in Start and Progression) Verb or Motion in FirstSen and in Progression G-impersonal Cl^n -p /-b 'arriving'	+Start |U/RedunSen	+Progression^n |U/LSen

RedunSen ...	+Parenthesis QtnSen SimpleDialoguePara	+Addition LSimpleSen
[Sub:αPartic, Sub:αPartic]		[Sub:-αPartic]
[β_1Verb Root, β_3VerbRoot]		[β_1VerbRoot]

RedunSimpleSen with SubordinateCl ... RedunParatacticSen	+Parenthesis QtnSen SimpleDialoguePara	+Addition LSimpleSen	+Review RedunSimpleSen
[Sub:αPartic, Sub:αPartic]		[Sub:α_2Partic]	[Sub:αPartic]
[β_2VerbRoot, β_3VerbRoot]		[β_1VerbRoot]	[β_1VerbRoot]

RedunSentence [Sub:α_2Partic, Sub:α_1Partic]	+Parenthesis QtnSen SimpleSen	+Addition LSimpleSen [Sub:α_3Partic]
[β_2VerbRoot, β_1VerbRoot]		[β_1VerbRoot]

+Parenthesis
- RedunParatacticSen
- SenCluster
- SimpleProgressivePara

+Parenthesis
- RedunParatacticSen
- SenCluster

Addition:LkSimpleSentence
aikesa i-ake iriro
THEN_ALSO HE-GO HE
'Then he went, too.'

In simple developmental paragraphs there is a single theme introduced in the first sentence and developed in succeeding sentences. Usually the theme is a verb root and the verb is the only unit of the G-clause repeated. The theme a 'go' occurs in niake 'I went' in the first sentence of (55) and is repeated in niaa in the development unit. While aspect and other suffixes may change when the theme is repeated in development units, the verb root must remain the same and the subject must refer to the same participant in the theme and development units.[17]

In optional addition units in developmental paragraphs the subject changes and the theme is not repeated as connective although the verb root of the predicate is the same as in the theme. For example, in (55) i-ake refers to a different participant, but the root a 'go' is the same as in ni-ake 'I went'. By the retention of the verb root, the addition unit is tied to the paragraph as a whole. In optional parenthesis units--which are often flashbacks and marked phonologically by an increase in speed--the theme is not repeated.

An example of a complex developmental paragraph is given in (56).

(56) Theme:LkSimpleSen
aro ni-poka-ig-apai
NOW I-COME-PLURAL...
'Now we returned.'

Development:RedunLkCompoundSentence
ni-poka-ig-apai aro na-katsatapai-ri
I-COME-PLURAL... NOW I-TAKE_HAND-HIM
'As we returned, I took his hand (to help him).'

Development:RedunParatacticSen(with SubordinateCl)
na-katsatapai-ri ka ni-montia-ig-apaa na-mapai-ne-ri itsagine
I-TAKE_HAND-HIM WHEN I-RIVER_CROSS... I-CARRY-BENEFACTIVE-HIM HIS_BAG
'Taking his hand when we crossed the river, I carried his bag for him.'

[17]The development of a single theme by additions in succeeding sentences in these paragraph types is somewhat similar to the "cumulative sentence" described by Cristensen:

It does not represent the idea as conceived, pondered over, reshaped, packaged, and delivered cold. It is dynamic...representing the mind thinking. The main clause exhausts the mere fact of the idea.... The additions stay with the main idea (Christensen 1963.156).

Development:RedunParatacticSen
n-ogi-montia-ig-ai-ri ni-tsonga-ig-ai
I-CAUSATIVE-RIVER_CROSS-PLURAL...HIM I-FINISH-PLURAL
'Helping him to cross the river, we finished.'

Parenthesis:QuotationSen
intsome
LET'S GO
'(I said) "Let's go."'

Review:USimpleSentence
ni-poka-ig-apai
I-COME-PLURAL...
'We returned.'

In complex developmental paragraphs there is a single theme introduced in the first sentence and repeated in the review unit. In development units the first new verb root of the preceding sentence--and, therefore, the theme in the first development unit--is repeated rather than the theme. In (56) poka in nipokaigapai is the theme, but katsa in nakatsatapairi and monti in nogimontiaigairi are the repeated verbs in the second and third development units. Although nimontiaigapaa occurs in a subordinate clause, it is the first new verb in the third sentence and is, therefore, the repeated verb in the fourth sentence. A comparison of nimontiaigapaa in the third sentence and its repetition as nogimontiaigariri in the fourth sentence shows that the same participant must be the surface structure subject but that the lexemic roles of the participant may be different: In the third sentence ni- 'I' with -ig 'plural' manifests agent and in the fourth sentence n- 'I' with -ig 'plural' manifests initiator. (See Section 4.1.3.3 for a discussion of agent and initiator.)

An example of a compound developmental paragraph is given in (57).

(57) DualThemes:(USimpleSen. USimpleSen)
yamaikari kani i-komota-kag-i-na pabati,
NOW WHEN_OTHER_DAY HE-DAM_STREAM-ACCOMPANITIVE
...ME FATHER
'Now the other day father took me along to
dam the stream.'

no-giatanë-ri
I-FOLLOW-HIM
'I followed him.'

Parenthesis:DirectQuotationSen
i-kanë-na (ora) intsome o-ngomo-ig-ëte Irocio
HE-SAY-ME LET'S_GO WE-DAM_STREAM-PLURAL... LUCIUS
'He said to me, "Let's go dam the stream, Lucius,"

i-kanë-na
HE-SAY-ME
he said to me.'

Development:URedunParatacticSen
no-giatanë-ri antagaisa ige na-karatanë
I-FOLLOW-HIM ALL BROTHER I-ACCOMPANY
'Following him, I went with all my brothers.'

Development:URedunSimpleSen(with SubordinateCl)
no-giatanë-ri iroti kanta i-komoke
I-FOLLOW-HIM AS_FAR_AS THERE HE-DAM_STREAM
'I followed him to where he dammed the stream.'

In compound developmental paragraphs there are dual themes introduced in the first two sentences. The first theme is repeated in the final clause of the last development unit. The second theme is repeated in the first clause of each development unit. In (57) komo in ikomotakagina is the first theme and is repeated at the end of the paragraph in ikomoke, whereas gia in nogiatanëri is the second theme and is repeated in the first clause of each development unit. Note, however, that it is not repeated in the parenthesis unit. The subject of the first them i- 'he', and the subject of the second theme, no- 'I', refer to different participants, but the first subject in each development unit must refer to the same participant, no- 'I', as the subject of the second theme.

An example of a simple progressive paragraph is given in (58).

(58) Setting:AdverbPh,Start:UParatacticSen
o-parintaka-ri como a las doce por ahi o-parintaka-ri
IT-BEGAN-HIM ABOUT AT THE TWELVE AROUND THERE
IT-BEGAN-HIM
'The meal (of beef) began around twelve o'clock.'

Progression:USimpleSen
i-almuersota-ig-e
HE-LUNCH-PLURAL...
'They ate lunch.'

Progression:UParatacticSen
i-kanta i-kanta i-kanta aro iroti i-tsonga-ig-ë-ri
HE-DO HE-DO HE-DO NOW AS_FAR_AS HE-FINISH-PLURAL-
...HIM
'They ate and ate until they had finished the beef.'

In simple progressive paragraphs there is a single setting manifested by one or more adverb phrases which simultaneously manifest adjuncts in the

first sentence.[18] Or, the setting may not be specified, but a verb of motion such as iake 'he went' indicates that the setting has changed. There is a single participant or only one group of animate participants referred to as subject in this paragraph type.

Examples of complex progressive paragraphs are given in (59) and (60).

(59) Setting:G-impersonalCl, Start:UCompoundSen
o-tsitinitanë p-agangitesatatanë aro
ni-betsaka-ig-abitana
IT-NIGHT IT-EARLY_EVENING NOW I-ARRANGE-PLURAL...
'After dark in the early evening, then we arranged (our bedding).'

Progression:UParatacticSen
irogito angani o-parigopë p-aga-ig-anaki-na
ka n-ina-ig-abitaka sitamenkorintsikë
SUDDENLY RAIN IT-FALL IT-TAKE-PLURAL...ME
WHERE I-EXIST-PLURAL... FLOOR_ON
'Suddenly it rained; it rained on us there where we were on the floor.'

Setting:AdverbPhrase, Progression:UParatacticSen
na-ka-ig-anahi ka iniro antirisi na-ka-ig-anahi
I-ENTER-PLURAL... WHERE HIS_MOTHER ANDREW I-ENTER-PLURAL...
'We entered where Andrew's mother was.'

Progression:UParatacticSen
no-betsaka-ig-apa ni-sama-ig-apë
I-ARRANGE-PLURAL... I-SLEEP-PLURAL...
'We arranged (our bedding) and slept.'

(60) Setting:MotionVerb, Start:UCompoundSen
i-ake aroke p-ine
HE-GO NOW_AND IT-EXIST
'He went and already it existed.'

[18] Popovich describes a similar kind of paragraph structure in Maxakali of Brazil:

> Each narrative paragraph contains either one spatial or one temporal setting or both. The temporal setting occurs at the very beginning of the paragraph. The nuclear area of the spatial setting occurs anywhere in the first half of the paragraph.... (1967.198-9).

He suggests that a nuclear area is the home area for which "come" is appropriate and places in passing are marginal areas for which "go" is appropriate. The relation of "coming" and "going" to progressive paragraph structure has not been studied in Nomatsiguenga, but it might prove to be fruitful in detailed analysis of these paragraphs.

Setting:MotionVerb, Progression:UCompoundSen
i-ake i-kontetane aroke p-inane singi isingine
HE-GO HE-COME_OUT NOW_AND IT-EXIST CORN HIS_CORN
'He went on and came out and already there was
his corn.'

Setting:MotionVerb, Progression:UCompoundSen
i-kontetane aroke p-agabake
HE-COME_OUT NOW_AND IT-MATURE
'He came out (at another place) and already
it (the corn) was mature.'

Setting:MotionVerb, Progression:UCompoundSen
i-kontetane aroke o-këterikisigi
HE-COME_OUT NOW_AND IT-MAKE_EARS
'He came out (at another place) and already
it (the corn) was making ears.'

Setting:MotionVerb, Progression:USimpleSen
i-kontetane basini
HE-COME_OUT ANOTHER
'He came out at another place.'

Setting:MotionVerb, Progression:USimpleSen
i-kontetane basini
HE-COME_OUT ANOTHER
'He came out at another place.'

Setting:MotionVerb, Progression:USimpleSen
i-kontetane basini aro
HE-COME_OUT ANOTHER NOW
'He came out at another place, the last one.'

Progression:UQtvSen
i-kemopë-ri pëng pëng pëng
HE-HEAR-HIM SOUND_OF_STRIKING_ROCKS
'He heard him striking rocks.'

Parenthesis:USimpleSen
i-kanti-ro mopë kanta i-pasati-ri irosirote
HE-DO-IT ROCK THERE HE-FEEL_FOR-HIM CRAB
'He was throwing rocks as he felt around for crabs.'

In complex progressive paragraphs more than one setting is specified. The non-initial settings are simultaneously part of a progression unit, whereas the initial setting may be simultaneously part of the start unit or a progression unit. In (59) otsitinitanë pagangitesatatanë is the first setting and is part of the start unit. In the second sentence ka ninaigabitaka sitamenkorintsikë may

be interpreted as part of the first setting also since it is in the same place as the start unit. The second setting is ka iniro antirisi which indicates a change of location.

Although angani 'rain' is the subject in both clauses of the first progression unit, it is an inanimate participant. There is a single group of animate participants, 'we', referred to as subject throughout the paragraph so that (59) is considered to be complex rather than compound. In (60) a second animate participant is referred to as subject in the parenthesis unit but only one is subject in start and progression units.

In (60) each occurrence of the verb iake or ikontetane indicates a different setting and simultaneously is part of a start or progression unit. Although ikontetane is repeated several times in (60), each occurrence refers to a different action, i.e., to going on to still another place. In developmental paragraphs, on the other hand, each repetition of a verb refers to the same action.

An example of a compound progressive paragraph is given in (61).

(61) Setting:Adverb, Start:RedunParatacticSen
i-amasobengo-pë iriro ironibani i-hogane kanta
HE-DESCEND-ARRIVING...HE SHE_ALONE HE-LEAVE THERE
'He (the moon) descended, he (her father)
had left her there alone.'

Progression:USimpleSen
irigito i-tsimetë-ko-p-ë-ro kara pobasita
SUDDENLY HE-OPEN_DOOR_A_BIT-INCLUDED-ARRIVING...
HER THERE HER_HUT
'Suddenly he opened the door a crack on her
there in her hut.'

Progression:USimpleSen
irogito i-nesango-p-ë-ro
SUDDENLY HE-LOOK_AT-ARRIVING...HER
'Suddenly he looked at her.'

Progression:LkParatacticSen
aro p-agobë-ro onta pi-baratanta
o-kisiogobë-ri kisio kisio
NOW SHE-TAKE-IT THAT HER-SALIVA SHE-SPIT_INCLUDED_
ARRIVING...HIM SPIT SPIT
'Then she took her saliva and spit on him as he
arrived--spit, spit.'

Progression:USimpleSen
i-sesetabitobaka-ro
HE-WIPE-IT
'He tried to wipe it away.'

Parenthesis:SimpleProgressivePara
i-sesetabitobaka-ro iriati i-birake-ro
HE-WIPE-IT HE_HIMSELF HE-MULTIPLY-IT
'By trying to wipe it away, he himself caused
it to multiply.'

onta yamai ora i-positamatontageta mantsiakori
yamai
THAT NOW THAT HE-HAS_BLEMISHED_FACE MOON NOW
'That's why the moon's face is blemished now.'

Since there are three animate participants in (61)--the moon (who is treated as animate in the myth from which this paragraph is taken), 'she', and 'he (her father)'--it is considered to be a compound progressive paragraph.

The first sentence in (61) begins with a repeated verb since the example is one kind of non-discourse initial variant of progressive paragraphs. The parenthesis unit also may be introduced by a repeated verb in progressive paragraphs, e.g., isesetabitobakaro in (61), whereas the parenthesis unit of a developmental paragraph cannot be. There are, however, no repeated verbs referring to the same action in progression units. Thus, progressive paragraphs differ from developmental paragraphs in the kinds of units which may be introduced by clauses in which a verb root or complete verb is repeated.

An example of a simple dialogue paragraph is given in (62).

(62) Opening:DirectQuotationSen
i-kane p-ogakë-ro-ma nani
HE-SAY YOU-PLACE-IT... BROTHER_IN_LAW
'He said, "Have you placed it (the dam),
brother-in-law?"'

Response:DirectQuotationSentences
hee n-ogake-ro n-ogake-ro ne-ri-ka nani
YES I-PLACE-IT I-PLACE-IT TAKE-HIM...
BROTHER_IN_LAW
'"Yes, I've placed it. I've already placed it;
take it (fish), brother-in-law."'

Reply:DirectQuotationSen
irontiri somantosira po-pai-na i-kanke-ri
IT_ONLY LEAVES YOU-GIVE-ME HE-SAY-HIM
'"You just give me leaves," he said to him.'

Parenthesis:SimpleDevelopmental Para
i-hiti-ro somantosi
HE-THINK-IT LEAVES
'He thought it was leaves.'

i-hiti-ri somantosi aka iriro mitiri inabita
HE-THINK-HIM LEAVES BUT HE FISH EXIST
'He thought it was just leaves but it was fish.'

Compound dialogue paragraphs are those in which the conversation turns from the participants first speaking to one or more others. (63) is an example of a compound dialogue paragraph.

(63) Opening:LkQuotationSen (Mother to Daughter)
aro o-kanti i-pegatanai-na-ri-niri itineriani
haikimingarani atike iake yamai pi-ha
pi-ngomantëti-ri piri
NOW SHE-SAY HE-CHANGE_INTO-ME-HIM... HIS
NEPHEW BROTHER_WORTHLESS WHERE HE_GO NOW YOU-GO
YOU-ADVISE-HIM YOUR_FATHER
'Now she said, "My worthless brother has changed
his little nephew (into a rock). Where has he
gone now? Run, tell your father."'

Opening-Response:CompoundSen (Daughter to Father)
pi-siganaka irisinto o-komantëti-ri
i-peganai-ri-metsi haiani nokongirirangi
SHE-RUN HIS_DAUGHTER SHE-ADVISE-HIM
HE-CHANGE_INTO-HIM... LITTLE_BROTHER MY-UNCLE
'His daughter ran and advised him, "He's changed
my little brother (into a rock), that uncle of
mine."'

Response:SimpleSen (Father in response to Daughter)
i-sigopë iriri
HE-RUN HIS_FATHER
'His father (of the baby) ran.'

Opening-Response:QuotationSen (Mother to Father)
i-pegatanai-na-ri itineriani irikongiri
HE-CHANGE_INTO-ME-HIM HIS_NEPHEW HIS_UNCLE
'His uncle changed his nephew (into a rock) on me;'

pi-hate pi-giatë-ri pi-takiti-ri
YOU-GO YOU-FOLLOW-HIM YOU-KILL_WITH_STICK-HIM
'go, follow him, beat him to death.'

pi-takiti-ri iginare isari i-ntisongëte i-kanëni
naarai
YOU-KILL_WITH_STICK-HIM HIS_CANAL HIS_RELATIVE
HE-TEAR_APART HE-SAY A_WHILE_AGO
'Go kill him; he said a while ago he was going
to go tear apart his relative's canal.'

Response:QuotationSen (Father to Mother)
atirasonori i-kanta i-pegatanai-na-ri
itineriani nanirikiminga natakitirita
HOW_TRUE HE-DO HE-CHANGE_INTO-ME-HIM
HIS_NEPHEW MY_BROTHER_IN_LAW_WORTHLESS I_KILL_
WITH_STICK_HIM
'"How can it be! My worthless brother-in-law
changed his little nephew on me; I'll go beat
him to death."'

3.7. The G-discourse Level. On the G-discourse level the topic of the plot helps determine which participant is first referred to by a noun. If the topic is a participant, then the first noun phrase must refer to that participant.

(64) [1] p-ogainogopa hiraini [2] o-ngantingani hiraira
IT-ASCEND BEFORE IT-IS-SAID_OF BEFORE

antsiato [3] i-toganteti-ro ira hiraini-sati
TREE HE-CUT-IT THAT BEFORE-PEOPLE

[4] ira obantanëngitsi i-timi kara hiraira
THAT GO_FIRST HE-LIVE WHEN BEFORE

[5] i-toganteti-ro [6] i-toganteta-be-ta-ro
HE-CUT-IT HE-CUT_FRUSTRATED...IT

[1-2]'It ascended long ago a tree, it's said of
it. [3] The long ago people chopped it, [4]
the ones who lived first long ago. [5-6] They
chopped it (but) their attempts were in vain
(because it kept healing itself).'

In (64) the topic, antsiato, is in the first sentence [1-2] of the first paragraph so that other participants are referred to by the noun phrase ira hirainisati in the second sentence [3-4].

If other participants are introduced before the topic, then they must be referred to by a pronominal affix until after the topic has been named by a noun phrase. In (65) the topic, ogerihegi, occurs paragraph medial and, therefore, other participants are not named where they first occur in [2] and [3].

[1] kara-ri kara hirai aiti basini
WHEN-BUT WHEN BEFORE THERE_IS ANOTHER

[2] kara i-ogaino-ka-ig-aka-ri hiraira
WHEN HE-ASCEND-ACCOMPANITIVE-PLURAL...
HIM BEFORE

[3] i-nianteti-ri hirai
HE-SEE-HIM BEFORE

[4] kara ini ogeri-hegi amaigari-hegi
WHEN HE_EXIST KILLER-PLURAL AMAIGARI-PLURAL

[5] i-ngantingani
HE-IS_SAID_OF

[6] i-nianteti-ri
HE-SEE-HIM

[7] i-ogo-baka kara hirai
HE-KILL-RECIPROCAL WHEN BEFORE

[8] i-nianteti-ri
HE-SEE-HIM

[9] i-mantsa-gainteta-ro abatsi-tsa hirai kanta honoganta
HE-SHOOT_AND_MISS-IT ROAD-ROPE BEFORE THERE ABOVE

[1-2]'There is another (story about) long ago when he (Parenti) ascended with them (the people) long ago. [3-4] He (Parenti) saw him (the people) long ago when the killers, the Amaigari, existed. [5] It's said of him (the killers). [6] He saw them [7] being killed long ago. [8-9] He saw them (the people) shooting and missing the road of rope which was there above long ago.'

We turn now to consider the grammatical structure of discourse as a whole, i.e., the structure of the highest level of the grammatical hierarchy.

The system of G-discourses parallels the system of discourses as a whole which will be discussed in Chapter 6. In this section only biography and myth will be discussed. The contrastive grammatical forms of these two discourse types are given in Chart 19.

One of the contrasts between biography and myth--percentage of redundancy--as grammatical units is shown on the chart as a contrastive feature of the discourses as a whole rather than as a difference in constituent units. This contrast is a result of the difference in frequency with which developmental paragraphs occur (cf. Sec. 3.6 for a description of developmental paragraphs): they occur much more frequently in biography than in myth. Since a verb root

is repeated in each development unit, developmental paragraphs are highly redundant. As a consequence of their frequency of occurrence in biography, approximately twenty-five per cent of the text of biography is redundant, whereas approximately twelve per cent of the text of myth is redundant.

Further study might reveal some structural rule for predicting which G-paragraph type will occur at various places in a discourse. This would make it possible to account for the difference in redundancy in biography and myth more precisely than is possible at present. To date the only apparent constraint on sequence of paragraph types is that two or more dialogue paragraphs may occur in succession in myth but they do not succeed each other in biography.

Comparison of Chart 19 and of Chart 34 shows the difference in constituent units of biography and myth when they are viewed from the standpoint of their grammatical structure and when they are viewed from the standpoint of their lexemic structure. When both their lexemic and grammatical structures are considered together as in Chart 39 in Chapter 6, the contrasts between the two discourse types becomes clearer. The constituent units of G-discourse will now be discussed briefly.

A topic unit is obligatory in both biography and myth. If the topic is a participant rather than an event, the first noun phrase in the discourse must refer to him. Although other participants may be introduced before the participant who is topic, as in (61), they are referred to by pronominal forms until after the topic is introduced by a noun phrase. This noun phrase may be a phrase which initiates the discourse and is not a constituent of any other unit of the discouse, e.g., ira sanguiro 'that snail'. When a noun phrase initiates the discourse in this manner the demonstrative refers forward to that which the speaker is going to tell about rather than backward to the participant he was referring to earlier (cf. Sec. 3.2).

In the biographical discourse described in Section 5.1 the topic is an event and is, therefore, manifested by a verbal active clause. The first noun phrase, then, refers to the participant who is the initiator and focus of attention.

The noun phrase introducing the topic may be the subject of an equative, i.e., nominal stative, clause which initiates the discourse as in matsiguenga pihiri hiraira PERSON BAT BEFORE 'the bat used to be a person'. Or, the noun phrase manifesting topic may occur in any sentence of the first paragraph of the discourse as illustrated in (64) and (65).

In biography, a background unit occurs which sets the time, or the place, or both the time and the place of the discourse. It is manifested by an adverb phrase which simultaneously manifests an adjunct in a G-clause in the first paragraph of the body of the discourse. In (66) kani manifests the

CHART 19.--Contrastive grammatical forms of biography and myth. Additional contrastive features are given in square brackets.

G-biography = [25% redundancy][a]	+Topic NounPh EquativeCl FirstNounPh inFirst Paragraph VerbalActiveCl	+Background AdverbPh inFirst Paragraph	+Body DevelopPara^{n} Progressive Para^{n} DialoguePara	+Closure LkSen	+Afterthought DevelopPara Progressive Para
G-myth = [12% redundancy]	+Topic NounPh EquativeCl FirstNounPh inFirst Paragraph	+Background hirai in First Paragraph	+Body DevelopPara^{n} Progressive Para^{n} Dialogue Paragraph^{n}	+Closure LkSen	

[a]See Allen (1959.378) for a discussion of genre distinctions by density of informative allomorphs per total allomorphs, i.e., by percentage of redundancy.

background unit and simultaneously the adjunct of the first G-clause of the first paragraph.

(66) kani i-gantabita-ri soraroheginta yamai
THERE_OTHER_DAY HE-SEND-HIM SOLDIER_PLURAL NOW
'the other day the soldiers, (the ones who are)
over there now commanded him'

The background unit gives the time of the events narrated and like the other units in Chart 19, has as its aspect of meaning a part of the plot. There are often other adjuncts in the beginning of a discourse which have to do not with the time of the events narrated but rather with the time of narration or speech event so that they have as their aspect of meaning a part of observer viewpoint. In (67) yamaika indicates the time of the narration, i.e., the aspect of meaning is that of the observer, whereas hiraini ka ihanaitë indicates the time of the events narrated, i.e., it manifests the background unit and its aspect of meaning is that of the plot.

(67) iri no-ngomantë-mi yamaika antirisi ka i-kanka
hiraini ka i-hanaitë
HE I-TELL-YOU NOW ANDREW WHEN HE-DO BEFORE
WHEN HE-SICK
'now I'll tell you what happened to Andrew
some time ago when he was sick'

In myth the manifestation of the background unit is limited to an adverb phrase stating the time to be 'a long time ago', e.g., hiraini in (64). Phrases such as hiraira or kara hiraira 'there a long time ago' also occur at various points throughout myth in conjunction with 'he (or it) was said of', e.g., o-ngantingani hirairi 'it was said of a long time ago' in (64). These phrases have as their aspect of meaning the observer rather than the plot. They are interpreted as a part of the reportive attitude which the speaker takes toward the narration rather than as an indication of the time of the events narrated.

The body of both biography and myth is manifested by a succession of G-paragraphs with no apparent structural limitations on the number of paragraphs which may occur.

The closure of a discourse is manifested by a linked sentence, e.g., aro o-karati NOW IT-CUT_OFF 'that's all'.

The afterthought unit of biography is manifested by a developmental or progressive paragraph. When an afterthought occurs, it is followed by a repetition of the closure unit. An example of an afterthought and repeated closure is given in Section 5.1.

3.8. Summary of the Grammatical Hierarchy. In Sections 3.1 through 3.7 the ways in which structures of each level contribute to the identification of participants were indicated first and then related to the system of the level

as a whole. In this section the order will be reversed: a summary of the characteristics which distinguish the levels of the grammatical hierarchy from one another will be given first and followed by a summary of the kinds of contributions made by grammatical forms to the identification of participants. Finally, the kinds of control exercised by the three aspects of meaning over grammatical forms referring to participants will be summarized.

The levels of the grammatical hierarchy are distinguished from one another by the different functional relations obtaining between constituent units of constructions on each level. The functions of these units are those of surface structure. In G-clauses, for example, they include the so-called "grammatical subject" and "grammatical object" which are termed "subject" and "complement" in this study. Units of only one level have a given function. For example, subject is a function of units on the clause-level only. Some of the characteristic functions by which the levels are distinguished are:

G-discourse level--topic, background, body and closure;
G-paragraph level--setting, theme, development, parenthesis, addition, and progression;
G-sentence level--base and periphery or quotative and quotation;
G-clause level--subject, complement, predicate, and adjunct;
G-phrase level--head and modifiers or appositives;
G-word level--stem and inflections;
Morpheme level--lack of constituent units.

The levels are also distinguished by the different lists of manifestations of the constituent units. However, a given kind of manifestation is not always limited to a single level. Noun phrases, for example, ordinarily manifest clause-level units such as subject, but they may also manifest vocative which is a sentence-level unit or topic which is a discourse-level unit. Therefore, characteristic functions of constituent units of each level are more useful for distinguishing levels than characteristic manifestations.

The ways in which forms of each grammatical level contribute to the identification of participants were pointed out in the introductory discussion of each level. These may be divided into three kinds of contribution--the occurrence of certain units, the agreement rules between constituent units of a construction, and the dimensions of contrast in the system of a given level.

Among the units which contribute to the identification of participants by their occurrence are noun phrases and certain morphemes or allomorphs of morphemes. However, except for a noun phrase, a given unit does not ordinarily identify the participant specifically unless it is considered in a higher-level context.

Agreement rules between constituent units of a construction help to identify the participants referred to as the same or different. Such rules have

been stated for some of the constructions of the clause level, the sentence level, and the paragraph level.

At least one category from each dimension of contrast in the systems of the clause level, the sentence level, and the paragraph level contributes positively to the identification of participants. Therefore, a language system as a whole is relevant, and not just individual units within it. It is not yet clear, however, whether other categories of a given dimension are neutral, i.e., unmarked, with respect to identification of participants or whether the way in which they contribute has simply not yet become apparent. For example, it is clear that the structure of developmental paragraphs (Sec. 3.6) contributes to the identification of participants, but it is not clear whether there are ways in which the structure of progressive and dialogue paragraphs contribute or whether they are neutral with respect to this problem.

The kinds of control exercised by the three aspects of meaning over grammatical forms referring to participants may be viewed as the converse of the ways grammatical forms contribute to the identification of participants:

The units which occur are in part controlled by the plot aspect of meaning. For example, if a participant is topic of the plot (Sec. 3.7), then a noun phrase must occur referring to that participant before other participants are referred to by noun phrases.

The social roles of the participants may control agreement in number. For example, plural agreement with a group of participants may be expected when the plot aspect of meaning is considered alone. The singular may occur instead, however, in agreement with the one participant who is the initiator of the action (Sec. 3.4).

Similarly, the focus of attention of the observer may control agreement in gender. For example, a masculine pronominal prefix with a plural suffix is expected for referring to a mixed group when the plot aspect of meaning is considered alone, but a non-masculine pronominal prefix with a plural suffix may occur in agreement with a woman of a mixed group upon whom the observer's attention is focused (Sec. 3.4).

The occurrence of forms from a certain category of a dimension of contrast in a system may also be controlled by the observer aspect of meaning. For example, passive forms (Sec. 3.1) occur obligatorily at one or more points in myths. Although the subject refers to the participant who is topic, the passive form as a whole indicates the uninvolved attitude of the observer toward the participants in the events narrated.[19]

[19]Further investigation may show that the occurrence of forms from certain categories of other levels are similarly conditioned by observer meaning. It is conceivable, for example, that in the system of the paragraph level, the dimensions of contrast are directly related to the way the observer chooses to distribute the information of the plot. The level of "functional sentence perspective" of Prague School linguists would then be related to observer meaning in discourse rather than to plot meaning (cf. discussion of Prague School concepts in Section 2.2.1).

PARTICIPANT IDENTIFICATION IN RELATION TO THE LEXEMIC HIERARCHY (DEEP STRUCTURE)

Eight hierarchical levels of lexemic units are posited for Nomatsiguenga discourse. They are L(exemic)-discourse, L(exemic)-chapter, L-paragraph, L-sentence, L-clause, L-phrase, L-word, and lexeme. These levels are roughly equivalent to those of the grammatical hierarchy, although the boundaries of any specific lexemic unit--an L-paragraph, for example--are not necessarily conterminous with the boundaries of a grammatical unit of the corresponding level. One lexemic level, however, has no corresponding grammatical level: a chapter level is posited for the lexemic hierarchy but not for the grammatical hierarchy since the evidence for a grammatical chapter is not clear-cut.

Participants are referred to, from the viewpoint of lexemic structure, by L-participant phrases--from the L-phrase level--and by substitutes which include pronominal forms (cf. Sec. 4.1.4).[1] Within a discourse a given participant may be referred to by several different L-phrases which may be similar in their grammatical structure but different in their lexemic structure. For example, in the Tree myth, cited in Section 3.7, the tree which ascended is referred to as antsiato 'tree', ora antsiato-nisata 'that tree-big', kontẽreroki-nisata 'kontẽreroki_tree-big', kontẽreroki 'kontẽreroki tree', ora antsiatonisata kontẽrerokinisata 'that big tree, big kontẽrero', antsiatonisata 'big tree', and p- ∞ o- ∞ -ro 'it, i.e., non-masculine'. Although all of these forms except the pronominal forms are grammatically noun phrases, several different lexemic phrases are included in the list: antsiato is a generic term for tree, whereas kontẽreroki is the name of a particular species of tree. The optional qualification of either term by 'big' yields still other phrases.

The L-phrases listed above can refer to the same tree as a participant since they share the feature 'member of the class of trees'.[2] This feature characterizes the tree in contrast to other participants. In turn, the 'tree'

[1]The prefix L- is used to distinguish "L-participant phrase" as a lexemic unit with formal characteristics discussed in Sec. 4.2 from "participant" which designates the ones who took part in the plot of the events without reference to language form, i.e., "participant" is used in this study to designate the meaning of a unit rather than a linguistic unit itself.

[2]Cf. Nida (1964.73) for discussion of lexical substitution of terms from different levels of a taxonomy to refer to the same participant in a discourse.

feature is a cue to identification of participants in particular actions since some of the actions are typical of trees but not of darkness--which is another non-masculine participant in the same discourse. For example, when the action is tẽ 'fall over sideways', the tree is identified as the one that fell since falling sideways is typical of trees. On the other hand, when the action is pari 'fall from a higher to a lower location' the darkness is identified as the one that fell since darkness is said to fall in that manner in Nomatsiguenga.

Forms of other levels of the lexemic hierarchy add other characterizations which aid in identification of participants. Ways in which participants are characterized and identified will be pointed out in the introductory discussion of each level in the sections of this chapter.

The descriptive sketch of the lexemic hierarchy will follow the same order as the sketch of the grammatical hierarchy in Chapter 3. L-clauses will be described first in Section 4.1. Levels below the clause will be described briefly in Sections 4.2 through 4.4. Levels above the L-clause will be described working from L-sentence in Section 4.5 to L-discourse in Section 4.8. A summary of the characteristics which distinguish the levels from one another and a summary of the ways participants are identified and characterized by lexemic structures will be given in Section 4.9.

4.1. The L-clause Level. The dimensions of contrast in the system of L-clauses are L-transitivity, observer focus, and social initiator of the action. Each of these dimensions is important for characterizing the participants by their functions or roles in relation to an action or state.

Units distinguished by the L-transitivity categories characterize participants by their actual, "real-world" roles or functions in an action. For example, in an L-transitive clause certain of the participants are characterized as agent and goal, whereas in an L-quotative clause the same participants may be characterized as agent and indirect goal. In both (1) and (2) Pablo is the agent, but Paipe is the goal in (1) and the indirect goal in (2).

(1) Pablo i-niake-ri Paipe
PAUL HE-SEE-HIM PAIPE
'Paul saw Paipe'

(2) Pablo i-kanke-ri Paipe
PAUL HE-SAY_TO-HIM PAIPE
'Paul said to Paipe'

Within an L-clause there are restrictions as to whether a unit such as indirect goal can refer to the same participant as another unit, e.g., agent. For example, 'Paul gave Paul money' is not acceptable but 'Paul cut himself' is. These restrictions are shown by agreement rules in Chart 21.

A unit in the marked focus category characterizes one participant as the observer's focus of attention in contrast to other non-focal participants.

(3) i-niabeki-ne-ri
HE-SEE-BENEFACTIVE-HIM
'he saw (it, the monkey) for him (the soldier)'

In (3) the soldier is characterized as in focus by the occurrence of -ne 'benefactive' with -ri 'him'.

A unit in the marked initiator category characterizes one participant by his social role, i.e., he is characterized as the initiator of the action.[3]

(4) te i-nia-kag-i-ri
NO HE-SEE-ACCOMPANIMENT...HIM
'he didn't cause him to see (a monkey), or
he didn't see (a monkey) with him'

In (4) the occurrence of -kaga 'accompaniment or causative' indicates that i- 'he' is the initiator while -ri 'him' is the agent.

We turn now from the way in which participants are characterized to the over-all system of lexemic clauses within which the characterizations operate. Specifically, we shall show how units such as agent, goal, focus, and initiator which characterize participants by their roles operate within the constructions of the L-clause system as a whole.

The system of L-clauses comprises clauses unmarked for focus, i.e., neutral with respect to the observer's focus of attention, in contrast with clauses marked for focus which specifically point to one of the participants as the focus (rows in Chart 20). A further set of contrasts intersects with the preceding; it comprises clauses unmarked for the initiator of the action, i.e., neutral with respect to the social roles of the participants, in contrast with clauses marked for the initiator which specifically point to one of the participants as the cause of the action (columns in Chart 20). The third dimension of contrast, L-transitivity, is described as a sub-system operating within each of the classes.

CHART 20.--System of L-clauses.

	Unmarked for Initiator	Marked for Initiator
Unmarked for Focus	A. Basic Clauses	B. Causative Clauses
Marked for Focus	C. Referential Clauses	D. Accompaniment Clauses

[3]Other social roles are indicated by structures at other levels. Kinship roles, for example, are distinguished primarily at the lexeme level (Sec. 4.4).

The basic L-clauses, i.e., those unmarked for initiator or focus, will be described in Section 4.1.1. These clauses include all those in which the roles or functions of the participants are directly related to the kind of event manifesting the action. The clauses marked for initiator and the clauses marked for focus will be described in Section 4.1.2. The units in L-clauses which characterize participants by their roles will be discussed in Section 4.1.3. Some variants in L-clauses will be discussed in Section 4.1.4, and finally, L-clauses and G-clauses will be distinguished in Section 4.1.5.

4.1.1. Basic L-clauses. There are eight basic L-clause types, i.e., L-clauses unmarked for focus or initiator, which differ from one another in transitivity. The prefix L- is used to distinguish lexemic clause types from grammatical clause types which also differ in transitivity. Although duplicate terms, e.g., "intransitive", are used in most cases, the lists of specific clauses which are included in each of the categories are not the same. (The difference in lists of L-clauses and lists of G-clauses is discussed further in Section 4.1.5.) Furthermore, transitivity distinctions in L-clauses are related to differences in deep structure units referring to participants: they may be referred to by units such as agent, goal, indirect goal, etc. In G-clauses, on the other hand, transitivity distinctions are related to surface structure units such as subject and complement referring to participants.

The contrastive forms of each of the basic L-clause types are shown by formulas in Chart 21.[4] Examples of each of these types are given in Chart 22. The location unit is omitted from all of the examples except motion clause where it is obligatory.

The units listed in Chart 21 for each L-clause type are limited to those which are directly related to the kind of event manifesting the action. L-impersonal clauses and L-existence clauses, however, differ from the other types in that there is no action unit. The constituent units of each L-clause type are named by their functions in the top line of each section and the manifestations of each are listed in columns below. Substitute manifestations of various units are discussed in Section 4.1.4, but they are not listed in this chart of contrastive forms.

The manifestation of agent in L-transitive clauses is listed as "L-participant phrase", which includes both animate and inanimate participants. In contrast, the manifestation of agent in L-bitransitive clauses is listed as

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[4]Just as "contrastive forms" of grammatical constructions represent an emic, underlying structure in contrast to an etic, variant manifestation, so also the "contrastive forms" of lexemic constructions represent an emic structure in contrast to etic manifestations which may include differences in order and other variants not shown on the chart. Although certain units such as goal in L-transitive clauses are considered obligatory in the contrastive, underlying form, they can often be deleted within higher-level contexts.

"animate L-participant phrase" since an inanimate thing can be said to do something to a participant as in (5) but not to give something to someone.

(5) pi-base-go-pë-na yaka nageroki
IT-STRIKE-INCLUDED...ME HERE MY_ANKLE
'it (the rock) struck me on my ankle'

The term "L-participant phrase" is used when the distinction between animate and inanimate participants is neutralized as in L-transitive clauses. In a more detailed analysis, however, it might be necessary to make the distinction more often than is done here. For example, transitive events which occur only with animate goals might need to be distinguished from those which occur with inanimate goals. (See Section 4.2 for further discussion of L-participant phrase.)

Units other than action listed in Chart 21 are limited to those which are directly related to the kind of event manifesting the action. Indirect goal, for example, can occur only with an action manifested by a bitransitive event or a quotative event. Although the location unit can occur in any of the basic L-clause types, it can occur only in a motion clause when it is manifested by an L-participant phrase.

There are other optional units which refer to participants and indicate their relation to the action. These include direction, beneficiary, purpose, reason, and instrument. They can each co-occur with most of the kinds of events, although there may be some limitations: for example, no occurrences of instrument in bitransitive clauses have been found in the data. Illustrations and discussion of these optional units will be given in Section 4.1.3.

One further unit--time, which is illustrated in (6)--can occur in each of the basic L-clause types.

(6) o-hanaita-ig-ëni yamai
SHE-SICK-PLURAL... NOW
'they (girls) are sick now'

4.1.2. Clauses Marked for Initiator or Focus. Clauses marked for initiator and clauses marked for focus are derived from the basic action L-clause types by additions and deletions which are described below. The main differences between basic clauses and the other types are summarized in Chart 23. L-impersonal and L-existence clauses cannot be marked for initiator or focus.

Since the basic clauses are unmarked for initiator or focus, i.e., they are neutral with respect to these two functions, they have a wider distribution than the marked clauses. Within narrative L-paragraphs, for example, clauses marked for initiator occur, in general, in the first L-sentence, whereas clauses unmarked for initiator or focus may occur in any of the sentences of the

CHART 21.--Contrastive forms of basic L-clauses. (Cell A of Chart 20.)

1. L-transitive =	+Agent L-particPh	+Action Transitive EventPh	+Goal L-particPh		±Location PlacePh
2. L-bitransitive =	+Agent AnimL-particPh	+Action BitransitiveEvent Ph	+Goal L-particPh [αpartic]	+IndirectGoal AnimL-particPh [-αpartic]	±Location PlacePh
3. L-intransitive =	+Agent L-particPh	+Action Intransitive EventPh			±Location PlacePh
4. L-quotative =	+Agent AnimL-particPh	+Action Quotative EventPh		+IndirectGoal AnimL-particPh	±Location PlacePh
5. L-motion =	+Agent L-particPh [αpartic]	+Action Motion EventPh			+Location L-particPh PlacePh [-αpartic]
6. L-factitive =	+Agent AnimL-particPh	+Action Factitive EventPh	+Goal AnimL-particPh [αpartic] [αL-particPh]	±Factitive L-particPh [αpartic] [-αL-particPh]	±Location PlacePh

CHART 21.--Continued.

7. L-impersonal	=	+State lnamL-particPh Meteorological-State		+Location PlacePh
8. L-existence	=	+Identified L-particPh [αpartic]	+Factitive L-particPh Quality [αpartic]	+Location PlacePh

CHART 22.--Examples of basic L-clauses. The numbers in the left column correspond to the numbered sections of Chart 21, and the order of units follows that in the formulas given there.

1. L-transitive	Pablo i-komoke-ro otsegoha PAUL HE-DAM_STREAM-IT BRANCH 'Paul dammed the river branch'
2. L-bitransitive	Pablo i-pë-ri Ariberito kireki PAUL HE-GIVE-HIM ALBERT MONEY 'Paul gave Albert money'
3. L-intransitive	Pablo i-tsorokeni PAUL HE-FEAR 'Paul is afraid'
4. L-quotative	Pablo i-kanke-ri Ariberito PAUL HE SAY-TO-HIM ALBERT 'Paul said to Albert'
5. L-motion	Pablo i-areeka-ri Julio PAUL HE-ARRIVE-HIM JULIUS 'Paul arrived at Julius's'
6. L-factitive	Pablo i-pegake-ri haneki mopë PAUL HE-CHANGE_INTO-HIM CHILD ROCK 'Paul changed the child into a rock'
7. L-impersonal	o-tsitinitanë IT-NIGHT 'night fell'
8. L-existence	iriro seripiari HE SHAMAN 'he is a shaman'

CHART 23.--Summary of contrastive forms of L-clause classes. Sections of the chart correspond to the cells of Chart 20. The forms in Sections B-D are stated as additions and deletions made in deriving the forms from basic action L-clauses in Sec. A. All units other than agent and action are indicated by ... in Sec. A; Chart 21 should be consulted to fill in the other units.

A. Basic Action = L-clause	+ag	+act...	
B. Causative = L-clause[c]	+ BasicL-intran / BasicL-motion / BasicL-fac -Goal -Fac	+init | (+AnimL-particPh +Causative)	
	+ BasicL-tran / BasicL-bitran / BasicL-quotative	-ag	+init | (AnimL-particPh +Mediative)
C. Referential = L-clause	+ BasicL-tran / BasicL-intran	+ref F[a] | (+AnimL-particPh +Included).	
	+ BasicL-bitran -IndirectGoal / BasicL-intran / BasicL-motion	+ref F | (+AnimL-particPh +Referential)	
D. Accompaniment L-clause	+ BasicL-tran / BasicL-quotative / BasicL-motion / BasicL-fac -Goal -Fac	+init (ag) F[b] | +AnimL-particPh	+co-ag | (+AnimL-particPh +Accompaniment)
		+init (ag) | AnimL-particPh	+co-ag F | +AnimL-particPh +Accompaniment)

[a]When the same L-participant phrase simultaneously manifests two units, the units are joined by the symbol ⌢.

[b]Agent is in parenthesis since it is already included in the basic L-clauses but here the initiator function is added, i.e., the same L-participant phrase simultaneously manifests agent and initiator units.

[c]In Sec. B and C alternate manners of deriving clauses from basic L-clauses are separated from each other by a broken line.

paragraph. The distribution of L-clause classes is illustrated in the description of specific discourses in Chapter 5. The discussion here will be limited to the ways in which clauses marked for initiator or for focus differ internally from basic L-clauses.

Clauses marked for initiator but unmarked for focus, i.e., causative clauses, are derived from basic action L-clauses in one of the following manners:

(a) An initiator unit manifested by an animate L-participant phrase and (o)mi- ∞ (o)gi- ∞ o- ∞ voicing (of initial stop) 'causative' is added to basic L-intransitive, basic L-motion, or basic L-factitive clauses. The goal and factitive units are deleted from basic L-factitive clause when the initiator is marked.[5] Juan is the initiator and Pablo is the agent in the examples in Sections 3, 5, and 6 of Chart 24. (See Section 4.1.3.3 for the distinction between initiator and agent functions.)

CHART 24--Examples of causative L-clauses (Section B of Chart 23). The numbering of the sections follows that of corresponding basic L-clauses in Chart 22.

1. L-transitive	Juan i-hoka-gan-tai-ri yaniri JOHN HE-THROW_AWAY-MEDIATIVE...HIM HOWLER_MONKEY 'John had the howler monkey thrown away'
2. L-bitransitive	Juan i-pa-gan-tẽ-ri Ariberito kireki JOHN HE-GIVE-MEDIATIVE...HIM ALBERT MONEY 'John sent Albert money'
3. L-intransitive	Juan i-omi-ntsoroke-ri Pablo JOHN HE-CAUSATIVE-FEAR-HIM PAUL 'John causes Paul to be afraid'
4. L-quotative	Juan i-kaima-gan-tẽ-ri Ariberito JOHN HE-CALL-MEDIATIVE...HIM ALBERT 'John sent for Albert'
5. L-motion	Juan i-ogi-montiẽ-ri Pablo JOHN HE-CAUSATIVE-CROSS_RIVER-HIM PAUL 'John caused Paul to cross the river'
6. L-factitive	Juan i-biake-ri Pablo JOHN HE-CAUSATIVE-CHANGE_INTO-HIM PAUL 'John caused Paul to get lost'

[5]The event pega~pia in L-factitive clauses with initiator marked has a specialized meaning of 'lose' rather than 'change into'.

(b) An initiator unit manifested by an animate L-participant phrase and -gan 'mediative' is added to basic L-transitive, basic L-bitransitive, or basic L-quotative clauses, and the agent unit is deleted. Juan is the initiator--but no agent occurs--in the examples in Sections 1, 2, and 4 in Chart 24.

Clauses marked for focus, but unmarked for initiator, i.e., referential clauses, are derived from basic action L-clauses in one of the following manners:

(a) A referent unit which is simultaneously focus is added to basic L-transitive or basic L-intransitive clauses. The referent is manifested by an animate L-participant phrase and -go∼-ko 'included'. Pabati 'father' is the referent in Section 1 in Chart 25, and yaniri 'howler monkey' is the referent in Section 3a pf Chart 25.

CHART 25.--Examples of referential L-clauses. (Sec. C of Chart 23.)

1. L-transitive	Pablo i-komoto-ko-ke-ri pabati otsegoha PAUL HE-DAM_STREAM-INCLUDED...HIM FATHER RIVER_BRANCH 'Paul dammed the branch of the stream with reference to father'
2. L-bitransitive	Pablo i-pĕna-ben-tahi-ri yaniri kireki PAUL HE-PAY-REFERENTIAL...HIM HOWLER_MONKEY MONEY 'Paul paid money for the howler monkey'
3. L-intransitive	(a) Pablo i-tsoro-go-batigi-ri yaniri PAUL HE-FEAR-INCLUDED...HIM HOWLER_MONKEY 'Paul is afraid of the howler monkey' --- (b) pi-ngaki-ben-kima yaniri YOU-STAY_AWAKE-REFERENTIAL... HOWLER MONKEY 'stay on guard with reference to the howler monkey, or because of him'
5. L-motion	i-apato-ben-ka-ri pabati i-matsiguenga HE-COME_TOGETHER-REFERENTIAL...HIM FATHER HIS-PEOPLE 'Father's people came together with reference to him'

(b) A referent unit which is simultaneously focus is added to basic L-bitransitive, basic L-intransitive, or basic L-motion clauses. Referent is manifested by an L-participant phrase and -ben 'referential'. The indirect goal unit is deleted from basic L-bitransitive clauses. Yaniri 'howler monkey' is the referent in Sections 2 and 3b of Chart 25, and pabati 'father' is the referent in the example in Section 5.

(c) A beneficiary unit which is sometimes simultaneously focus is added to basic action L-clauses. For example, in (7) -ro 'her' is the beneficiary and simultaneously the focus of attention.

(7) na-manantë-ne-ro kayeta
I-BUY-BENEFACTIVE-HER CRACKER
'I bought crackers for her'

An illustration of a beneficiary which is not focus is discussed in Section 5.2.

Since the examples given in Chart 25 and in (7) are isolated from their context, the focus role is not apparent. Nevertheless, ways in which clauses marked for focus differ from those unmarked for focus is described as a basis for discussion of focus in specific discourses in Chapter 5.

Clauses marked for initiator and for focus, i.e., accompaniment clauses, are derived from all basic action L-clauses except L-bitransitive and L-intransitive in the following manner:

The participant who is agent is simultaneously initiator and a co-agent unit is added. The co-agent is manifested by an animate L-participant phrase and -haga ∞ -kaga ∞ -ka ∞ -a 'accompaniment'. The goal and factitive units are deleted from basic L-factitive clauses.

In accompaniment clauses the focus may be simultaneously either initiator or co-agent. Therefore, other clauses in the context which are marked for focus but not initiator must be considered in order to determine whether it is the initiator or the co-agent which is also focus in any specific clause. In the examples in Chart 26, Juan is simultaneously initiator, agent, and focus, and Pablo is co-agent.

4.1.3. Units in L-clauses which Characterize Participants by their Roles. The units in L-clauses which characterize participants by their role or function in relation to the action and the criteria by which these units have been distinguished will be discussed in this section. One of the units is agent which occurs in all of the basic action L-clause types.[6] Other units co-occur in basic L-clauses with particular kinds of events manifesting the action unit. Still other

[6]See Section 6.2 for a discussion of deletion of agent under certain grammatical conditions.

CHART 26.--Examples of accompaniment L-clauses. (Sec. D of Chart 23.)

1. L-transitive	Juan i-komota-ka-ke-ri Pablo otsegoha JOHN HE-DAM_STREAM-ACCOMPANIMENT...HIM PAUL RIVER_BRANCH 'John dammed the river branch with Paul'
4. L-quotative	Juan i-kaim-a-ke-ri Pablo Ariberito JOHN HE-CALL-ACCOMPANIMENT...HIM PAUL ALBERT 'John called Albert with Paul, or John caused Paul to call Albert'
5. L-motion	Juan i-montia-haga-në-ri Pablo JOHN HE-CROSS_RIVER-ACCOMPANIMENT... HIM PAUL 'John helped Paul across the river'
6. L-factitive	Juan i-pia-ka-ka-ri Pablo JOHN HE-CHANGE_INTO-ACCOMPANIMENT... HIM PAUL 'John disappeared with Paul'

units which characterize participants are optional additions to most of the basic clause types.

4.1.3.1. Agent and Other Units Which Co-occur With Particular Kinds of Events. When a participant is referred to by an agent unit, he is characterized as the actual performer of the action in the clause. The agent unit is manifested by an L-participant phrase.

(8) Alfredo i-hokabetana-ne-ri sangenari
ALFRED HE-THROW-BENEFACTIVE-HIM LETTER
'Alfred left a letter for him'

In (8) Alfredo is the agent, i.e., he is the one who left a letter. In all of the examples in Chart 22, except in Sections 7 and 8 where no agent occurs, Pablo is the agent. He is also the agent in Sections 3, 5, and 6 of Chart 24 and in Sections 1, 2, and 3 of Chart 25.

When a participant is referred to by a goal unit, he is characterized as

the one on which the action is performed.[7] The goal unit is manifested by an L-participant phrase. In (8) sangenari 'letter' is the goal. In Section 1 of Chart 25 yaniri 'howler monkey' is the goal of the action. The goal unit occurs in L-transitive, L-bitransitive, and L-factitive clauses.

When a participant is referred to by an indirect goal unit, he is characterized as the recipient of an action--including the addressee of a verbal action. The indirect goal is more or less equivalent to the traditional "indirect object" and is manifested by an L-participant phrase.

(9) ironti hompiki i-pë-ri
IT_ALONE PILLS HE-GIVE-HIM
'he just gave him pills'

In (9) -ri 'him' is the indirect goal whereas ironti hompiki is the goal. In Sections 2 and 4 both of Chart 22 and of Chart 24, Ariberito is the indirect goal. The indirect goal unit occurs in L-bitransitive and L-quotative clauses.

When a participant is referred to by a factitive unit, he is characterized by his name or by an L-participant phrase which states what he is turned into.[8]

(10) o-hit-a irosa
SHE-NAME-REFLEXIVE ROSE
'her name was Rose'

In (10) Irosa is the factitive, and in Section 6 of Chart 22 mopë 'rock' is the factitive. In L-existence clauses the factitive unit may characterize a participant by a quality or by an L-participant phrase which states the profession or other state of existence of the identified.

(11) irianti irasi felipe
HE_ALONE HIS PHILIP
'he is Philip's'

In (11) irasi felipe is the factitive. In Section 8 of Chart 22 seripiari 'shaman' is the factitive. In L-factitive clauses the factitive and goal units refer to the same participant whereas in L-existence clauses the factitive and identified units refer to the same participant.

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[7]It is conceivable that affected goal and unaffected goal should be considered separate units. For example, one might consider the goal in i-tonke-ri 'he-shot-him' to be an affected goal in contrast with the goal in i-netsë-ri 'he-looked_at-him' or i-giatanë-ri 'he-followed-him' which is unaffected by the action. Although the distinction has not been made in this study, if further data should show that there are restrictions in deriving non-basic clauses from some of these actions, then the distinction might prove fruitful.

[8]A similar unit in English was termed "object complement" by Fries (1952. 194). In 'they appointed him secretary', 'secretary' would be considered the object complement. Since "object complement" suggests surface structure, I have substituted "factitive".

The identified unit occurs only in L-existence clauses. As the term implies, it refers to the participant who is characterized by another constituent unit. In (11) irianti is the identified and in Section 8 of Chart 22 iriro 'he' is the one identified.

The location unit may optionally occur in any of the basic L-clauses when it is manifested by a place phrase. In an L-motion clause, however, it is obligatory and sometimes characterizes a participant as the location of an action since it may be manifested by an L-participant phrase or by a place phrase.

(12) n-ogagana iroti paaroa-kë
I-GO_ON AS_FAR_AS PAAROA_RIVER-AT
'I went on until (I came) to the Paaroa River'

(13) n-areeka inato-këⁿta
I-ARRIVE MOTHER-AT_OVER_THERE
'I arrived at mother's'

In (12) iroti paaroakë is the location, and in (13) inatokëⁿta is the location. In Section 5 of Chart 22 Julio is the location.

4.1.3.2. Optional Units Which Occur in the Basic L-clauses. The optional units which occur in the basic action L-clauses are manifested by an L-participant phrase plus a function marker, i.e., "case marker", which points to the role characterizing the participant. These units are direction, beneficiary, reason, purpose, and instrument. They are considered to be optional since they are not required by the kind of action in the clause but can, with some limitations, be added to any of the basic action L-clause types.

These optional units differ as a whole from the units discussed in the preceding section by the fact that there is a marker of the function of each, whereas the function of those discussed previously is indicated only by the kind of action with which they co-occur. The function markers, e.g., -si 'purposive', in the optional units are verbal affixes in G-clauses, but in L-clauses they mark the functional relation of the L-participant phrase to the action. Therefore, markers such as -si are described in this section as a part of the manifestation, along with an L-participant phrase, of a particular unit characterizing participants.

When a participant is referred to by a direction unit he is characterized as the one toward which the action is directed. The direction unit is manifested by an L-participant phrase plus one of the following function markers: -te 'toward' or -mo 'in the presence of'.

(14) Pablo i-hoka-te-tabeka-ri Ariberito igotsirote
PAUL HE-THROW-TOWARD...HIM ALBERT HIS_KNIFE
'Paul threw his knife toward Albert'

(15) Pablo i-kenga-mo-tahi-ri Ariberito
PAUL HE-NARRATE-IN_PRESENCE_OF-HIM ALBERT
'Paul narrated it in Albert's presence'

In (14) and (15) Ariberito is the direction of the action.

The direction unit is semantically similar to the location unit, but the two are considered to be distinct for the following reasons: (a) The direction unit is manifested only by an L-participant phrase plus a direction marker, whereas the location unit in motion clauses can be manifested by an L-participant phrase or a place phrase, and in other clauses it is manifested only by a place phrase. (b) They can co-occur in a single L-clause as shown in (16).

(16) kero ni-ato-mo-ti-ri sekari haara
NOT I-GO-IN_PRESENCE_OF...HIM JAGUAR JUNGLE
'I don't go in the jaguar's presence in the jungle'

(17) n-areeka-ri Siointi
I-ARRIVE-HIM SHOINTI
'I arrived at Shointi's'

In (16) -ri 'him' and sekari 'jaguar' refer to the participant who is the direction, but haara 'jungle' refers to the location. On the other hand, in (17) -ri 'him' and Siointi refer to the participant who is the location.

When a participant is referred to by a beneficiary unit, he is characterized as the one who is benefitted or harmed by the action. The beneficiary unit is manifested by an L-participant phrase plus -anon ∞ -ne ∞ ∅ 'benefactive'. In (18) Ariberito is the beneficiary of the action.

(18) Pablo i-tongabeki-ne-ri Ariberito yaniri
PAUL HE-SHOOT-BENEFACTIVE-HIM ALBERT HOWLER_MONKEY
'Paul shot the howler monkey for Albert'

The distinction between beneficiary and direction is not clear-cut, but they are considered to be distinct for the following reasons: (a) Beneficiary is sometimes simultaneously focus (see discussion in Section 4.1.2), whereas direction is not. (b) The beneficiary can be the same participant as the agent or he may be different, whereas the direction must be a different participant than the agent.

(19) he-ri-ka nati p-ag-anon-tanaim-a
TAKE-IT... NEPHEW YOU-TAKE-BENEFACTIVE...
REFLEXIVE
'here, nephew, take (this) away for yourself'

In (19) p- 'you' is the agent and also the beneficiary of the action as indicated by the reflexive -a.

Similarly, the distinction between beneficiary and indirect goal is not clear-cut, but they are considered to be distinct for the following reasons: (a) The indirect goal possesses the goal after the action of giving, and after an action of saying he has at least potentially heard what was said. In contrast, the action itself, rather than the goal, has either benefitted or harmed the beneficiary, and nothing is indicated of his subsequent relation to the goal, if there is one.

(20) Pablo i-pë-ne-ri Juan tiapa singi
PAUL HE-GIVE-BENEFACTIVE-HIM JOHN CHICKEN CORN
'Paul gave the chicken corn for John (the owner)'

(b) They may co-occur in a single L-bitransitive clause as shown in (20) where Juan is the beneficiary and tiapa is the indirect goal. Since they may co-occur, and there appears to be no basis for considering the clause to be complex, i.e., including an embedded clause, they are considered to be distinct units.[9]

When a participant is referred to by an instrument unit, he is characterized as the means by which the action is performed. The instrument unit is manifested by an L-participant phrase--usually inanimate--or an L-clause plus -an 'instrumental'.

(21) te na-ngen-an-taima-ro sintipoa
NOT I-TRAVEL-INSTRUMENTAL...IT BALSA_RAFT
'I didn't go by raft'

(22) ora pi-nets-an-tima-ri hitatsia negativo
THAT YOU-LOOK_AT-INSTRUMENTAL...HIM NAME NEGATIVE
'look at it (the sun during an eclipse) with that which is called a negative'

In (21) sintipoa 'balsa raft' is the instrument, and in (22) the L-clause ora... hitatsia negativo 'that which is named negative' is the instrument.

When a participant is referred to by a purpose unit, he is characterized as the purpose of the action. The purpose unit is manifested by an L-participant phrase or an L-clause plus -si 'purposive'.

(23) ni-ganta-si-të-ri hompiki
I-SEND-PURPOSIVE...HIM PILLS
'I sent him for pills'

(24) ni-poka-si-tahi a-niopai-ri-ta paba paatiri
I-COME-PURPOSIVE... WE-SEE_HIM... GOD PRIEST
'we came to see God the priest'

[9]Cf. C. J. Fillmore (1967, fn. 57) for discussion of two occurrences of a single case, i.e., "functional unit manifested by an L-participant phrase or by an L-participant phrase plus function marker" in terms used here. He considers such an instance to be either a result of more than one deep structure case or of a complex sentence.

In (23) the purpose is hompiki 'pills', i.e., the obtaining of pills. In (24) the L-clause aniopairita paba paatiri is the purpose. When the participant who is the purpose of an action is the same as the participant who is the agent, then purpose is manifested by -a 'reflexive', and the meaning is modified to 'purposeless' as shown in (25).

(25) ni-poka-si-t-a
I-COME-PURPOSIVE...REFLEXIVE
'I just came, i.e., I came purposelessly'

When a participant is referred to by a reason unit, he is characterized as being the reason for an action. The reason unit is manifested by an L-participant phrase or an L-clause plus -biri ∞ -bi 'on account of'. In (26) Juan is the reason.

(26) Pablo i-kisa-biri-ke-ri Juan
PAUL HE-BE_ANGRY-REASON...HIM JOHN
'Paul was angry on account of John'

Reason may co-occur with purpose as in (27) where pairo 'why' is the reason and -mi 'you' is the purpose.

(27) pairo i-poka-si-biri-ti-mi
WHY HE-COME-PURPOSIVE-REASON...YOU
'why did he come for you?'

They differ from each other in that purpose and agent can refer to the same participant whereas reason and agent cannot. They differ further in that purpose expresses a future purpose for an action, whereas reason explains an action on the basis of something past. The result of this semantic difference is that clauses including the reason unit are in complementary distribution with clauses including the purpose unit in implicational sentences: reason may occur in the cause unit in cause-and-effect sentences (see Sec. 4.5 for L-sentence types), whereas purpose may occur in the intent unit of intentive sentences. In simultaneous sentences, however, they contrast in that either can occur in a clause manifesting the event unit. They are, therefore, considered to be separate since they contrast in some L-sentence types and since they are semantically different.[10]

[10]Reason, purpose, and instrument units can conceivably be assigned to either the clause level or the sentence level. The following considerations are the basis for assigning them to the L-clause level: (1) All three of the units include a function marker similar to that of other optional clause-level units such as beneficiary. (2) The instrument role seems to be almost universally a clause-level function.

On the other hand, reason and instrument could have been considered variants of the cause unit in cause-and-effect sentences rather than a unit optionally occurring within the cause unit. Similarly, purpose could have been considered a variant of the intent unit in intentive sentences rather than a unit optionally occurring within the intent unit. This latter course would result in fewer units posited since cause-and-effect and intentive sentences are posited in any case.

4.1.3.3. Additional Units Which Occur in Clauses Marked for Initiator or Focus. When a participant is referred to by an initiator unit, he is characterized as the one who causes an action to be done. In contrast, when he is referred to by an agent unit he is characterized as the one who actually performs the action. In clauses marked for both initiator and focus the initiator is simultaneously one of the agents of the action and a co-agent unit occurs also.

(28) Juan i-pok-a-ke-ro irisinto
JOHN HE-COME-ACCOMPANIMENT...HER HIS_DAUGHTER
'John came with his daughter, or he brought his daughter'

In (28) Juan is initiator and agent and irisinto is co-agent. In Chart 26 Juan is initiator and simultaneously agent and focus while Pablo is the co-agent. In clauses unmarked for focus there is no specification of whether or not the initiator is also an agent.

(29) p-o-tëanai-ro kogentima
IT-CAUSATIVE-FALL-IT WIND
'the wind caused it (a tree) to fall'

In (29) the wind is initiator, but only the tree is agent. In Chart 24 Juan is the initiator in the examples.

When a participant is referred to by a focus unit, he is characterized as the one on whom the observer's attention is focused. In clauses marked for focus but not for initiator, focus is simultaneously referent. The referent unit--especially when it is marked by -ko 'included'--is quite unspecific about the exact function of the participant: it specifies only that the action has some reference to him. Sometimes the function appears to be co-agent, sometimes direction, or sometimes beneficiary.

(30) ni-samë-ko-ke-ro nagisere
I-SLEEP-INCLUDED...IT MY_COMB
'I went to sleep with reference to my comb, i.e., I went to sleep while making my comb and dropped it.'

(31) no-komoto-ko-ke-ri pabati
I-DAM_STREAM-INCLUDED...HIM FATHER
'I dammed the stream with reference to father, i.e., I dammed the stream along with father, or I dammed the stream for father'

Another possible reason for considering them to be sentence-level units is that their manifestation is different from other L-clause level units discussed in this section. Reason, instrument, and purpose can all be manifested by an L-clause or by an L-participant phrase plus a function marker while the other units are manifested only by an L-participant phrase plus a function marker.

In (30) nagisere 'my comb' is referent and appears to be similar to beneficiary. In (31) pabati is referent and can be interpreted as beneficiary or as agent and initiator with '1' as co-agent. The fact that referent is in a clause marked only for focus but not for initiator and that it is mutually exclusive with reason, purpose, instrument, beneficiary, and direction helps to explain the vagueness: referent is neutral with respect to all of the units referring to participants except those listed in Section 4.1.3.1 which co-occur with a particular kind of action. Consequently, it can be interpreted as any one of them according to the context.

In clauses other than those marked for focus, when -ko 'included' occurs, an added participant does not occur but one of the functions of a participant becomes less direct. For example, the goal manifested by piari in (32a) is less direct than the goal in (32b) which is manifested by kireki.

(32) (a) po-mẽ-go-tati-na-ta piari
YOU-GIVE-INCLUDED...ME... PIARI
(A BEVERAGE)
'give me a container of piari'

(b) Pablo i-pë-ri Ariberito kireki
PAUL HE-GIVE-HIM ALBERT MONEY
'Paul gave Albert money'

In L-motion clauses and L-impersonal clauses the occurrence of 'included' and the consequent indirectness of the affected function eliminates the semantic incongruity of participants performing motions appropriate for animals but not for people or of participants performing meteorological state roles. For example, flying is a motion of birds and people do not 'night', but (33) and (34) are appropriate for people since 'included' occurs in them.

(33) n-arë-ko-ig-anake
I-FLY-INCLUDED-PLURAL...
'we flew (in a plane)'

(34) Pablo i-tsitinito-ko-ke
PAUL HE-NIGHT-INCLUDE...
'Paul was included in the night'[11]

Examples are given in (35) in which ha ∞ a 'to go' remains constant in the manifestation of the action unit in an L-motion clause but various optional units which characterize participants by their roles are added. These examples are followed by several examples in (36) of optional units co-occurring in a single L-clause.

[11]Spanish expressions such as ¿Como le ha amanecido (a Ud)? 'How are you this morning?' are somewhat parallel in meaning to this usage in Nomatsiguenga.

(35) L-motion clause
Pablo i-ake komate
PAUL HE-GO DOWNRIVER
'Paul went downriver'

L-motion clause, Direction: (+sekari +mo)
kero ni-a-to-mo-ti-ri sekari haara
NOT I-GO...IN_PRESENCE_OF...HIM JAGUAR JUNGLE
'I don't go to the jaguar's presence in the jungle'

L-motion clause, Purpose: (+Ariberito +si)
Pablo i-a-ta-si-ke-ri Ariberito
PAUL HE-GO...PURPOSIVE...HIM ALBERT
'Paul went with Albert in mind (e.g., to see him)'

L-motion clause, Reason: (+Juan +biri)
Pablo i-a-tage-biri-ke-ri Juan
PAUL HE-GO...REASON...HIM JOHN
'John was the reason for Albert's going'

L-motion clause, Co-agent: (+Ariberito +ka)
Pablo i-a-ta-ka-ke-ri Ariberito
PAUL HE-GO...ACCOMPANIMENT...HIM ALBERT
'Paul went with Albert'

(36) L-motion clause, Initiator: (+pi- +gan), Initiator (+pi- +gi-)[12]
pi-gi-piga-gan-të-na carta
YOU-CAUSATIVE-RETURN-MEDIATIVE...ME LETTER
'you send me a letter in return through
someone else (since you can't write)'

L-bitransitive clause, Reason: (+pairoraka +bi),
Referent: (+mula +ben)
pairoraka o-pëna-ben-to-bi-ti-ri mula
WHY WE-PAY-REFERENTIAL...HIM MULE
'why should we pay for the mule (since he ate our crops)?'

L-motion clause, Initiator: (+i- +voicing)
i-ro-barigi-ri bomba
HE-WILL-CAUSATIVE-FALL-HIM BOMB
'he will drop bombs on him'

L-motion clause, Initiator: (+i- +voicing), Beneficiary: (-ri +ne)
i-robarigi-ne-ri bomba
HE-WILL_CAUSATIVE-FALL-BENEFACTIVE-HIM BOMB
'he will drop bombs against him'

[12]This example could be termed "double causative" since -gan indicates that someone is caused to write the letter and -gi indicates that the letter is caused to return.

4.1.3.4. Control of Form by Aspects of Meaning. In Sections 4.1.3.1 through 4.1.3.3 the units which are manifested by L-participant phrases were discussed from the standpoint of how they characterize participants by their roles. In this section we shall discuss these units from the standpoint of how the different aspects of meaning determine the roles of participants.

The plot of the events narrated determines which participants are referred to by the units which co-occur with a particular kind of action, i.e., agent, goal, indirect goal, factitive, and location. The participants referred to are the ones who actually performed the role indicated. For example, the agent is the one who actually did the action.[13] In (35) for example, Pablo is the participant who actually went, and in (37) Irao is the one who actually arrived.

(37) irigito i-areepa Irao
SUDDENLY HE-ARRIVE RALPH
'suddenly Ralph arrived'

In contrast, focus is determined by the observer's viewpoint in telling the story. The observer's focus may shift within a single discourse.[14] For example, in one narration the focus was first on Harold Shaver, a linguistic field worker; later it shifted to his wife; and still later to another linguistic field worker.

Similarly, the social roles of the participants determine which participant is referred to as the initiator. The participant referred to is relative to the social situation rather than the actual initiator of the action.

(38) n-aree-go-ta-ga-nẽ-ro
1-FLY-INCLUDED...ACCOMPANITIVE...HER
'I (pilot, nurse, or father) caused her (passenger, patient, or daughter) to fly; or I flew with her (in a plane)'

For example, the initiator in (38) may be the pilot of the plane if he is speaking and the co-agent may be a woman passenger. Or, the initiator may be a nurse taking a patient by plane for medical treatment if the nurse is speaking. Or, he may be a man taking his little daughter along with him on a plane trip. In the last two cases neither the nurse nor the man piloted the plane, but with relation to the patient the nurse initiated the trip and with relation to the daughter the father initiated the trip.

[13]The units controlled by the plot aspect of meaning are roughly equivalent to the cases in a proposition proposed by Fillmore (1967.41ff).

[14]The L-participant phrase manifesting focus simultaneously manifests referent or beneficiary. It is conceivable that reason and purpose are also related to the observer's viewpoint, but direction and instrument appear to indicate roles in the plot.

This contrast between actual participant roles, e.g., Irao as agent in (37), and relative participant roles, e.g., 'I' as initiator in (38) is one of the reasons the plot aspect of meaning has been posited as distinct from the observer and social aspects.

4.1.4. Variants of L-clauses. In this section variants in L-clauses conditioned by the manifestation of constituent units will be considered first and then distributional variants will be discussed.

Units which refer to participants have been described so far as if they were manifested only by L-participant phrases. They may also be manifested by various substitutes which are discussed below:

(a) Reflexive -a substitutes for the L-participant phrase manifesting goal when the same participant is both agent and goal. Or, it may substitute for the L-participant phrase manifesting purpose or beneficiary when they refer to the same participant as the agent.

(39) manii-ko no-meganëm-a
ANT-MAYBE I-CHANGE_INTO-REFLEXIVE
'maybe I will turn myself into an ant'

In (39) the speaker is simultaneously agent and goal and manii 'ant' is factitive.

(b) Distributive -ge can substitute for unnamed participants performing the goal function as shown in (40).

(40) tosorintsi i-peganta-ge-ti
DEITY HE-CHANGE_INTO-DISTRIBUTIVE...
'deity was always changing various (people)
into another form'

(c) A pronominal form may substitute for an L-participant phrase after the participant has already been named in some previous clause--or before he is named in some cases (cf. Sec. 3.7). In fact, pronominal forms such as i- or -ri 'masculine, third person' substitute for L-participant phrases in the most common manifestations of L-clauses.

On the other hand, if a unit such as agent is manifested by an L-participant phrase and by a pronominal form, then agent is considered to be redundantly manifested. In the elicited examples of the basic L-clause types in Chart 22, agent, goal, indirect goal, and location are redundantly manifested by both an L-participant phrase and a pronoun.[15]

[15]A pronoun may sometimes redundantly indicate the possessor of the goal rather than the goal itself: i-agëke-ri irisinto HE-TOOK-HIM HIS_DAUGHTER 'he took his daughter'. An alternative interpretation is to consider -ri as a variant manifestation of the beneficiary unit with no functional marker occurring.

Factitive is not redundantly manifested since it can only be manifested by an L-participant phrase and never by a pronominal form.

Examples of various manifestations of agent and goal are given in (41) to illustrate pronominal substitution and redundant manifestation.

(41) (a) Pablo i-niake inato
PAUL HE-SEE MOTHER
'Paul saw mother'

(b) i-niake-ro
HE-SEE-HER
'he saw her'

(c) Pablo i-niake-ro
PAUL HE-SEE-HER
'Paul saw her'

(d) Pablo niake-ro
PAUL SEE-HER
'Paul is the one who saw her'[16]

Within the context of discourse, a unit such as goal which is obligatory in the contrastive form of the L-transitive clause type is often omitted in a specific transitive clause. In such a case the deletion of goal is considered to be conditioned by grammatical or lexemic structures of higher levels. Other omissions of goal occur with some transitive events in which the goal is implicit in the event. For example, monga 'to chew' implies 'coca' as the goal unless another goal such as chicle 'gum' is made explicit. Deletions and implicit goals are further illustrated in the discussion of specific discourses in Chapter 5. Rather than discussing them further here, we turn from variant manifestations of constituent units in L-clauses to distributional variants of clauses.

One kind of distributional variant is conditioned by occurrence in a sentence-level variant which is in turn conditioned by a paragraph-level unit.

(42) iroti na-ken-an-taka
IT 1-TRAVEL-INSTRUMENTAL...
'I went by means of it (a small bridge)'

For example, in (42) iroti 'it' occurs clause initially and is a substitute manifesting instrument and sentence level connective in a successive variant of L-sentences. This sentence variant is conditioned by its occurrence in the sequent unit of narrative L-paragraphs.

(43) iriro agapë-ro inta kasintaronta
HE TAKE-IT THAT OWNER
'the owner is the one who received it'

[16]The change in meaning in (41d) is signalled by the nominal active grammatical form rather than by the L-clause structure which is the same in all four examples, i.e., the L-clause structure is agent, action, and goal in all of the examples.

In (43) iriro...inta kasintaronta manifests the agent unit, whereas iriro manifests the connective and simultaneously is a constituent of the phrase manifesting agent. This discontinuous manifestation of the agent unit is conditioned by the fact that the clause occurs in a successive variant of L-sentences.

The variants illustrated in (42) and (43) are conditioned primarily by a paragraph-level unit. Other variants are conditioned primarily by sentence-level structures. One of these occurs when an L-participant phrase or a substitute simultaneously manifests a unit within two L-clauses.

(44) pi-hateka haara pi-nee-ka yaniri pi-ntongi-na
YOU-GO_IF JUNGLE YOU-SEE-IF HOWLER_MONKEY
YOU-SHOOT-(BENEFACTIVE)-ME[17]
'if you go to the jungle and see a howler monkey,
shoot it for me'

Yaniri in (44) is simultaneously the goal of both the second and the third L-clauses in the sentence.

4.1.5. Some Differences Between L-clauses and G-clauses. In this section L-clauses and G-clauses will be contrasted. The functions of units in L-clauses are deep structure functions such as agent and goal, whereas the functions of units in G-clauses, described in Section 3.1, are those of surface structure such as subject and complement. In verbal active G-clauses, but not in passive G-clauses, the subject is associated with the initiator or agent in L-clauses and complement is associated with goal, indirect goal, etc. Both kinds of functions are considered to be necessary for the description of Nomatsiguenga since both contribute to the identification of participants. For example, the subject must refer to the same participant in each clause of theme and development units in simple and complex developmental G-paragraphs (cf. Sec. 3.6). On the other hand, a function such as agent is appropriate for different participants at different points in narrative L-paragraphs (cf. Sec. 4.6).

Just as there is not a one-to-one relation between lexemic units such as agent and grammatical units such as subject, so also the relation of L-clauses to G-clauses as a whole is not such that they can be mapped onto each other in a one-to-one manner. One G-clause may be two clauses when viewed lexemically. For example, a G-clause with a subordinate clause manifesting an adjunct within it, is often lexemically two clauses in which the actions are simultaneous.

(45) nopanigebiripĕri kara ikomoke
I_WATCH_DISTRIBUTIVE_HIM THERE HE_DAM_STREAM
'I watched while they dammed the stream'

[17] 'Benefactive' is enclosed in parentheses since it is manifested by zero when the beneficiary is first or second person.

In (45) the subordinate clause manifesting adjunct within a G-clause is kara ikomoke. Viewed lexemically, however, (45) equals the two clauses 'I watched' and 'they dammed the stream' in which the actions are simultaneous.

(46) nitsonkero nitoromitaigëro
1_FINISH_IT I_PILE_ROCKS_PLURAL_IT
'we finished piling up the rocks'

On the other hand, one L-clause may be two clauses when viewed grammatically. In (46) nitsonkero and notoromitaigëro are each G-clauses, with clause-level subject and complement deleted within the context of discourse. Lexemically, however, (46) is one clause since nitsonkero 'I finished it' is a verb in grammatical form, but it is an aspect of an action rather than a separate action in its lexemic form.[18] In general, one action unit or state unit occurs in an L-clause and one verb occurs in a G-clause--with the exception of verbs in relative and subordinate clauses manifesting constituent units in other G-clauses. Nevertheless, the boundaries of L-clauses and G-clauses are not coterminous since not all verbs are actions.

The dimensions of contrast in L-clauses and in G-clauses are also different. In L-clauses the contrasts are L-transitivity, observer focus, and social roles. These contrasts relate directly to the three different aspects of meaning. In G-clauses the contrasts are G-transitivity, voice, and verbal or nominal structure.

Finally, the divisions in transitivity are not the same. The list of specific L-transitive clauses, for example, is divided into G-transitive clauses and G-neutral clauses since L-transitive events in which a goal is implicit do not require a complement when viewed grammatically. For example, a clause in which komo 'to dam the stream' occurs is lexemically transitive, i.e., a goal is obligatory. Grammatically, however, it is neutral, i.e., a complement is optional since 'stream' is implicit. G-neutral clauses, on the other hand, do not correspond to an L-clause type. They include some L-transitive clauses, such as those in which komo occurs, and L-quotative clauses.

4.2. The L-phrase Level. L-participant phrases which refer to the same participant in a specific discourse share one or more features which characterize a participant as a member of a class. When a different L-participant phrase occurs at some point and refers to the same participant, then other features which characterize him may be added.

[18]Hall and Hall (1967) proposed within the framework of transformational grammar a similar treatment of concepts such as 'begin' and 'stop' to that here. They proposed to treat these "verbs" as aspects introduced within the VP in the phrase structure component. In contrast, Perlmutter (1967) argued that modals and other auxiliaries are verbs in the deep structure. Such an analysis is not plausible if one recognizes a distinction between events as deep structure classes and verbs as surface structure classes.

When different phrases refer to the same participant not only are additional characterizing features added, but also the fact that participants are usually named in more general terms when first referred to and in more specific terms in some later phrase helps to decide which phrases refer to a single participant. For example, in the Tree myth, the tree is first referred to by the phrase antsiato and later by the species name kontërero with the qualifier -nisata 'big'. Similarly, in another discourse about a fiesta, the ones who came are first referred to simply as birakotsia 'Whites' and later as birakotsia oankayokëni 'Whites from Huancayo'. In the Moon myth, the first L-participant phrase referring to the girl who married the moon is irisinto maonti 'Maonti's daughter'; in the middle of the story her name santomaria 'St. Mary' is given.

Some of the ways in which L-participant phrases are related to the problem of identification were discussed in the preceding paragraphs. In the remainder of this section some of the functional relations assigned to the L-phrase level will be indicated and L-phrases will be distinguished from G-phrases.

The constituent units in L-participant phrases may refer to two or more participants in a possessed and possessor relation as in (47), quantifiers of a participant as in (48), or qualifiers of a participant as in (49).

(47) iri-sinto-ë-te nasi paba
HIS-DAUGHTER-PLURAL-POSSESSED MY FATHER
'the daughters of our God'

o-rento Maragarita
HER-SISTER MARGARET
'Margaret's sister'

o-niro na-sinto
HER-MOTHER MY-DAUGHTER
'my daughter's mother, i.e., my wife'

i-bango Jorge
HIS-HOUSE GEORGE
'George's house'

(48) poro kintoro
ONE PARROT
'one parrot'

(49) (a) pongotsi okibe
HOUSE BIG
'a big house'

(b) antsiato-nisata
TREE-BIG
'a big tree'

The difference in L-participant phrases and G-noun phrases is illustrated in (49). Both examples are L-participant phrases with a qualifier meaning 'big' as a constituent. However, (49a) is a G-noun phrase in which pongotsi manifests the head and okibe manifests the modifier, but (49b) is a G-noun phrase in which antsiatonisata manifests the head and no G-phrase-level modifier occurs.

4.3. The L-word Level. The classes of L-words tentatively posited are L-participant, event, time, place, qualifier, manner, and connective.[19] Although the L-participant class corresponds roughly to the grammatical word class noun, and the event class corresponds roughly to the G-word class verb, the classes are not isomorphic. A noun may refer to either a participant, e.g., misi 'cat', or to an event, e.g., kama 'die' as in pi-kama-ne YOUR-DEATH-POSSESSED 'your death'. Conversely, an L-participant word might parallel grammatically a noun stem rather than a complete noun. For example, both of the following L-words would have to be prefixed for possession to qualify as a noun rather than a stem: -rento 'non-masculine sibling of the same sex as ego, i.e., a woman's sister' and -renti 'masculine sibling of the same sex as ego, i.e., a man's brother'.

The L-participant class includes animate and inanimate subclasses. In some L-clause types the agent must refer to an animate participant, and in others it can refer to animate or inanimate participants (cf. Chart 21). In myth, however, some participants which are ordinarily treated as inanimate are viewed as animate so that they may be agent in any of the L-action clause types.

The qualifier class, which includes quantifiers also, modifies L-participants, e.g., antagaisa in antagaisa na-haneki-te ALL MY-CHILD-POSSESSED 'all my children'.

The manner class modifies events, e.g., omanapage in i-komopë-ro omanapage HE-DAM_STREAM-IT RAPIDLY 'he built the dam rapidly'.

Representatives of the connective class are karari 'but', -nta 'since', -sa 'also', and -kerai 'and yet'.

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[19]These L-word classes are an adaptation of the four classes--object, event, qualifier, and relational--posited by Nida (1964.62):

> A careful examination of numerous transformations and the meaningful relationships between the parts reveals the fact that basically there are four principal functional classes of lexical symobls: object words, event words, abstracts, and relationals.

"L-participant" parallels his class "object", "qualifier" is reserved here for L-words which can qualify participants; and "manner" is added for L-words which can qualify events. "Connective" is somewhat more limited in usage than "relational": it is used here only for L-words by which L-clauses and units in higher hierarchical levels are conjoined, e.g., karari 'but'. "Case markers" or function markers such as -an 'instrumental' are considered to be part of the manifestation of units such as instrument rather than relationals.

4.4. The Lexeme Level. In Nomatsiguenga discourse participants are often referred to by kin terms rather than by name. These terms characterize participants by specifying one of their social roles in relation to one another.

The kin terms are L-words which are usually composed of a kinship lexeme and a gender lexeme. For example, the L-word -hariri 'woman's brother' is composed of hari which manifests the lexeme meaning 'parallel relative of opposite sex of ego and of ego's generation' and the lexeme 'masculine' manifested by -ri. The gender lexeme usually does not occur when a participant is addressed by a kin term or when he is referred to by a first person participant, e.g., hai 'brother (said by a woman)'.

Since participants are often referred to by kin terms, the system of kinship lexemes is given in Chart 27 as an illustration of a system on the lexeme level. The dimensions of contrast in kinship lexemes are generation, sex, and parallel or cross (including affinal) relation. The generations distinguished are ego's own generation (G^0), second generation (G^2), first ascending generation (G^{+1}), and first descending generation (G^{-1}).[20] In ego's own generation and the second generation, the sex distinction made is whether the relative is the same or different sex than ego, whereas in the first ascending and first descending generations the sex distinction made is whether the relative is male or female. For example, ren refers to a sibling or parallel cousin of the same sex as ego, whereas tom refers to a son of a man or of a woman and sin to the daughter of a man or of a woman.

In the translations of examples in this study the kinship lexemes are glossed for convenience as follows:

tsia 'grandmother, grandfather, grandson, granddaughter, or relative'

sio and sa 'grandmother, grandfather, grandson, granddaughter, cousin, or relative'

ren 'brother or sister'

ani 'brother-in-law'

tsi 'sister'

hari 'brother'

i 'father'

kongi 'uncle or father-in-law'

tom 'son'

[20]This kind of analysis of a system of kinship terms is similar to the componential analysis developed independently by Goodenough (1956) and Lounsbury (1956). It is also similar to the systems posited at other levels in this study, e.g., sentence and paragraph, in which contrastive features of meaning are the intersecting categories. For a theoretical discussion of dimensions of contrast in language systems, see Pike (1962).

tine 'nephew or son-in-law'

ni 'mother'

agi 'aunt or mother-in-law'

sin 'daughter'

ani and eba 'niece or daughter-in-law'

CHART 27.--System of kinship lexemes. The manifestations occurring when the participants are referred to by third person forms are given in the cells. Where the manifestation is different for a femal ego, it is given in parentheses.

	Same Sex as Ego		Different Sex than Ego	
	Parallel	Cross (and Affinal)	Parallel	Cross (and Affinal)
G^2	tsia		sio (sa)	
G^0	ren	ani[a] (nato)	tsi (hari)	
	Male Relative		Female Relative	
G^{+1}	i	kongi	ni	agi
G^{-1}	tom	tine	sin	ani (eba)

[a]The manifestation ani of the lexeme 'cross relative of ego's generation and sex' and of the lexeme 'female cross relative of the first descending generation' appears to be a case of homophony. This interpretation is supported by the fact that the manifestations of the lexemes are different--nato and eba, respectively--when ego is a woman.

In Chart 28 the kinship lexemes are given within L-phrases with the possessor manifested by a pronominal substitute and the gender lexemes included. For example, tsia in i-tsiarine is the manifestation of the lexeme 'relative of same sex as ego in the second generation removed' while tsiari is an L-word in which the kin lexeme is manifested by tsia and the gender by -ri.[21] The form i-tsiari-ne is an L-phrase composed of a possessor manifested by i- 'he' and -ne 'possessed' plus the L-word tsiari. The L-phrase for a male ego's relative is listed in the top line of each cell and the L-phrase for a female ego's relative is listed in the lower line of each cell.

CHART 28.--System of kinship lexemes illustrated in L-phrases. L-phrases for a male ego's relatives are given in the top line of each cell and for a female ego's relative in the lower line. The order of constituents in each phrase is possessor, kinship lexeme, and gender lexeme.

	Same Sex as Ego		Different Sex than Ego	
	Parallel	Cross (and Affinal)	Parallel	Cross (and Affinal)
G^2	i-tsia-ri-ne o-tsia-ro-ne		i-sio-ro o-sa-ri	
G^o	i-ren-ti o-ren-to	ir-ani-ri o-nato-to	iri-tsi-ro o-hari-ri	
	Male Relative		Female Relative	
G^{+1}	ir-i-ri i-ri	iri-kongi-ri o-kongi-ri	i-ni-ro o-ni-ro	ir-agi-ro agi-ro[a]
G^{-1}	i-tom-i o-tom-i	i-ti-ne-ri o-ti-ne-ri	irl-sin-to o-sin-to	ir-ani-ro eba[b]

[a]The manifestation of the non-masculine possessive pronoun is Ø before vowel initial kinship lexemes. Therefore, there is no overt possessive pronoun for i-ri, agi-ro, or eba.

[b]There is apparently no gender lexeme in the term for a woman's daughter-in-law or cross niece.

[21]Formerly sa was the term for a relative of the second generation removed of the same sex as ego or for a parallel relative of ego's generation and sex. This former meaning is preserved in the myth described in Sec. 5.2. One informant explained that isari was formerly used for itsiarine but that Mabireri and his relative were of the same generation "like brothers", and not grandfather and grandson. In one biographical narrative in the data itsiarine is also used in the sense of 'brother', i.e., a parallel relative of ego's own generation. It also occurs in this sense in one instance in the Mabireri myth. Both (i)sari and (i)tsiarine are translated as 'relative' when they are used in this sense.

In the preceding paragraphs we have discussed a system of lexemes which characterize participants by one kind of social role. We turn now from that topic to discuss the general nature of "lexemes" in contrast to morphemes.

The lexeme level is the minimum level of the lexemic hierarchy and is roughly equivalent to the morpheme level of the grammatical hierarchy. Lexemes and morphemes, however, are not in one-to-one relation to one another. For example, the lexeme 'male parallel relative of the first ascending generation' is usually manifested by the morpheme paba when the possessor is first person but by the morpheme i, as in iriri, when the possessor is third person or second person.

Aspect lexemes, discussed below, provide a further example of the non-isomorphic relation between lexemes and morphemes. The manifestation of the continuative aspect lexeme is, in its grammatical structure, the adverb përoka in illustration (50a), but in (50b) its manifestation is the repetition of the verb stem komo in ikomokero, and in (50c) its manifestation is the repetition of the noun phrase aisa basini manifesting complement.

(50) (a) përoka i-gisë-go-ta-ri
CONTINUE HE-BE_ANGRY-INCLUDED...HIM
'he continues to be angry with him'

(b) i-komopë-ro pabati i-komoke-ro aro
HE-DAM_STREAM-IT FATHER HE-DAM_STREAM-IT NOW
'father continued to dam the stream until he finished'

(c) arosiatapage no-geke-ri aisa basini, aisa
LITTLE SCATTERED I-PUT-HIM ALSO ANOTHER ALSO

basini, aisa basini aro
ANOTHER ALSO ANOTHER NOW
'I continued to gather a few little ones
until I finished'

In (50b and c) and (51b) the manifestation of the lexeme 'continuative' is repetition which involves repetition of morphemes. That which distinguishes the lexeme from a morpheme, however, is the fact that the item which is repeated can be any verb, or any verb stem, or a repetition of certain noun phrases. Thus, when 'continuative' is manifested by repetition rather than by përoka, no one morpheme or set of allomorphs can be said to be its manifestation.

Similarly, the manifestations of the completive aspect do not correspond to any one grammatical form. In (51a) its manifestation is grammatically the verb itsonkero, but in (50b and c) its manifestation is the conjunction aro placed G-clause finally. In (51b) it is manifested redundantly by both itsonkero and aro.

(51) (a) i-tsonke-ro i-toromitë
HE-FINISH-IT HE-PILE_UP ROCKS
'he finished piling up the rocks'

(b) i-kanti-ro, i-kanti-ro, i-tiake-ro, i-tiake-ro
HE-DO-IT HE-DO-IT HE-FILL_IN-IT HE-FILL_IN-IT

i-tsonke-ro aro
HE-FINISH-IT NOW
'he filled in the holes with dirt; he continued to do so until he finished'

Similarly, a lexeme such as 'desire' which expresses the agent's attitude toward an event is not isomorphic with a morpheme or morpheme class. Lexemically 'desire' is not an event but an "auxiliary" in an event phrase which manifests the action unit in an L-clause.[22] 'Desire' may be manifested by nin (52) which is grammatically a verb root or by bin (53) which is grammatically a verbal affix. (52) and (53) both comprise a single L-clause, but grammatically (52) comprises two G-clauses while (53) comprises only one.

(52) aroke i-nin-ti i-ri-boke yaka
NOW_AND HE-DESIRE... HE-WILL-COME HERE
'now he wants to come here'

(53) yaka aroka i-poko-bin-ti
HERE NOW_IF HE-COME-DESIRE...
'if he wants to come here'

In other cases there is a closer correspondence between lexemes and morphemes, although they are still not isomorphic. For example, the morpheme komo 'to dam a stream' and the morpheme toromi 'to pile up rocks' are both verb roots. The lexeme 'to fish by damming a stream' is manifested by komo, but the lexeme to 'dam the stream'--a particular step in the fishing process--can be manifested by either komo or toromi. Komo is the same morpheme in either case but viewed lexemically it is the manifestation of two different lexemes, i.e., it is an allolex of two lexemes.[23]

The lexemes of Nomatsiguenga will not be described further. The examples above have been given in order to indicate something of the nature of the unit

[22]In his discussion of Indo-European moods, Gonda takes a similar position with regard to 'want' and 'be able to'. He ascribes the following role to auxiliaries: "to express the speaker's visualization of the relation of the subject to a specified process as far as the subject's qualifications, or disposition with regard to the process are concerned" (Gonda 1956.6-7).

[23]Eunice Pike (1966) hints at this kind of distinction between lexical classes and grammatical classes in her article on skewing between the hierarchies. Her work differs in that she considers the morpheme to be a lexical unit, whereas it is considered to be a grammatical unit here.

termed "lexeme",[24] which is posited at the lowest level of the lexemic hierarchy, and to indicate some of the ways in which it differs from the grammatical unit "morpheme".

4.5. The L-sentence Level. The dimensions of contrast in the system of L-sentences are the number of events referred to by the constituent L-clauses and the relations between the constituents. One or more categories from each of these dimensions is relevant for the identification of participants. On the whole, however, L-sentences are more important for indicating the relations between L-clauses within which participants are characterized by their roles than for adding characterizations of participants.

Single event sentences are relevant to the participants who can be referred to within a sentence. The agent or initiator of each constituent clause must refer to the same participant. In (54) 'he', i.e., 'they' is the agent of each of the clauses.

(54) i-toganteti-ro, i-toganteta-be-ta-ro
HE-CHOP-IT, HE-CHOP-FRUSTRATIVE...IT
'They chopped it (the tree), but they chopped in vain (since they couldn't fell it).'

On the other hand, sequential sentences in which clauses are related as a sequence of events are relevant to the observer's focus of attention on a particular participant. All of the constituent clauses must be marked for focus or unmarked for focus. In (55) the occurrence of -ne 'benefactive' and -ri 'him' as the beneficiary in each clause marks it for focus and characterizes 'him' as the participant in focus. In (56) each clause is unmarked for focus.

(55) i-niabeki-ne-ri, i-tongabeki-ne-ri,
HE-SEE-BENEFACTIVE-HIM, HE-SHOOT-BENEFACTIVE-HIM,

i-amabitapë-ne-ri
HE-BRING-BENEFACTIVE-HIM

'He saw one (a monkey) for him; he shot it for him; he brought it for him.'

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[24]Conklin (1962.121) uses the term "lexeme" for:

> every meaningful form whose signification cannot be inferred from a knowledge of anything else in the language... So far as lexemic status is concerned, the morphosyntactic or assumed etymological relations of a particular linguistic form are incidental; what is essential is that its meaning cannot be deduced from its grammatical structure.

The main difference in Conklin's lexeme and that which I have posited is that he considers that single morphemes are necessarily lexemes whereas I consider no one-to-one relation to be necessary between morphemes and lexemes.

(56) i-pagetëni Aroro kara i-agetobë
HE-GIVE HAROLD WHEN HE-TAKE
'Harold picked them up and gave them (to the others).'

We turn now to consider the system of L-sentences as a whole as the background against which the particular cues to identification and characterization of participants operate. The contrastive types will be discussed in Section 4.5.1 and the distributional variants in Section 4.5.2. L-sentences are distinguished from G-sentences in Section 4.5.3.

4.5.1. Contrastive L-sentence Types. The system of L-sentences comprises L-narrative sentences in contrast with L-quotation sentences, i.e., sentences in which the actions of participants are narrated in contrast with those in which a participant's speech is quoted. Divisions of L-quotation sentence types will not be given, although a general formula and some illustrations are given along with the formulas and illustrations of L-narrative sentences.

The system of L-narrative sentences comprises series, circumstance, and adversative classes (columns in Chart 29). In series sentences the events in constituent units are in sequential time relationship to one another, except for the mono-clausal sentence type which is a special case. In circumstance sentences one unit is the circumstance of the event in the other. In adversative sentences one unit is the converse of the other.

CHART 29.--System of L-narrative sentences.

		Series	Circumstance	Adversative
Single Event		1. Mono-clausal	2. Paraphrastic	3. Converse
Non-single Event	Plural Event	4. Sequential	5. Simultaneous	6. Antithetical
	Implicational	7. Cause-Effect	8. Intent	9. Conditional

A further set of contrasts intersects with the above. This set comprises single event and non-single event sentences (rows in Chart 29). Non-single event sentences are further divided into plural and implicational event sentences. In single event sentences there is only one action or statement of existence, although it may be restated in a paraphrase unit or in a converse unit. In implicational event sentences there are two events one of which implies the other. In contrast, there is more than one event or statement of existence in plural event sentences, but neither implies the other.

The contrastive forms of narrative sentences, as well as a general formula for L-quotation sentences, are given in Chart 30. The cues to identification of participants mentioned in Section 4.5 are shown as agreement rules operating in some of the sentence types.

The manifestations of constituent units in L-sentences are primarily L-clauses, but there are other manifestations such as embedded sentences. The lists of manifestations given in Chart 30 are not exhaustive, but there are certain characteristics of the manifestations which help to distinguish one sentence type from another. These are pointed out below in the discussion of each sentence type.

The single event, series sentence type is named mono-clausal. It is distinguished from other sentences in that there is only one constituent unit, a statement which may be manifested by any of the L-clause classes except referential.[25] Within narrative L-paragraphs it tends to occur paragraph initially or finally, but it is less limited in other L-paragraph types, e.g., enumeration. (57) is an example of a mono-clausal L-sentence.

(57) Statement:BasicL-transitiveCl
arosiata na-ma-pë na
A LITTLE 1-BRING-ARRIVING I
'I just brought back a little.'

The single event, circumstance sentence type is named paraphrastic. The paraphrase unit may be an expansion of the statement, or it may be simply a restatement. If each of the two units is manifested by an L-clause, they are usually of the same transitivity type, as illustrated in (58).

(58) Statement:BasicL-transitiveCl, Paraphrase:Basic-L-transitiveCl
n-agë-ri, no-pogopogoke
I-TAKE-IT, I-GRASP
'I picked it up; I grasped it.'

However, (59) is an illustration of a transitive clause as the paraphrase of an intransitive causative clause.

(59) Statement:CausativeL-intransitiveCl,
Paraphrase:BasicL-transitiveCl
i-ogi-pigai-ri aisa, i-hokahati-ri
HE-CAUSATIVE-RETURN-HIM AGAIN, HE-THROW-HIM
'He sent it back (monkey); he rejected it.'

L-motion clauses may paraphrase L-impersonal clauses also. A paraphrastic sentence is the only L-narrative sentence in which an ideophone may manifest one of the constituent units; (60) includes the ideophone piho.

[25] In conversation the distribution of L-clauses appears to be different than that described here for monologue.

CHART 30.--Contrastive forms of L-sentences. The numbered sections correspond to the cells of Chart 29.

1. L-mono-clausal	=	+Statement |L-Cl except referential clauses	
2. L-para-phrastic	=	+Statement |BasicL-Cl except QuotativeCl \[αpartic as ag or init\] \[βtransitivity\]	+Paraphrase |BasicL-Cl except QuotativeCl \[αpartic as ag\] \[βtransitivity\] PluralEventSen Ideophone
3. L-con-verse	=	+Statement |ActionL-Cl \[αpartic as ag\] \[βspecific event\] \[γ purposive or frustrative\]	+Converse |ActionL-Cl \[α partic as ag\] \[β specific event\] \[$-\gamma$purposive or frustrative\]
4. L-sequen-tial	=	+Antecedent |ActionL-Cl \[α focus\] CircumstanceSen	+Sequent^{n} |ActionL-Cl \[α focus\] CircumstanceSen
5. L-simul-taneous	=	+Circumstance |L-Cl	+Event |ActionL-Cl SequentialSen PurposiveSen
6. L-anti-thetical	=	+Thesis |BasicL-Cl PluralEventSen	+Antithesis |($\pm$'but' + {BasicL-Cl / SeriesSen})
7. L-cause-effect	=	+Cause |($\pm$'since' + {BasicL-Cl / Circum-stance Sen})	+Effect |($\pm$'that's why' + {BasicL-Cl / SimultaneousSen / AdversativeSen / ParaphrasticSen})

CHART 30.--Continued

8.	L-intent	=	+Circumstance: ActionL-Cl; +Intent: L-transitiveCl | L-intransitiveCl
9.	L-conditional	=	+Protasis: (+ActionL-Cl +Conditional Marker); +Apodosis: (+ActionL-Cl ±Conditional Marker)
10.	L-quotation	=	+Quotative: L-quotativeCl; +Quotation: (+QuotationProper ±Vocative) L-discourse | L-paragraph | L-sentence | L-clause | L-phrase | L-word | ProQuote | Ideophone | L-particPh

(60) Statement:BasicL-factitiveCl,
Paraphrase:Ideophone
i-piakani, piho
HE-CHANGE, SOUND_OF_BLOWING
'He changed him (into a rock); he blew piho.'

The single event, adversative sentence type as named converse. It differs from the anthithetical sentence type discussed below in that the agent in the two clauses must refer to the same participant; this restriction is shown by the agreement rules in Chart 30. It differs further in that the specific event referred to in the L-clause manifesting the statement unit must be the same as that in the L-clause manifesting the converse unit--or the same as that in the first L-clause of the converse unit if the latter is manifested by an L-sentence as in (62). Although the two clauses are alike in that each refers to the same agent of the same specific event, they differ from each other in that a lexeme such as -bita ∞ -be 'frustrative', as in (61), or -si 'purposive', as in (62), occurs in one of the units but not the other. Consequently, the two clauses are the converse of each other.

(61) Statement:BasicL-transitiveCl,
Converse:Cause-EffectSen
aito i-niopë-na kanta inato-këⁿta,
RIGHT-THERE HE-SEE-ME THERE MOTHER-AT

i-nia-be-pë-na no-ga-ig-asega piari
HE-SEE-FRUSTRATIVE...ME I-DRINK-PLURAL... PIARI
'He found me at mother's, but it was in vain
since we were drinking piari (a local alcoholic
beverage).'

(62) Statement:BasicL-motionCl, Converse:
IntentSen
te no-poka-si-tim-a, ni-poke

ni-sitoriakë ora curso de comercio
NOT I-COME-PURPOSIVE...REFLEXIVE,
I-COME I-STUDY THAT COURSE OF COMMERCE
'I didn't come purposelessly; I came to
study the Commerce Course.'

The plural event, series sentence type is named sequential. Ordinarily, the same participant is the agent in all of the constituent units, as in (63), but it is not yet certain whether or not this is always the case. As illustrated in (55) in the beginning of Section 4.5, if one of the clauses is marked for focus, then all of them must be.

(63) Antecedent:L-motionCl, Sequent:L-transitiveCl
ni-ake komatekero, aro na-niake marangi
I-GO DOWNRIVER, NOW I-SEE SNAKE
'I went downriver and then I saw a snake.'

The plural event, circumstance sentence type is named simultaneous (64). If the order of constituent units is reversed from that shown in Chart 30, then the circumstance unit may be optionally marked by kara 'when', as in (65).

(64) Circumstance:L-motionCl, Event:L-transitiveCl
ni-montia-ig-a, i-katsatapai-na
I-CROSS_RIVER-PLURAL..., HE-TAKE_HAND-ME
'When we crossed the river, he took my hand
(to help me across).'

(65) Event:L-transitiveCl, Circumstance:('when',
L-transitiveCl)
no-panigebirike-ri, kara i-komoke
I-WATCH-HIM, WHEN HE-DAM_STREAM
'I watched them while they dammed the stream.'

The plural event, adversative sentence type is named antithetical. The thesis and antithesis are often in negative and positive relation to each other, as in (66).

(66) Thesis:L-quotativeCl, Antithesis:L-transitiveCl
arokemë na-kantakagantabitaka-ri katingasati,
ALREADY_INDEED I-TELL-HIM STRAIGHT,

te i-rogoti-ro
NOT HE-KNOW-IT
'Now, indeed, I explained it to him correctly,
but he didn't understand it.'

If the antithesis is negative, it may be simply a negative L-word with the rest of the clause deleted, as in (67).

(67) Thesis:L-transitiveCl, Antithesis:Negative
i-niabetobaka-ri yamai, te
HE-SEE-HIM NOW, NO (HE WANT)

The implicational event, series sentence type is named cause-and-effect. The cause and the effect may be indicated simply by the juxtaposition of two L-clauses, as in (68); or by the juxtaposition of two embedded L-sentences; or the cause may be marked by -nta 'since', as in (69).

(68) Cause:L-existenceCl, Effect:L-transitiveCl
te o-ntohaigë, arosata n-aga-ig-anake
NOT IT-MANY, A_LITTLE I-BRING-PLURAL-RETURN
'Since there weren't many, I just brought back
a few.'

(69) Effect:L-transitiveCl, Cause:(-nta, L-transitiveCl)
tigeti no-pa-ig-apë,
NOTHING I-EAT-PLURAL-ARRIVING, NOT-SINCE

te-nta no-ma-ig-apëni hetari
I-BRING-PLURAL-ARRIVING FISH
'I didn't eat anything on returning since
I didn't bring any fish back.'

If the cause unit is sentence initial and is marked by -nta, then the effect is marked by iroro or by iroti ora 'that's why', as in (70).

(70) Cause:(-nta, AdversativeSen), Effect:(iroti ora, L-quotativeCl)
te-nta irineni aganë-ri-ni naro-nta
NOT-SINCE HE_HIMSELF SEND-HIM... I-SINCE

agata-ig-ë-ri iroti ora
SEND-PLURAL...HIM, THAT'S WHY

i-kantabitanaka-ri yamai Juan
HE-TALK_AGAINST-HIM NOW JOHN
'Since he didn't send them himself, instead we
sent them; that's why he talks against John now.'

The implicational event, circumstance sentence is named intent. An example of this L-sentence type is given in (71). (Cf. Sec. 4.1.3.2 for discussion of intent in contrast with clause-level purpose.)

(71) Circumstance:L-transitiveCl, Intent:L-transitiveCl
i-age igebatsite hanta, ora i-api
HE-GET HIS_DIRT FAR_THERE, THAT HE-EAT
'He's gone far to get dirt to eat.'

The implicational event, adversative sentence is named conditional. The conditional marker -me occurs if the condition is unfulfilled at the time of narration (72). If the condition is not specified as already fulfilled or unfilfilled, the conditional marker -ka occurs in the protasis and no marker occurs in the apodosis. The order of protasis and apodosis can be reversed when the condition is not specified as already fulfilled or unfulfilled (73).

(72) Protasis:(L-bitransitiv Cl, -me),
Apodosis:(L-factitiveCl, -me)
irorota-me i-më-ri ora somantosi,
IT-CONDITIONAL HE-GIVE-HIM THAT LEAVES,

kero-me i-pegi-ri
NOT-CONDITIONAL HE-CHANGE_INTO-HIM
'If he hadn't given him those leaves, he
wouldn't have changed him (into a rock).'

(73) Apodosis:L-transitiveCl, Protasis:(L-motionCl, -ka)
no-ngomokeni naramani, aro-ka i-robariake
I-DAM_STREAM TOMORROW, NOW-IF HE-CAUSATIVE_FALL
'I'll dam the stream tomorrow if the sun shines.'

L-quotation sentences differ from all the others in that they include an optional vocative unit. (Cf. Sec. 3.5 for the relevance of a vocative to the identification of participants.) A further difference is that whereas an embedded sentence may manifest a unit in the other sentence types, in L-quotation sentences a whole paragraph or discourse may manifest the quotation unit. The vocative may occur after the quotation proper; or it may occur anywhere within it; or, occasionally it may occur preceding it. L-paragraph structure appears to condition whether the quotative precedes the quotation as in (74), or follows it as in (75), or both precedes and follows it (76). The conditioning

factors, however, are not yet clear.

(74) Quotative:L-quotativeCl, Quotation:L-transitiveCl
i-kanti-ri, i-takengani pitsiarineni
HE-SAY_TO-HIM, HE-BURN YOUR_RELATIVE
'He said to him, "Your relative has been burned."'

(75) Quotation:(L-word, vocative), Quotative:
L-quotativeCl
kabeni nani, i-kanke
HARDER BROTHER_IN_LAW, HE-SAY
'"Harder, brother-in-law," he said.'

(76) Quotative:L-quotativeCl, Quotation:L-paragraph,
Quotative:L-quotativeCl
na-kanta-ig-anake, intsome o-ngomota-ig-e
I-SAY-PLURAL...,LET'S_GO WE-DAM_STREAM-PLURAL...

pairiro-ko a-haga-igë, na-kanta-ig-anake
WHATEVER-MAYBE WE-EAT-PLURAL..., I-SAY-PLURAL...
'We said to one another: "Let's go dam the
stream (and get fish). Otherwise, whatever
will we eat."'

4.5.2. Distributional Variants of L-sentences. The system of contrastive L-sentence types was described in Section 4.5.1. The cues to identification of participants are relevant to the contrastive types. In this section on variants no further cues are suggested.

Any variants described in Section 4.5.1 were conditioned by the internal structure of the constituent units. There are other variants, however, which are conditioned by paragraph structure, i.e., by units of higher levels. These variants include unmarked, terminative, successive, and opening sentences. The distribution of each of these variants is shown in Chart 32.

The unmarked, i.e., basic variants are the least restricted in distribution. For example, they may manifest either the setting or the sequent in narrative paragraphs, whereas an opening sentence, i.e., a variant marked for opening, can manifest only the setting. The unmarked variants are the same in form as the contrastive forms described in Section 4.5.1.

Terminative variants are derived from the unmarked variants by the addition of an aspect unit having the meaning 'finish'. In (77) 'finish' is manifested by aro 'now' placed finally. In (78) it is manifested by nitsongaigai 'we finished'. While (78) is grammatically two clauses it is lexemically a terminative variant of the mono-clausal sentence type. (The manifestations of 'finish' are discussed in Section 4.4 as an illustration of a lexeme and its manifestations.)

(77) na-pë na-pë na-pë aro
I-EAT I-EAT I-EAT NOW
'I ate and ate until I finished, i.e., until I had sufficient.'

(78) n-ogi-montia-ig-ai-ri ni-tsonga-ig-ai
I-CAUSATIVE-RIVER_CROSS-PLURAL...HIM I-FINISH-PLURAL...
'We finished helping him across the river.'

Successive variants are derived from the basic variants by the addition of a connective such as aisa 'also' or -kerai 'and yet'. This kind of connective occurs primarily in sentences manifesting the addition unit in enumerative paragraphs and is illustrated in (79). In successive sentences manifesting the sequent unit in narrative paragraphs the connective is usually a substitute which simultaneously manifests connective and some other L-clause unit such as time, location, or instrument. In (80) aito is a location substitute and simultaneously connective.

(79) aisa Anita pi-ake
ALSO ANITA SHE-GO
'Anita went also.'

(80) aito p-agë-na angani
RIGHT_THERE IT-TAKE-ME RAIN
'Right there I was overtaken by a rainstorm.'

Opening variants are derived from the basic sentence variants by moving the time unit of the first constituent clause to initial position. A time unit occurs initially only when the clause in which it is included is paragraph initial and, of course, when it is manifested by a substitute which is simultaneously connective as described above. An example of an opening variant is given in (81).

(81) iriraike yamai tsiopi i-ake Jorge
RECENTLY NOW YESTERDAY HE-GO GEORGE
'Just recently--yesterday, in fact--George went.'

4.5.3. Some Differences Between L-sentences and G-sentences. Some of the contrasts between L-sentence types have been illustrated above. We shall now discuss briefly some of the differences between L-sentences (deep structure) and G-sentences (surface structure).

The dimensions of contrast in L-sentences are the number of events referred to by constituent clauses and the different ways in which events in constituent clauses are related to one another. In G-sentences, on the other hand, they are the ways in which constituent clauses are conjoined, e.g., by parataxis or subordination. Both (82a) and (82b) represent a single simultaneous sentence in their lexemic structure, i.e., the events occur simultaneously.

Grammatically, however, (82a) is a paratactic sentence while (82b) is a simple sentence with a subordinate clause manifesting adjunct.[26]

(82) (a) naroke panigebirike; i-komoke
I_AND WATCH HE-DAM_STREAM
'I watched and he dammed the stream, or I watched him while he dammed the stream.'

(b) no-panigebirike-ri kara i-komoke
I-WATCH-HIM WHEN HE-DAM_STREAM
'I watched him while he dammed the stream.'

L-quotation sentences and G-quotation sentences are another example of the difference between L-sentences and G-sentences: The contrast between direct and indirect quotations is relevant for G-sentences whereas in L-sentences it is not, e.g., 'he told her to go' is an L-quotation sentence which is not distinguished from 'he said, "go"'.

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[26]In several recent articles, Longacre has posited systems of grammatical sentence types in which the contrastive categories are similar to those I have posited as lexemic categories. These articles have been helpful in suggesting possible sentence types, but I consider a type such as "paraphrastic" to be a lexemic sentence and retain such traditional terms as "simple", "complex", and "compound" for G-sentences. One reason for doing so is the fact that two different L-sentence types in Nomatsiguenga, e.g., simultaneous and sequential sentences, may both correspond to a surface structure form such as a simple G-sentence with a subordinate clause or to a form such as a paratactic G-sentence or a compound G-sentence.

Longacre uses "grammatically varied structures" (1964.20) manifesting "the same L-syntagmeme" as a basis for separating lexical and grammatical structure on the clause level. On the sentence level, however, he does not appear to do so, although he mentions the various possible grammatical structures: "This closely-knit sentence type [sequence]...may be transformed to a simple sentence (S_14) with a temporal margin" (Longacre 1966.246), and "when a simultaneous sentence is transformed to a simple sentence (S_14) its first clause is shifted to the temporal margin..." (Ibid., p. 247).

One difference between the lexemic structure I have posited and the lexical structure posited by Longacre may explain his assignment of sentence types such as paraphrastic and antithetical to G-sentence structure. I have posited systems for the language as a whole, apart from a specific discourse, at each level of the lexemic hierarchy. Within a specific discourse these systems are manifested by sequences of "equivalence classes". Longacre, on the other hand, considers lexical constructions such as L-clauses as "relevant to particular texts rather than to a language as a whole" (1964b.18). I agree with him in considering that something on the order of Harris' equivalence classes are the type of construction suitable for discussion of specific discourses. There are also, however, both deep structure relations such as thesis and antithesis and surface structure relations such as conjoining of clauses by connectives which need to be accounted for in systems of the language as a whole.

4.6. The L-paragraph Level. The identification of participants is most difficult in narrative and conversational L-paragraphs until the structure is understood. In contrast to these dynamic paragraphs, the reference is usually clear in static and discursive paragraphs since they include more overt cues such as the occurrence of L-participant phrases listing or naming the participants.

Although the overt cues to identification are fewer in dynamic paragraphs, the structure of the paragraphs themselves, coupled with the social roles characterizing the participants, provides the basis for identification. For example, in one common variant of narrative paragraphs the initiator of a trip or project is the agent or initiator of the events in the setting unit of the paragraph. A less important person follows as the agent of the events in the sequent unit, the initiator is the agent again in the terminus unit, and an inanimate participant is agent in the result unit. Examples of this sequence of roles can be seen in Section 5.1 where Pablo is the initiator in the setting unit, Irocio is the agent in the sequent unit, and Pablo is the agent in the terminus unit of each of the L-paragraphs in the biography discussed there. In other variants a participant who is clearly a leader is the agent of the events in the setting unit and a less important person follows as agent in the sequent.

Similarly, there appears to be an appropriate order, determined by social roles, for participants to speak in conversational paragraphs. For example, in some of the data examined the leader speaks first and others only after he has initiated the conversation. This order should contribute to identification of speaker and addressee, although no details have been worked out.

In discourses in which a participant is characterized as the observer's focus of attention, the focus is on the same participant throughout a paragraph. However, L-clauses marked for focus occur in only one sentence of the paragraph. For example, in the discourse described in Section 5.1 Pablo is the focus of attention and, consequently, is referred to as focus and simultaneously beneficiary or referent in the clauses of one sentence in each paragraph.

We turn now to consider the cues to identification of participants in narrative paragraphs against the background of the system of L-paragraphs as a whole.

The system of paragraphs comprises action-oriented paragraphs in contrast with report-oriented paragraphs (columns in Chart 31). Action-oriented paragraphs are centered around actions and the participants in them. Report-oriented paragraphs, on the other hand, are centered around a report of a state of affairs, although they do not exclude actions, e.g., verbal actions in conversational paragraphs.

CHART 31.--System of L-paragraphs.

	Action-oriented	Report-oriented
Dynamic	1. Narrative	2. Conversational
Static	3. Enumerative	4. Descriptive
Discursive	5. Explanatory	6. Argumentative

A further set of contrasts which intersects with the preceeding comprises dynamic, static, and discursive paragraphs (rows in Chart 31). In dynamic paragraphs there is a flow of actions or reported statements, whereas in static paragraphs the action or report is with reference to a moment of time. In discursive paragraphs the action or report is set forth as premise and conclusion.

The contrastive forms of the paragraphs are shown by formulas in Chart 32. The lists of manifesting units are not exhaustive and, consequently, some of the contrasts are not clearly shown. There are, however, certain characteristic manifestations which help to distinguish one paragraph type from another. For example, in a narrative paragraph an intent sentence, which is included in "O/UCircumstanceSen" and "S/USen" in Chart 32, can only manifest a setting or sequent unit; it cannot manifest a terminus or result unit.

The contrastive forms of L-paragraphs are analogous to those of L-clauses. In Section 4.1 the so-called "logical subject" and "logical object" were posited as the lexemic, deep structure units agent and goal whereas in Section 3.1 "grammatical subject" and "grammatical object" were posited as the grammatical, surface structure units subject and complement. A similar kind of deep structure versus surface structure distinction is carried into this section on L-paragraphs: the order of units in L-paragraphs is the logical order rather than the actual, surface order in which the clauses were narrated.[27] In order

[27]A similar procedure is suggested by Wheeler (1966.7) for study of discourse structure: "Label each event as E1, E2...to plot the logical sequence of events." He does not, however, posit a paragraph level intermediate between sentence and discourse as I have done here.

Similarly, Martin mentions two kinds of order in rhetoric:

> that which records the actual progression of events (real chronology), and that which creates a progression which is not an action of the object but one of the observer (subjective chronology). Real chronology may be manipulated for effect... Subjective, or psychological, chronology is already a manipulation...(Martin 1958.135).

The chronological order he describes appears to parallel closely the order posited here for lexemic structure, but it is not clear whether the progression of the observer should be equated with the surface order in a discourse or whether this is a third kind of order which has not yet been investigated in Nomatsiguenga. (Cf. fn. on p.94 for discussion of a possible relation of the observer to distribution of information.)

to arrive at the structure of L-paragraphs, L-clauses, and L-sentences, the narrative is rearranged in "logical order". In dynamic paragraphs, as one class of L-paragraphs, the logical order is the chronological order of the actions, with the exception of some intent units and some simultaneous actions.[28]

While the logical order is posited as the order of L-paragraphs, the surface order in which the story was narrated is posited as the order of G-paragraphs (cf. Sec. 3.6). Comparison of the examples below shows that the degree of difference in lexemic order and grammatical order varies from one paragraph type to another.

In the examples given below of each L-paragraph type, the free translation is given first for the convenience of the reader. Just as the boundaries of L-clauses and G-clauses are not always co-terminous, so also the boundaries of L-paragraphs and G-paragraphs do not always coincide. Therefore, the complete L-paragraph is given in its logical order with constituent units identified in the line above. This is followed by the same portion of text in its grammatical order, i.e., the surface order, although it may include more or less than a complete G-paragraph. Arabic numerals indicate the order of G-clauses and Roman numerals the order of G-sentences. The same Arabic numerals are used for the corresponding L-clauses, but the numbers are not always in sequence because of the rearrangement into logical order.

The dynamic, action-oriented paragraph type is named narrative. An example of this type is given in (83).

(83) 'Then father sent us for dirt with which he would fill in the dam. We were the ones who went and brought dirt for him (while father was the one who filled in the dam). He continued to fill it in until he had finished. And then the stream dried up.'

Setting:OIntentSen
[1,3] aro i-gata-si-ki-na-ro [2] ora
i-ti-an-taka-ro kibatsi

Sequent:UIntentSen
[4] ni-aa [5,6,8] n-aga-si-të-ne-ri narokerai
[7] ora i-ti-an-taka-ro aro paba

Terminus:TSequentialSen
[9,10] i-kanti-ro [11,12] i-tiake-ro
[13] i-tsonke-ro aro

Result:TMono-clausalSen
[14] aroke i-o-biriatë-ro

[28]The logical order posited for static and discursive paragraphs is tentative since the criteria are not so clearcut as the criterion of chronological order for dynamic paragraphs.

CHART 32.--Contrastive forms of L-paragraphs. The numbered sections correspond to the cell numbers in Chart 31. The differences in constituent units rather than the order of units is the basis of contrast in L-paragraph types. Sentences manifesting paragraph units are listed by class, i.e., by categories of the dimensions of contrast shown in Chart 29, rather than by name of specific sentence type except where the manifestation appears to be limited to specific types.

1. Narrative	= +L-setting[a]	+Sequent	+Terminus	±Result
	O/UMono-ClSen O/USequenceSen O/UCircumstanceSen O/UL-quotativeSen	S/USen USenCluster Enumerative Para	TMono-ClSen TSequentialSen TSenCluster	TMono-ClSen
2. Conversational	= +Initiating Utterance	+Initiating Response	+Sequent Utterance[n]	±Sequent Response
	O/UL-quotativeSen	S/UL-quotative Sen	S/UL-quotative Sen	S/UL-quotativeSen
3. Enumerative	= ±L-setting	+Specification	+Addition of participants[n]	±Comment	±Summation
	O/USeriesSen O/UCircumstanceSen	S/USingleActionSen USequentialSen	SSingleActionSen SSequentialSen	Discursive Para	S/TSingle ActionSen
4. Descriptive	= +L-setting	+Description of participants[n]	±Reason	
	O/UMono-ClSen O/USimultaneousSen	USingleActionSen UPluralActionSen	SCause-EffectSen	

CHART 32.--Continued

5. Explanatory	=	+Situation UCircumstanceSen UL-quotativeSen UMono-ClausalSen	+Conclusion^{n} UAdversativeSen UParaphrasticSen ExplanatoryPara Cause-EffectSen^{n}
6. Argumentative	=	+Premise USen	+Conclusion U/S/TSen ArgumentativePara

[a]The prefix L- is added to "setting" to avoid confusion with the setting manifested by adverbs in grammatical paragraphs.

[I-1] aro i-gata-si-ki-na-ro [2] ora i-ti-an-
NOW HE-SEND-PURPOSIVE...ME-IT THAT HE-FILL_IN-

taka-ro kibatsi [II-3] i-gata-si-ig-ë-na-ro
INSTRUMENTAL...IT DIRT HE-SEND-PURPOSIVE-PLURAL...

[4] ni-aa [5] n-aga-si-të-ne-ri
ME-IT I-GO I-BRING-PURPOSIVE...BENEFACTIVE-HIM

[III-6] n-aga-si-të-ne-ri
I-BRING-PURPOSIVE...BENEFACTIVE-HIM

[7] ora i-ti-an-taka-ro aro paba
THAT HE-FILL_IN-INSTRUMENTAL...IT NOW FATHER

[IV-8] n-aga-si-kë-ne-ri narokerai
I-BRING-PURPOSIVE...BENEFACTIVE-HIM I_IN_CONTRAST

[V-9] i-kanti-ro [10] i-kanti-ro [11] i-tiake-ro
HE-DO-IT HE-DO-IT HE-FILL_IN-IT
[12] i-tiake-ro [13] i-tsonke-ro aro
HE-FILL_IN-IT HE-FINISHED-IT NOW

[VI-14] aroke i-o-biriatë-ro
NOW_AND HE-CAUSATIVE-DRY_UP-IT

There are variants of narrative paragraphs which are conditioned by the unit which the paragraph manifests--usually a unit in an L-chapter or an L-discourse. For example, when a narrative paragraph manifests the introduction to the discourse either the terminus unit may be omitted, or a single L-sentence may simultaneously manifest the setting and terminus units. In the latter case, the result unit is almost always omitted, and the order of units is as follows:

[+Setting ⁀Terminus +Sequent]

An example in which the terminus is omitted is given in (84).

(84) L-Setting:OMono-ClSen, Sequent:UMono-ClSen
kani i-komota-kagi-na pabati. no-giatanë-ri
OTHER-DAY HE-DAM-STREAM-ACCOMPANIMENT-ME FATHER.
I-FOLLOW-HIM.
'The other day father dammed the stream with
me. I followed him.'

Variant manifestations of narrative L-paragraphs, resulting from different readings of the formula in Section 1 of Chart 32 or resulting from the different manifestations of the constituent units, occur in the specific discourses discussed in Chapter 5 and are, therefore, not discussed here. Other variants which are conditioned by the number of participants in the plot, their social roles, and the observer's focus of attention will also be illustrated

in Chapter 5.

The dynamic, report-oriented paragraph type is named conversational. When part or all of a dialogue is embedded in a monologue, then this paragraph type occurs. An example of a conversational paragraph within a myth is given in (85).

(85) 'He called to him: "Brother-in-law, why did you change your nephew on me, you worthless person? Come, I'm going to kill you." He answered: "No, don't kill me, brother-in-law. Instead nail me down with a pifayo tree stake so that I'll turn into a pifayo tree. Then you can eat my fruit."'

Initiating Utterance:OL-quotativeSen
[1] i-kaimë-go-tapë-ri [2] nani po-pegatanai-
na-ri-niko pitinerikimingarani [3] hoke
[4] no-pasati-mi.

Initiating Response:UL-quotativeSen
[10] i-kanë-ri [5,6] ma kero pi-pasati-
na nani [7] po-pëakitigi-na iroro këri-tsobiteki
[8] aro këri no-meganëm-a [9] aro po-pë-na-niri

[I-1] i-kaimë-go-tapë-ri [2] nani po-pegatanai-
HE-CALL-INCLUDED...HIM BROTHER_IN_LAW YOU-CHANGE_INTO-

na-ri-niko pitinerikimingarani
(BENEFACTIVE)-ME-HIM... YOUR_NEPHEW_YOU_WORTHLESS_
PERSON

[3] hoke [4] no-pasati-mi [II-5] ma kero
COME I-KILL-YOU NO NOT

pi-pasati-na nani [6] kero pi-pasati-na
YOU-KILL-ME BROTHER_IN_LAW NOT YOU-KILL-ME

[7] po-pëakitigi-na ora iroro këri-tsobiteki
YOU-NAIL-ME (THAT)[29] IT PIFAYO_TREE-STAKE

[8] ora aro këri no-meganëm-a
(THAT) NOW PIFAYO I-WILL_CHANGE_INTO-REFLEXIVE

[9] aro po-pë-na-niri [10] i-kanë-ri
NOW YOU-EAT-ME... HE-SAY_TO-HIM

[29]Hesitation forms are enclosed in parentheses in the literal translation. In [2] benefactive is enclosed in parentheses since it is manifested by zero.

The static, action-oriented paragraph type is named enumerative. In this type the various participants who took part in an action are enumerated, or the actions of two or more participants are contrasted. An example of this paragraph type is given in (86).

(86) 'Then I left there. We all went--Harold, the Senora, Julian--they followed me. Also Julian's wife, and Anita, and Mori went. Julian just went along; he wasn't sick, but his wife was. Thus, all of us went together.'

L-setting:OParaphrasticSen
[1] aro no-paniaa [2] ni-atahi

Specification:UParaphrasticSen[30]
[3] ni-a-ig-ai antagaisati Aroro Señora Julian
[4] io-giatë-na

Addition:SMono-clausalSen
[5] aisa iina pi-ake

Addition:SMono-clausalSen
[6] aisa Anita pi-ake

Addition:SMono-clausalSen
[7] aisa Mori i-ake aro

Comment:EnumerativePara
[8,10] Julian i-ata-si-ka iriro [9] teni i-ria-naitë [11] ora-ri iina iroro hanaitëngitsi

Summation:SParaphrasticSen
[12] aro na-karata-ig-ë [13] ni-a-ig-ë antagaisati

[I-1] aro no-paniaa [2] ni-atahi [II-3] ni-a-ig-ai
NOW I-LEAVE I-GO I-GO-PLURAL...

antagaisati--Aroro, Señora, Julian [4] io-giatë-na
ALL HAROLD SENORA JULIAN HE-FOLLOW-ME

[III-5] aisa iina pi-ake [IV-6] aisa Anita pi-ake
ALSO HIS_WIFE SHE-GO ALSO ANITA SHE-GO

[V-7] aisa mori i-ake aro [VI-8] Julian i-ata-si-k-a
ALSO MORI HE-GO NOW JULIAN HE-GO-PURPOSIVE...REFLEXIVE

[30]In Section 4.5 it was specified that the agent in each clause of a paraphrastic sentence refers to the same participant. The example here shows that this should be qualified as follows: when plural participants are agent in the first clause, then one of them can be agent in the second.

iriro [9] teni i-rianaitë [10] i-ata-si-k-a
HE NOT HE-SICK HE-GO-PURPOSIVE...REFLEXIVE

[11] ora-ri iina iroro hanaitëngitsi [VIII-12] aro na-karata-ig-ë
SHE-BUT HIS_WIFE SHE SICK NOW I-GO_TOGETHER-PLURAL

[13] ni-a-ig-ë antagaisati
I-GO-PLURAL...ALL

The static, report-oriented paragraph type is named descriptive. It is similar to enumerative paragraphs in that it enumerates items, but differs chiefly in that it enumerates characteristics of a single participant or place, while an enumerative paragraph enumerates various participants in an action. An example of the descriptive paragraph type is given in (87).

(87) 'I looked around upon arrival. Oh! there are very many of Harold's people; there are truly very many. There are many planes, many houses, and truly many children.'

L-setting:UMono-clausalSen
[1] na-nëtsëmapë

Description:UParaphrasticSen
[2] të iriro ira i-tohainga Aroro [3,4] e tohainisonoriginte tohanini i-matsigengahegi Aroro

Description:UMono-clausalSen
[5] tohaiti arakomentotsi

Description:UMono-clausalSen
[6] tohaiti pongotsi

Description:UMono-clausalSen
[7] hanekihegi tohainisono

[I-1] na-nëtsëmapë [II-2] të iriro ira i-tohainga
I-LOOK_UPON_ARRIVAL OH! HE THAT HIS-MANY_PEOPLE

Aroro [III-3] e tohainisonoriginte [4] tohaini
HAROLD OH! MANY_TRULY_VERY MANY

i-matsigengahegi Aroro [IV-5] tohaiti
HIS-PEOPLE_PLURAL HAROLD MANY

arakomentotsi [V-6] tohaiti pongotsi
PLANES MANY HOUSES

[VI-7] hanekihegi tohainisono
CHILD_PLURAL MANY_TRULY

The discursive, action-oriented paragraph type is named explanatory. The constituent units in this paragraph type are related as situation and conclusion. An example is given in (88).

(88) 'He had probably never seen one (a howler monkey). He said it looked like a person. That's why when he saw it just now he didn't want it. He was afraid of it and didn't want to eat it; that's why he threw him away.'

Situation:UMono-clausalSen, ObserverComment[31]
[1] teeka irasi i-ranëë-ri [2] na-hiti

Conclusion:ExplanatoryPara =
Situation:USpeechSen
[6] kantaanta matsigenga [7] i-ngane

Conclusion:Cause-EffectSen
[3] arotsi kara i-niabetobaka-ri yamai
[4] te [5] i-tsoro-go-batigi-ri

Conclusion:Cause-EffectSen
[8] te i-ragabintsati-ri [9] iroro i-hogë-tahi-ri

[I-1] teeka irasi i-ranëë-ri [2] na-hiti
NOT_IF HIS HE-SEE-HIM I-THINK

[II-3] arotsi kara i-niabetobaka-ri yamai [4] te
NOW_WHY WHEN HE-SEE-HIM NOW NO

[III-5] i-tsoro-go-batigi-ri [IV-6] kantaanta
HE-FEAR-INCLUDED...HIM LIKE

[31]The constituent units of L-paragraphs listed in Chart 32 do not include observer comments such as nahiti 'I think' since their occurrence is not obligatory nor limited to any one L-paragraph type. However, explanatory paragraphs as a whole could be considered observer comments, i.e., they represent the observer's judgment regarding the events narrated. Similarly, implicational L-sentences and reason and purpose on the clause level could be interpreted as representing the observer's judgment regarding a part of the plot.

Units having an observer component of meaning are considered to be simultaneous with those having a plot component of meaning rather than in linear order with them. For example, the English "sentence adverbial" hopefully expresses the observer's view about the whole of the remainder of the sentence he will come. In surface structure the two elements are in linear order, of course, but in deep structure they can be viewed as analogous to intonation which occurs simultaneously and suprasegmentally with segmental phonological units. This interpretation of the place of units having observer rather than plot meaning might help to explain the indeterminacy discussed in Section 4.1.3.2 in assigning purpose, reason, and cause to a particular level. In contrast, units such as agent, qualifier, sequent, etc. which have a plot component of meaning more clearly belong to one level or another.

matsigenga [7] i-ngane [V-8] te i-ragabintsati-ri
PERSON HE-SAY NO HE-EAT_WANT-HIM

[9] iroro i-hogëtahi-ri
THAT'S_WHY HE-THROW-HIM

The discursive, report-oriented paragraph is named argumentative. Although the contrast with explanatory paragraphs is not clear-cut, it is posited as contrastive since the explanatory forms such as 'that's why' do not occur in it. An example of an argumentative paragraph is given in (89).

(89) 'There's nowhere to get money to pay for my trip. Therefore, I won't go. I'll just send my wife, but I'll work here in order to repay what you spend on her.'

Premise:UIntentSen
[2] teni ka n-aganë-ri kireki [3] ira
no-pëna-ben-tanëm-a [4] ka na-hake

Conclusion:ArgumentativePara =
Premise:UAntitheticalSen
[1] kero ni-ati [5] aro na-gake-ro iroonti
nahina

Conclusion:SIntentSen
[6] narokerai tarobakaa-ben-tageke-ro-ni
nahina yaka [8] kara po-pëna-benke-ro
[7] ora no-pëna-ben-tahi-ro

[I-1] kero ni-ati [2] teni ka n-aganë-ri kireki
NOT I-GO NO WHERE I-GET-HIM MONEY

[3] ira no-pëna-ben-tanëm-a [4] ka na-hake
THAT I-PAY-REFERENTIAL...REFLEXIVE WHEN I-GO

[II-5] aro na-gake-ro iroonti nahina
NOW I-SEND-HER SHE_JUST MY_WIFE

[III-6] narokerai tarobakaa-ben-tageke-ro-ni
I_IN_CONTRAST WORK-REFERENTIAL...HER...

nahina yaka [7] ora no-pëna-ben-tahi-ro
MY_WIFE HERE THAT I-PAY-REFERENTIAL...HER

[8] kara po-pëna-ben-ke-ro
WHEN YOU-PAY-REFERENTIAL...HER

4.7. The L-chapter Level. In a discourse in which there are several chapters, there may be different sets of participants in each chapter. Although there may be ten or more animate participants and additional inanimate participants in a narrative discourse, they are characterized by their chapter roles

and the characterization in turn helps to identify them.

In myth the roles of participants in each chapter are "villain"--which causes a problem, "victim" or a group of victims, and "mediator" or a group of mediators. These roles are analogous to functions such as agent and goal on the clause level, i.e., they are chapter-level characterizations of participants. Once a participant has been characterized as "villain" or "victim" on the chapter level, then the agent of a particular action referred to in an L-clause can sometimes be identified without further cues since some actions are appropriate for villains whereas others are more appropriate for victims.

The following paragraphs illustrate some of the common orders in which participants performing some of the different roles in a chapter of a myth are introduced:

The villain of each chapter in a myth is usually introduced first and the "mediator" is introduced later--often not until the mediation unit of the chapter. For example, in the story about Mosquito who used to eat people, Mosquito is introduced first. The way he tempted people--the victims--to visit him since he always had plenty of fish for them to eat and then killed them and ate them while they were in a deep sleep from overeating is narrated first. Later a "mediator", one of the people who realized what was happening to his relatives, is introduced.

In one version of the Moon myth, however, Moon who is the mediator is introduced first. Illustration (90) gives the introduction and chapter summary of this myth.

(90) irari basini ira mantsiakori pingana ika
THAT_BUT ANOTHER THAT MOON YOU_SAY THIS

mantsiakori. ira hirainisati ingantingani
MOON. THAT ANCIENT_ONES HE_IS_SAID_OF

hiraira, teni ini kaniri. teni ini kaniri
LONG_AGO, NOT EXIST MANIOC. NOT EXIST MANIOC

hiraira. iriro oganëro kaniri mantsiakori.
LONG_AGO. HE PUT_IT MANIOC MOON.

'Another story about the moon you say (to tell). It is said of him (the moon) that the ancient ones long ago did not have manioc. The moon is the one who made manioc."

The moon's role as mediator is made clear in the summary where it is stated that he is the one who made manioc for people to eat. The details of how he made it, however, are not given until the appropriate place later in the chapter.

In a new chapter in both biography and myth, at least one participant is included who was referred to in some preceding chapter. This carry-over of a participant is one of the links between the two units. For example, there are several chapters in an account of events related to the life of the narrator's father. The father is referred to in each chapter, i.e., he is among the set of participants in each chapter, although he is not a prominent character in any of them. On the other hand, Mabanga and Niaco are prominent in the first chapter, but are not among the set of participants in succeeding chapters.

We turn now to consider the structure of L-chapters as a whole as background for the above statements about participant roles within a chapter.

The system of structures at the L-chapter level comprises temporal chapters in contrast with climactic chapters. The former manifest episodes in biography and exposition, whereas the latter manifest episodes in folklore, i.e., in myth and indoctrination discourses. The discussion here will be limited to chapters manifesting episodes in biography and myth.

A temporal episode unit occurs in biography and is manifested by a temporal chapter narrating a succession of events which comprises a phase of the total story. (Cf. Section 5.1 for illustration and detailed analysis of a temporal chapter.) A new phase is often marked by a stated change of time, location, or direction. For example, in the biographical story of the Anapati Trip the two major divisions are the journey to Anapati and the return journey. One informant considered the return journey to be 'almost another story', i.e., a temporal chapter.

In contrast, a climactic episode unit occurs in myth and is manifested by a climactic chapter narrating a series of events which build up to a climax.[32] For example, in the Mabireri myth (described in detail in Sec. 5.2) their decision to burn him, his burning, and the ascent of his ashes into heaven is one climactic chapter; the relative's changing the baby into a rock, the brother-in-law's pursuit of him and nailing him down so that he becomes an edible fruit is another climactic chapter manifesting a further episode. Another version of the myth includes still other climactic chapters.

The contrastive form of each of the L-chapter types is shown in Chart 33.

Both kinds of chapters vary in the following ways in addition to the occurrence or non-occurrence of optional units:

(a) When there is only one episode in a discourse, then the manifestation of the summary unit of the L-chapter may simultaneously manifest the introduction unit of the L-discourse. For example, matsigenga pihiri hiraira 'the

[32]Further data may show that neither of these types of chapters is limited to the distribution stated here. For example, some biographies could conceivably include climactic chapters.

Although there is a temporal order in the climactic chapters, the distinguishing property is not time but the three phases of a series of events--conflict, mediation, and resolution.

CHART 33.--Contrastive forms of L-chapters.

L-temporal chapter =	±Summary Narrative Para	+Succession^{n} DynamicPara^{n} ParaCluster^{n} = (+DynamicPara ±StaticPara) TemporalCh			
L-climactic Ch =	±Summary Narrative Para	±Situation Narrative Para Enumerative Para	+Conflict Dynamic Para^{n} Climactic Chapter	+Mediation Dynamic Para^{n} Climactic Chapter	+Resolution Narrative Para^{n} Climactic Chapter

bat used to be a person' manifests the introduction unit of the discourse and simultaneously the chapter summary unit in one of the Bat myths in the data. Since it manifests both, it can be an L-existence clause (cf. Chart 34) rather than a narrative L-paragraph which otherwise manifests a chapter summary.

(b) If there is a time or direction sequence between conjoined episodes, then variation of the chapters manifesting each results; the included units within each chapter must be consonant with the sequence. For example, the actions of the first chapter of the trip to Anapati include aspectual units meaning 'going away from the point of reference', whereas the actions of the second chapter include aspectual units meaning 'returning to the point of reference'. There is apparently no such restriction when conjoined episodes are not in sequential relation.

The order of units in climactic chapters may be that given in the formula in Chart 33 or it may be as follows:

[±Summary ±Situation +Resolution +Conflict +Mediation].

Examples of this order are insufficient to show whether it is a conditioned or free variant. In the two myths in the data in which this order occurs, the resolution unit is manifested by an embedded climactic chapter; this manifestation may possibly be obligatory for this order.

Variations of the conflict and resolution units in climactic chapters may occur as a consequence of the occurrence of the reportive unit indicating the observer's uninvolved attitude toward the events narrated. (Cf. Section 6.1 for discussion of the place of the reportive unit in discourse structure.) A sentence such as (91), which manifests the reportive unit, may occur at one or more places within the conflict or resolution units.

(91) iriro-ko kantagekëngitsia; i-kanke ira
HE-MAYBE SAY ; HE-SAY THAT

kingaigi-ri ira kingatsi.
NARRATE_ABOUT-HIM THAT NARRATE.
'That's what the story-teller told about him.'

While this unit is obligatory in the myth as a whole, the exact places in which a manifestation of it occur are apparently optional; the only restriction is that it cannot occur within the mediation unit.

In addition to the variations in L-chapters discussed in the preceding paragraphs, there are many variations in content. The latter are so great in climactic chapters that the two types of L-chapters posited might conceivably be treated as a primary division comparable to the division of discourse types into monologue and dialogue (cf. Sec. 6.1), with further subdivisions within each. Other alternatives would be (a) to posit more constituent units in the chapters, or (b) to posit constituent units within the units now posited, e.g., to posit included units within the conflict unit. This latter course would result in a proliferation of levels which can apparently be avoided by positing embedded climactic chapters as a variant manifestation of some of the units. The former course would be closer to folklore structure posited by Dundes (1964) and Propp (1958) and might ultimately prove to be more useful.

4.8. The L-discourse Level. On the discourse level the participants in the plot of the events narrated are those included in the sum of the sets of participants in the constituent L-chapters. These participants will not be discussed further here.

There are other participants in the discourse as a whole, however, who are related to the speech event, i.e., they must be identified as related to the observer rather than to the plot.

(92) pi-ngemisanti-na yamai i-komoti santobari tsiopi
YOU-LISTEN-ME NOW HE-DAM_STREAM SANDOVAL YESTERDAY
'listen now (I'll tell you about) Sandoval's
damming the stream yesterday'

In (92) pi- 'you' and -na 'I' are participants in the speech event, i.e., speaker and addressee, whereas Sandobari is a participant in the narrated event, i.e., the plot.

The speaker as observer in myth takes an uninvolved attitude toward the events narrated. One way in which he indicates this attitude is through the reportive unit in which a former story-teller, another participant related to the speech event, is introduced.

(93) yamai hirai i-kengitsatomoetinaro naro ora
NOW BEFORE HE-NARRATE_IN_PRESENCE_OF_ME_IT ME

na-kemantabita naro arosatapage
THAT I-LISTEN I A_LITTLE

'Now (the story-teller) told in my presence
that which I listened to a little (and will
now tell you).'

In (93) the story-teller is referred to as 'he', but in (99) he is referred to by an L-participant phrase giving his name and in (102) as 'the story-teller from upriver'.

The story-teller referred to by the speaker as well as the speaker and addressee can usually be identified by the fact that they are referred to only in L-quotative clauses in which actions such as kema 'hear', kinga 'narrate', and koman 'advise' occur, whereas the participants in the plot may be referred to in any of the L-clause types.

We turn now to the lexemic structure of discourse as a whole since it is the highest hierarchical level with which we are concerned for the identification of participants.

The system of narrative discourses is discussed in Section 6.1. In this present section we are only concerned with the lexemic structure of biography and myth. The contrastive lexemic forms of these two types are shown in Chart 34, but only constituent units related to the plot are listed there. Consequently, the contrasts are not clear-cut since units related to the observer and social setting must be added for clear discourse-level contrasts.

CHART 34.--Contrastive lexemic forms of biography and myth. Only constituent units related to the plot are listed.

L-biography	= +Introduction	+Temporal Episode^{n}	±Elucidation	+Closure
	L-particPh L-sentence Narrative Para	Temporal Ch	Explanatory Para	TSingle ActionSen
L-myth	= +Introduction	+Climactic Episode^{n}	±Elucidation	+Closure
	L-particPh L-sentence	Climactic Ch	Explanatory Para	TSingle ActionSen

The following variants of biography and myth as L-discourses result from different readings of the formulas in Chart 34:

(a) The occurence or non-occurrence of the optional elucidation unit is one kind of variation. If the elucidation unit occurs after closer in myth, then the closure unit is repeated. If, on the other hand, a discourse-level elucidation occurs within a chapter the constituent units of the chapter are discontinuous.

(b) The optional occurrence of more than one episode unit is yet another variant of discourse. There is no apparent structural limitation to the number of temporal or climactic episodes which may be conjoined in a discourse. For this reason, each is marked with an n superscript in Chart 34.

The choice of units from other levels which may manifest the constituent units of the L-discourse level yields further variations in the forms of both biography and myth. The variant manifestations of these units are shown in Chart 34 in columns beneath the functions by which the constituent units are named. Details of the internal structure of manifesting forms have been described in preceding sections of this chapter on lexemic structure, but in the following paragraphs some of the variant manifestations of constituent units will be discussed and illustrated. Episode units, however, will not be discussed here; they are illustrated and analyzed in Chapter 5.

The introduction unit may be manifested by an L-participant phrase stating the title as in (94), by an L-sentence (95), or narrative paragraph (96) summarizing the narrative, or by an L-sentence stating the situation as in (97).

(94) ira sanguiro 'that snail'

(95) i-o-sebatanaka tsiapaini hirai kibatsi
HE-CAUSATIVE-TO_QUAKE CHAPAI LONG_AGO EARTH
'Chapai caused an earthquake long ago'

(96) kani i-komota-kagi-na pabati. no-giatanë-ri.
OTHER_DAY HE-DAM_STREAM-ACCOMPANITIVE-ME FATHER.
1-FOLLOW-HIM.
'The other day Father dammed the stream with me.
I followed him.'

(97) matsigenga pihiri hiraira
PERSON BAT LONG_AGO
'The bat used to be a person.'

In some stories recorded especially for my benefit in the early weeks of field work, the narrator accomodated the manifestation of the introduction unit to my lack of understanding by using a Spanish phrase rather than Nomatsiguenga: ahora este cotomono 'Now, this howler monkey.'

When the narration is preceded by other narrations, the introduction unit is optionally manifested by a variant which links the story to the preceding discourse and yet indicates that a new discourse is beginning as in (98).

(98) ira-ri basini ira mantsiakori...
THAT-BUT ANOTHER THAT MOON...
'Now there's another story about the moon...'

In (99) the introduction not only indicates that a new discourse is beginning, the old story-teller is referred to resulting in yet another variant.

(99) aiti basini una cuenta i-ngane ira ogetianëki
THERE_IS ANOTHER A STORY HE-SAY THAT

isionkareki kara hirai. i-poke
OGETIANEKI ISIONKAREKI WHEN BEFORE. HE-COME

hirai ira hitagantanë ispaniori
BEFORE THAT NAME SPANIARD

'There is another story which Ogetianeki Ishonkareki used to tell about the coming of the Spaniards.'

A further variant occurs when the speaker and addressee, who are participants in the speech event, rather than in the plot events, are referred to in the introduction as in (100).

(100)iri no-ngomantë-mi yamaika antirisi ka i-kanka
HE I-ADVISE-YOU NOW ANDREW WHEN HE-DO

hiraini ka i-hanaitë
BEFORE WHEN HE-SICK

'Now I'll tell you about what happened to Andrew some time ago when he was sick.'

The elucidation unit is manifested by one or more explanatory paragraphs (cf. Sec. 4.6 for a description of explanatory paragraphs). A paragraph taken from the Mosquito myth is given in (101) as an example of a manifestation of elucidation. Since the purpose here is to illustrate the unit it manifests rather than to discuss its internal structure, the paragraph is given in the surface form in which it was spoken rather than in its logical order.

(101)irooti ora inanta monio-niro yamëka,
THAT'S_WHY THAT THERE_ARE MOSQUITOES-BAD NOW

inanta yamë monio arokenta i-tonganë. aroke
THERE_ARE NOW MOSQUITOES BECAUSE HE-EXPLODE ALREADY

i-tongane kanta aroke i-porokanë atiroko
HE-EXPLODE THERE ALREADY HE-GO EVERY_PLACE

i-ngantahi-ri. irooti ora inanta
HE-WOULD_SAY-HIM THAT'S_WHY THAT THERE_ARE

monio-niro yamai. matsigenga i-ngantingani hiraira
MOSQUITOES-BAD NOW PERSON HE-IS_SAID_OF BEFORE

i-aagantini monio-niro i-kanti-ri-ni kingëgoti-ri
HE-EAT MOSQUITO-BAD HE-SAY_ABOUT-HIM TOLD_ABOUT-HIM

ka hirai
THERE BEFORE

'There are pesky mosquitoes now because Mosquito exploded and went in all directions. That's what they used to say. That's why there are mosquitoes now. He used to be a person and ate people. That's what the old story-teller said.'

The closure unit may be manifested by a terminative sentence: aro o-karati NOW IT-CUTS_OFF 'that's all'. Or, just as the introduction unit is sometimes manifested by a Spanish phrase to accommodate to my lack of understanding so also the closure is sometimes manifested by a Spanish phrase: ya 'already' or ese no mas 'this no more'. Whether it is manifested by Nomatsiguenga or Spanish, however, it occurs obligatorily in well-formed narratives. The informant's question 'didn't he say "that's all"?'--after listening to a narrative where it was omitted is one evidence of its obligatory nature.

Further variations of the closure unit may occur in myth when a manifestation of the reportive unit occurs within it. For example, the first sentence in (102) is a manifestation of the reportive unit, whereas the second is the closure proper.

(102) aro i-kanti ira kingaigi-ri na-kemaigi-ri
NOW HE-SAY THAT NARRATE-HIM I-LISTEN_TO-HIM

kinga-mo-taiki-na-ri ira tionkësati na-kemaige
NARRATE-IN_PRESENCE_OF...ME-HIM THAT UPRIVER_PERSON I-LISTEN.

aro o-karati yamai
NOW IT-CUT_OFF NOW

'Now that upriver person told about him when I was listening, and that is what he said. That's all.'

4.9. Summary of the Lexemic Hierarchy. In Sections 4.1 through 4.8 the ways in which structures of each level contribute to the identification or characterization of participants were discussed first and then related to the system of

the level as a whole. In this section the order will be reversed; a summary of typical functions of constituent units of each level will be given first and followed by a summary of the ways participants are identified and characterized by lexemic forms.

Just as the levels of the grammatical hierarchy are distinguished from one another by the different functional relations obtaining between constituent units of constructions on each level, so also the levels of the lexemic hierarchy are distinguished by functional relations. In contrast to the surface structure functions of grammatical units, however, the functions of lexemic units are deep structure functions. They reflect "real-world" universal functions, e.g., agent and goal on the L-clause level, although the linguistic deep structure functions posited here are not intended to be a list of universal functions.[33]

The functions of both optional and obligatory units are included among those by which the levels are distinguished. Some of the typical functions of units at different lexemic levels are:

L-discourse level--introduction, episode, elucidation, closure;

L-chapter level--summary, conflict, mediation, and resolution;

L-paragraph level--setting, sequent, terminus, result, or premise and conclusion;

L-sentence level--circumstance, sequent, paraphrase, statement, and converse;

L-clause level--agent, goal, instrument, focus, initiator, beneficiary, purpose, and indirect goal;

L-phrase level--possessor and possessed or qualifier and qualified;

L-word level--kin relation and gender;

Lexeme level--no constituent functions but features such as generation, and parallel or cross relation.[34]

In Section 3.8 it was pointed out that there are three kinds of contribution to the identification of participants made by grammatical forms: the occurrence of certain units, the agreement rules between constituent units of

[33]Although no claim is made that these functions are those which should be posited as universals, the Nomatsiguenga L-clause functions or "cases" described in this chapter could be considered indicative of the need to add to those posited by Fillmore (1967) for an adequate universal treatment. Just as one does not expect to find all of the Jakobsonian phonological distinctive features in any one language, so one would not expect to find all of the cases in the lexemic clause system of any one language.

[34]Specific constructions at each level of the lexemic hierarchy can be considered X-level lexemes. However, I have reserved the term "lexeme" for the lowest level of the hierarchy and used the qualifier "lexemic", as in L(exemic)-sentence, for constructions of the other levels.

a construction, and the dimensions of contrast of a given level. Comparable kinds of contributions to identification are made also by lexemic forms and pertinent forms have been pointed out in the introductory discussion of each level of the lexemic hierarchy. For example, an L-word giving the participant's name may occur; in single event L-sentences the agreement rules identify the agent of each action in the sentence as the same participant; and in dynamic L-paragraphs--from the dimension comprising dynamic, static, and discursive paragraphs--the appropriate order for participants to act helps identify them.

In addition to these kinds of contribution to identification, lexemic forms characterize participants. Participants are characterized by contrastive lexemic units which indicate the roles of the participants or the class of which they are a member, by variant forms which sometimes add other characteristics, and by distribution of lexemic forms in the appropriate sequence within the narrative.

Among the contrastive units which characterize participants are kinship lexemes which indicate certain social roles of the participants with reference to one another. Other units such as agent and goal characterize participants by their roles or functions in particular actions.

Variant forms referring to the same participant at different points in a discourse may add other characterizing features. For example, if a generic term refers to a participant first, then a later specific term adds features. Or, if a participant is first referred to by a kin term, then a later form referring to him may add his name.

Distribution of lexemic forms in the appropriate sequence within the narrative characterizes a participant and in turn contributes to identification. For example, since the villain of a chapter in a myth is introduced first--unless there is overt indication to the contrary--then if the buzzard is introduced first, he is characterized as the villain. Subsequently, the one who hid wounded game from a hunter can be identified as the buzzard since hiding game is an action typical of villains.

Identification and characterization of participants are inseparable in the distribution of lexemic forms. They are also inseparable when grammatical forms and lexemic forms are considered with reference to each other. A participant may be identified by a noun phrase which names him, but the phrase viewed lexemically characterizes the participant. The characterization in turn helps to identify him in a subsequent action when he is referred to only by a pronominal form.

IDENTIFICATION OF PARTICIPANTS IN SPECIFIC DISCOURSES

In Chapters 3 and 4 we described cues for the identification of participants and the ways in which aspects of meaning control the forms selected for referring to them. In this chapter two discourses will be partially analyzed in order to illustrate the structures described previously.

In Section 5.1 a short biographical narrative will be analyzed and discussed. The sequence of roles of participants in L-paragraphs is a striking feature of this discourse.

In Section 5.2 the first two chapters of a myth will be partially analyzed and selected features of the myth will be discussed. One feature which is of particular interest in this myth is the relation between the plot roles of participants in L-chapters and their social kinship roles.

In Section 5.3 we shall discuss briefly informant reaction with reference to the paragraph boundaries posited in the analysis of these narratives.

5.1. A Biographical Narrative. An account of a fishing trip told as if from Lucius' viewpoint will illustrate some of the solutions to the encoding and decoding problems applied to biographical narrative.[1]

Within each L-paragraph of this story the sequence of roles of the participants is the same. This sequence is summarized in Chart 35. The FATHER column of the chart, for example, shows that he is the agent or initiator in each setting unit; the goal, beneficiary and focus, or referent and focus in each sequent unit; the agent in each terminus unit; and the initiator in each result unit.

The particular sequence of roles shown in the chart is an example of a specific system within the paragraphs of a particular discourse. This sequence correlates the social, observer, and plot roles of the participants with the appropriate units of narrative paragraphs. Although the systems are different in other discourses, the appropriate sequence of roles is an important cue to identification in discourses where there are multiple third person participants.

Actually, in this story identification of participants is relatively easy since there are only three human participants, one of which is first person.

[1](Cf. Sec. 2.1.4.3 for discussion of stories told 'as if' from a certain viewpoint.)

CHART 35.--Summary of the sequence of roles of participants in each L-paragraph of the fishing story. This chart is a condensation of some features of the right-hand pages of Diagram 1.

Paragraph Unit	Participant			
	FATHER	I,LUCIUS	STREAM	OTHER INANIMATE PARTICIPANTS
Setting	ag/init	co-ag/ ag⁀i g	g/pu	pu and inst
Sequent	g/ben⁀F/ ref⁀F	ag	g/pu	g/ inst
Terminus	ag		g	
Result	init		ag	

However, since many of the same constructions which occur here serve as cues to identification in other stories where there are multiple third person participants, this story will serve as a simple illustration. It will also serve to illustrate the factors controlling the selection of nouns, free pronouns, or pronominal affixes for referring to participants.

A free translation of the story is given first and is followed by a detailed analysis in Diagram 1. On the left hand pages of the analysis the story is given clause by clause--numbered G1, G2, etc.--in the actual surface order in which it was told. The grammatical clause-level units are named in the line above the vernacular.

Reference to human participants is indicated by the symbol α and a number. In this story $\alpha 1$ = FATHER, $\alpha 2$ = I-LUCIUS, and $\alpha 3$ = BROTHERS.[2] Reference to inanimate participants is indicated by γ and a number: $\gamma 1$ = STREAM, $\gamma 2$ = LEAVES, $\gamma 3$ = DIRT, and $\gamma 4$ = POISON. In developmental paragraphs where the sequence of particular verb roots is relevant, the roots are identified by β with a number. Since the particular sequence of verb roots is not relevant in other paragraphs, they are identified only in developmental paragraphs.

[2]Since there are more than two participants, the symbols α and $-\alpha$ used earlier have been replaced by α with a number.

In the left-hand column of the left pages G-paragraphs are numbered and named and constituent units of the paragraphs are also named.

Row 1 of the left page of Diagram 1 is to be read as follows: "Beginning of the first G-paragraph which is compound developmental. The first constituent unit in this paragraph is a dual theme manifested by an unmarked simple sentence. This first sentence comprises G-clause 1 (G1). The constituents in G1 are adjunct manifested by NOW, adjunct manifested by OTHER_DAY, predicate manifested by HE-DAM_STREAM-ACCOMPANIMENT-ME, and subject manifested by FATHER. Within the predicate the prefix refers to $\alpha 1$, i.e., FATHER, and the suffix to $\alpha 2$, i.e., I; the clause-level subject also refers to $\alpha 1$. The verb root is $\beta 1$."

The second row is to be read as follows: "Unmarked simple sentence--also a part of the manifestation of the dual theme unit--comprising G-clause 2. The sole constituent of G2 is a predicate manifested by I-FOLLOW-HIM. The prefix refers to $\alpha 2$ and the suffix to $\alpha 1$. The verb root is $\beta 2$."

G3 - 6 are constituents of the quotation sentence manifesting the parenthesis unit in the first paragraph. The verb roots are not identified in these clauses since the rules of repetition do not apply to parenthetical units.

Relative clauses which manifest subject or complement within the main clause, e.g., G20, and subordinate clauses which manifest adjunct, e.g., G10, are analyzed on separate lines of the diagram. However, they are enclosed in square brackets to indicate that they manifest clause-level units rather than sentence-level units.

On the right-hand pages of Diagram 1 a partial analysis of the lexemic structure of the story is given.[3] In the left-hand column of the right pages, lexemic paragraphs are numbered beginning with Roman numeral I for the first paragraph after the introduction. Constituents of the L-paragraphs are also identified. In the clause number column (Cl. No.) the number of the L-clause is listed first and followed by the number of the G-clause or clauses to which it corresponds. For example, L1 corresponds to G1, but L3 corresponds to G3 and G6. The lexemic clauses are aligned as much as possible with the G-clauses on the left pages, but the rearrangement of lexemic clauses into chronological order makes complete alignment impossible.[4]

Only the actions and the units which refer to participants, e.g., initiator and focus (init $\widehat{F}$) manifested by FATHER and HE- in row 1, are given for L-clauses since temporal, locative, and connective units do not appear to be

[3]The diagram of references to participants is adapted from that which I suggested for the Grahams' use in the analysis of Sataré texts (Graham 1966).

[4]The chronological order in this and other texts was determined in part by comments from informants as to the order of events and in part by phonological cues. For example, flashbacks are often marked by increase in speed and decrease in volume.

particularly relevant for the identification of participants. In order to simplify the diagram further only the glosses of Nomatsiguenga forms are given in the right-hand pages. L-clauses in which there is an instrument unit, e.g., L15, and L-clauses manifesting the quotation in L-quotation sentences, e.g., L4 and L5, are enclosed in square brackets.

Vertical arrows indicate that the same noun or affix simultaneously manifests the two units connected. For example in L14 and L15 the phrase THAT LEAVES manifests purpose in the first and instrument in the last.

The first row of the lexemic analysis is to be read as follows: "Introduction manifested by a narrative paragraph. The first constituent unit in that paragraph is the setting manifested by an opening mono-clausal sentence. The sentence comprises L-clause number 1 (L1) corresponding to G1. Initiator and focus units are simultaneously manifested by FATHER and HE- referring to 'Father', the co-agent unit is manifested by -ME referring to LUCIUS, and the goal unit referring to the STREAM is manifested implicitly in the action which is 'to fish by damming a stream'.

A free translation of the story follows. (Each paragraph corresponds to the G-clauses listed in the square brackets. A literal translation of these G-clauses is given in the left-hand pages of Diagram 1.)

[G1 -G2] 'Now (I'll tell you about) the other day when father caused me to dam the stream along with him. I followed him.

[G3 - G15] 'He said to me, "Let's go dam the stream, Lucuis." And so, I followed him along with all my brothers to where he made the dam. He piled up the rocks and continued to do so until he finished. I also piled up the rocks along with him until we finished.

[G16 - G29] 'Having finished piling up the rocks, he sent me for leaves with which he would stop up the cracks in the dam. "Go get leaves for me, son," he said. And so, I went and cut leaves for him to stop up the cracks. When I brought them to father, he stopped up the cracks with them and continued to do so until he finished.

[G30 - 46] 'Having finished, he sent us for dirt with which he would fill in the (other) dam (downstream). We were the ones who went and brought dirt for him (while father was the one who filled in the dam). He continued to fill it in until he had finished. Then the stream dried up. That's all.

[G47 - G52] '(Oh yes!) He told us to pound the poison. We pounded it to a pulp. Then he poured it in. That's all.'

5.1.1. Grammatical Structure and Lexemic Structure of the Story. In this section the grammatical structure of the story as shown in the left-hand pages of

Diagram 1 will be discussed. This will be followed by discussion of the lexemic structure of the story as a whole. Discussion of the way participants are referred to will be given last.

When the story is viewed grammatically, it comprises the following units: topic, background, body, afterthought, and closure (cf. Chart 19 in Sec. 3.7 for G-discourse structure).

The topic of the story refers to an event--a fishing trip--rather than to a participant. It is, therefore, manifested by a verbal active G-clause (G1) which is simultaneously part of the first paragraph of the body of the story.

The background unit of the story is manifested by the adverb phrase kani 'the other day' in G1. The adverb yamaikari 'now' refers to the time of the speech event rather than to the time in the plot when the events took place and is, therefore, not part of the background unit.

The body of the story comprises five G-paragraphs, and there is also an afterthought unit manifested by a sixth paragraph. The boundaries of the six G-paragraphs correspond exactly to the places where the informant indicated that the 'story changes a little'.

The boundaries of G-paragraphs I and IV can be identified fairly easily by the pattern of verb root repetition typical of compound developmental paragraphs. In between these two paragraphs I have posited another boundary: G17 is considered to be the end of G-paragraph II and G18 to be the beginning of G-paragraph III. One of the reasons for positing this boundary is the occurrence of the morpheme tson(g) 'finish' in G16. This morpheme was almost invariably taken by the informant as signalling a paragraph boundary at the end of the sentence in which it occurs. A second reason for positing the boundary is the fact that the occurrence of the verb root ga 'to send' in G18 coupled with a 'to go' in G23 indicates a change of setting.

A paragraph boundary has also been posited between G45 and G47. A closure unit occurs between these two clauses, but this cannot be taken as clear evidence of a paragraph boundary. Note, for example, that the second closure in G51 is embedded within the last paragraph. The evidence is rather the occurrence of aroke NOW_AND 'already' in G45. The occurrence of this adjunct almost invariably signals the end of a grammatical paragraph. Further evidence is that VI is marked phonologically as the manifestation of an afterthought by rapid speed and low volume. (These two features also frequently mark parenthetical units within paragraphs.)

We turn now to the lexemic structure of the story as a whole (cf. Chart 34 in Sec. 4.8). The introduction unit is manifested by the variant of narrative paragraphs in which the terminus is omitted. There is a single temporal

DIAGRAM.--1 Partial Analysis

G- paragraph		G-clause No. and Internal Structure
No. and Type of ¶	Constituent Units of ¶	
I Cpd Develop-mental	DualTheme |USimpleSen	G1 Adjunct Adjunct Pred(α1 β1 α2) Sub α1 yamaikari kani i-komota-kagi-na pabati NOW OTHER_DAY HE-DAM_STREAM-ACCOMPANI-TIVE-ME FATHER
	|USimpleSen	G2 Pred(α2 β2 α1) no-giatanë-ri I-FOLLOW-HIM
	Parenthesis |UQuotation Sen	G3 Pred(α1 α2) i-kanë-na HE-SAY_TO-ME
		G4 IrregularPred intsome LET'S_GO
		G5 Pred(α1 and α2) Voc α2 o-ngomo-ig-ëte irocio WE-DAM_STREAM-PLURAL... LUCIUS
		G6 Pred(α1 α2) i-kanë-na HE-SAY_TO-ME
	Development |RedunPara-tactic Sen	G7 Pred(α2 β2 α1) no-giatanë-ri I-FOLLOW-HIM
		G8 Complement(α3) Pred(α2 β3) antagaisa ige na-karatanë ALL BROTHER I-GO_ALONG_WITH
	Development |RedunSim-pleSen	G9 Pred(α2 β2 α1) Adjunct:G10 below no-giatanë-ri I-FOLLOW-HIM
		[G10 Adjunct Pred(α1 β1) iroti kanta i-komoke AS_FAR_AS THERE HE-DAM_STREAM]

of Fishing Story

L-paragraph No. and Type of ¶	Constituent Units of ¶	Cl. No.	Participants FATHER	I (LUCIUS) and BROTHER	STREAM	Other Inanimate	Actions
Intro Narrative	Setting OMono-Cl Sen	L1 G1	Init F: HE-	co-ag:-ME	g:IMPLICIT		FISH BY DAMMING STREAM
	Sequent UMono-Cl Sen	L2 G2	g:-HIM	ag:I-			FOLLOW
I Narrative	Setting UL-QuotationSen	L3 G3, 6	ag:HE-	i g:-ME			SAY
		L4 G4	ag:IMPLICIT--------	voc: LUCIUS			LET'S GO
		L5 G5	ag:WE- -PLURAL----		g:IMPLICIT		FISH BY DAMMING STREAM
	Sequent UPara-phrase Sen	L6 G8		ag:I- g:ALL BROTHERS			ACCOMPANY
		L7 G9, 7	ag:-HIM	ag:I-			FOLLOW

DIAGRAM 1--Continued

G-paragraph No. and Type of ¶	G-paragraph Constituent Units of ¶	G-clause No. and Internal Structure
II Cpd Progressive	Start Setting UParataticSen with -p	G11 Pred(α1 γ1) Sub α1 i-komo-p-ë-ro pabati HE-DAM_STREAM-ARRIVING...IT FATHER G12 Pred(α1 γ1) Conjunction i-komoke-ro aro HE DAM_STREAM-IT NOW
	Progression USimpleSen	G13 Sub α2 Pred(α2 α1) Comp α1 naro basini no-komoto-ko-ke-ri paba I ALSO I-DAM_STREAM-INCLUDED...HIM FATHER
	Progression UParataticSen	G14 Pred(α2 α1) no-komoto-ko-ke-ri I-DAM_STREAM-INCLUDED...HIM G15 Pred(α2 α1) Adjunct no-toromitë-go-të-ri aro I-DAM_STREAM-INCLUDED...HIM NOW
	Progression UParataticSen	G16 Pred(α1 γ1) i-tsonke-ro HE-FINISH-IT G17 Pred α1 i-toromitë HE-PILE_ROCKS
III Cpd Progressive	Start UParataticSen	G18 Pred(α1 α2 γ2) i-gata-si-ki-na-ro HE-SEND-PURPOSIVE...ME-IT G19 Pred(α1 α2 γ2) Comp γ2 i-gata-si-ki-na-ro | G20 HE-SEND-PURPOSIVE...ME-IT [G20 Comp γ2 Pred(α1 γ1) ora tsipanabasi io-basiat-an-ka-ro THAT LEAVES HE-STOP_CRACKS-INSTRUMENTAL...IT]
	Parenthesis UQuotationSen	G21 Pred(α2 α1 γ1) Voc(α1 α2) p-aga-si-tënti-na-ro no-tiomi YOU-GET-PURPOSIVE...BENEFACTIVE-ME-IT MY-SON G22 Pred α1 i-kanke HE-SAY

L-paragraph No. and Type of ¶	Constituent Units of ¶	Cl. No.	Participants FATHER	I(LUCIUS) and BROTHER	STREAM	Other Inanimate	Actions
	Terminus |TSequence |Sen	L8 G11	ag:FATHER HE-		g:-IT		DAM STREAM
		L9 G12	ag:HE-		g:-IT		CONTINUE TO DAM STREAM
		L10 G16, 17	ag:HE-		g:-IT		FINISH DAMMING STREAM
	|TSequence |Sen	L11 G13	ref F: ag:I ALSO, FATHER, I- -HIM		g:IMPLI- CIT		DAM STREAM
		L12 G14	ref F ag:I- -HIM		g:IMPLI- CIT		CONTINUE DAMMING STREAM
		L13 G15	ref F: ag:I- -HIM		g:IMPLI- CIT		FINISH DAMMING STREAM
II Narrative	Setting |UPara- phrase |Sen	L14 G18, 19	init:HE- ag i g:-ME			pu:THAT LEAVES	SEND
		L15 G20	ag:HE-		g:-IT inst:		STOP CRACKS
		L16 G22	ag:HE- i g:Ø				SAY
		L17 G21	ben F:-I ag:YOU- Voc:MY-SON		pu:-IT g:Ø (LEAVES)		GET

DIAGRAM 1--Continued

G-paragraph		G-clause No. and Internal Structure
No. and Type of ¶	Constituent Units of ¶	
	Progression | UParatac- | ticSen	G23 Pred α2 ni-aa I-GO
		G24 Pred(α2 α1) Comp γ2 ni-karata-si-ki-ne-ri |G25 I-CUT-PURPOSIVE...BENEFACTIVE-HIM
		[G25 Comp γ2 Pred(α1 γ1) ora io-basiat-an-ka-ro THAT HE-STOP_CRACKS-INSTRUMENTAL...IT]
	Progression | USimpleSen	G26 Pred(α2 α1) Comp α1 Comp γ2 n-aga-si-tëti-ne-ri pabati |G27 I-BRING-PURPOSIVE...BENEFAC- FATHER TIVE-HIM
		[G27 Comp γ2 Pred(α1 γ1) ora io-basiat-an-ka-ro THAT HE-STOP_CRACKS-INSTRUMENTAL-IT]
	Progression | UParatac- | ticSen	G28 Pred(α1 γ1) io-basike-ro HE-STOP_CRACKS-IT
		G29 Pred(α1 γ1) Adjunct io-basike-ro aro HE-STOP_CRACKS-IT NOW
	Progression | UParatac- | ticSen	G30 Pred(α1 γ1) i-tsonke-ro HE-FINISH-IT
		G31 Pred α1 io-basike HE-STOP_CRACKS
IV Cpd Develop- mental	Theme | USimple | Sen	G32 Adjunct Pred(α1 β4 α2 γ3) Comp γ3 aro i-gata-si-ki-na-ro |G33 NOW HE-SEND-PURPOSIVE...ME-IT
		[G33 Comp γ3 Pred(α1 γ1) Comp γ3 ora i-ti-an-taka-ro kibatsi THAT HE-FILL_IN-INSTRUMENTAL...IT DIRT]

L-paragraph No. and Type of ¶	Constituent Units of ¶	Cl. No.	Participants FATHER	I(LUCIUS) and BROTHER	STREAM	Other Inanimate	Actions
	Sequent USequence Sen	L 18 G23		ag:I-			WENT
		L 19 G24	ben F: -HIM	ag:I-	pu:-IT	g:THAT (LEAVES)	CUT
		L 20 G25		ag:HE-	g:-IT	inst:	STOP CRACKS
		L 21 G26	ben F:-HIM FATHER	ag:I-	pu:-IT	g:THAT (LEAVES)	BROUGHT
		L 22 G27		ag:HE-	g:	inst:	STOP CRACKS
	Terminus TSequence Sen	L 23 G28		ag:HE-	g:-IT		STOP CRACKS
		L 24 G29		ag:HE-	g:-IT		CONTINUE STOPPING CRACKS
		L 25 G30, 31		ag:HE-	g:-IT		FINISH STOPPING CRACKS
III Narrative	Setting OMono-Cl Sen	L 26 G32, 34	Init:HE-	ag i PLURAL	g:-ME	pu:THAT DIRT	SEND
		L 27 G33		ag:HE-	g:-IT	inst:	FILL IN

DIAGRAM 1--Continued

G-paragraph		G-clause No. and Internal Structure
No and Type of ¶	Constituent Units of ¶	
	Theme Development | RedunParatacticSen	G34 Pred(α1 β4 α3 α2 γ3) i-gata-si-ig-ë-na-ro HE-SEND-PURPOSIVE-PLURAL...ME-IT G35 Pred(α2 β5) ni-aa I-GO G36 Pred(α2 β6 α1) n-aga-si-te-në-ri I-BRING-PURPOSIVE...BENEFACTIVE-HIM
	Development | RedunSimpleSen	G37 Pred(α2 α1) Comp γ3 | G38 n-aga-si-te-në-ri I-BRING-PURPOSIVE...BENEFACTIVE-HIM
		G38 Comp γ3 Pred(α1 γ1) Adjunct Sub α1 ora i-ti-an-taka-ro aro paba THAT HE-FILL_IN-INSTRUMENTAL...IT NOW FATHER
	Development | RedunSimpleSen	G39 Pred(α2 β6 α1) Sub α2 n-aga-si-kë-ne-ri narokerai I-BRING-PURPOSIVE...BENEFACTIVE-HIM I_IN_CONTRAST
V Simple Progressive	Start | UParatacticSen	G40 Pred(α1 γ1) i-kanti-ro HE-DO-IT G41 Pred(α1 γ1) i-kanti-ro HE-DO-IT
	Progression | UParatacticSen	G42 Pred(α1 γ1) i-tiake-ro HE-FILL_IN-IT G43 Pred(α1 γ1) i-tiake-ro HE-FILL_IN-IT G44 Pred(α1 γ1) Adjunct i-tsonke-ro aro HE-FINISH-IT NOW

L-paragraph No. and type of ¶	Constituent Units of ¶	CI. No.	Participants FATHER	I(LUCIUS) and BROTHER	STREAM	Other Inanimate	Actions
	Sequent | UIntent Sen	L 28 G35		ag:I-			WENT
		L 29 G36, 37, 39	ben F:-HIM	ag:I- MYSELF	pu:IT	g:THAT (DIRT)	BROUGHT
		L 30 G38		ag:HE-	g:-IT	inst:	FILL IN
	Terminus | TSequence Sen	L 31 G40, 41		ag:HE-	g:-IT		DID
		L 32 G42, 43		ag:HE-	g:-IT		CONTINUE FILL IN
		L 33 G44		ag:HE-	g:-IT		FINISH FILL IN

DIAGRAM 1--Continued

G-paragraph		G-clause No. and Internal Structure
No. and Type of ¶	Constituent Units of ¶	
	Progression |LKSimple Sen	G45 Adjunct Pred(α1 γ1) aroke i-o-biriatë-ro NOW-AND HE-CAUSATIVE-DRY-IT
Closure |LKSimple Sen		G46 Adjunct Pred aro o-kara NOW IT-CUT_OFF
VI Simple Develop-mental	Theme |USimple Sen	G47 Pred(α2 β7 α3 γ4) Comp γ4 no-tononga-ig-ë-ro baakasi I-POUND-PLURAL...IT POISON
	Parenthesis |USimpleSen	G48 Pred(α1 α3 α2 γ4) Comp γ4 i-gata-si-ig-ë-na-ro baakasi HE-SEND-PURPOSIVE-PLURAL...ME-IT POISON
	Development |RedunPara- tacticSen	G49 Pred(α2 β7 α3 γ4) no-tononga-ig-ë-ro I-POUND-PLURAL...IT
		G50 Pred(α2 β8 α3 γ4) Adjunct no-tobeta-ig-ë-ro aro I-POUND_TO PULP-PLURAL...IT NOW
Closure |LKSim- pleSen		G51 Adjunct Pred aro o-karati NOW IT-CUT_OFF
	Parenthesis |LKSimple Sen	G52 Adjunct Pred α1 aroke i-konatë NOW-AND HE-POUR_IN

L-paragraph No. and Type of ¶	L-paragraph Constituent Units of ¶	Cl. No.	Participants FATHER	I(LUCIUS and BROTHER	STREAM	Other Inanimate	Actions
	Result | TMono-Cl | Sen	L34 G45	init:HE-		ag:-IT		DRY
Closure | TMono-Cl | Sen		L35 G46					THAT'S ALL
IV Narrative	Setting | UMono-Cl	L36 G48	init:HE-	ag͡i g:-ME PLURAL		pu:-IT POISON	SEND (COMMAND)
	Sequent | USequence | Sen	L37 G47, 49		ag:I- PLURAL		g:-IT POISON	POUND
		L 38 G50		ag:I- PLURAL		g:-IT (POISION)	POUND TO PULP
	Terminus | TMono-Cl | Sen	L39 G52	ag:HE-			g:Ø (POISON)	POUR IN
Closure TMono-Cl Sen		L40 G51					THAT'S ALL

episode manifested by a temporal chapter. The chapter summary is manifested by the narrative paragraph which simultaneously manifests the introduction (cf. Chart 33 in Sec. 4.7). Four L-paragraphs manifest succession units within the chapter. In this particular story each paragraph is a narrative paragraph, i.e., a dynamic, action-oriented paragraph (cf. Chart 32 in Sec. 4.6) relating a step of the fishing trip as a whole.

After the story was rearranged chronologically, the lexemic pattern of paragraphs is fairly transparent: in each L-paragraph except the one manifesting the introduction, there is a setting unit in which a step of the total process is initiated, a sequent in which the necessary preparations are carried out--going to the site in L-I, getting leaves in L-II, getting dirt in L-III, and pounding poison in L-IV--and a terminus unit. In L-III the result unit occurs optionally.

Within this paragraph pattern there is a systematic sequence of roles of the participants. A check of the column referring to FATHER shows that, with the exception of L-clauses enclosed in square brackets, he is the initiator or agent of each action in the setting units, i.e., of L1, L3, L14, L16, L26, and L36.[5] Again he is the agent of each action in the terminus units, except for L11-13 which are discussed below. Within the sequent units, FATHER is goal, referent and focus, or beneficiary and focus but not agent or initiator. Thus his social role as initiator of the trip is highlighted in the setting units while his role as the observer's focus of attention is prominent in the sequent unit. On the other hand, LUCIUS is co-agent or agent and simultaneously indirect goal in setting units but agent in sequent units. With the exception of L11-13 where he is agent along with FATHER, as indicated by I ALSO, LUCIUS is not mentioned in the terminus units.

The brothers are introduced as goal in L6, and thereafter are referred to only along with LUCIUS in some of the units where he is mentioned.

In each L-paragraph except the first a new inanimate participant is introduced in the setting and referred to also in the sequent. With the exception of implicit reference in L-IV, these inanimate participants are not referred to in terminus units. The role of inanimate participants throughout is purpose, instrument, or goal.

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[5]The quotative root gan 'to send or command' in L14, L26, and L36 is no doubt related to -gan 'mediative'. As a quotative root it is interpreted as simultaneously manifesting the action in an L-quotative clause and marking one of the participants, Lucius, as agent as well as indirect goal. Thus, L-clauses in which gan occurs are considered to be inherently marked for initiator. Similarly, it would be possible to consider clauses such as L6 in Diagram 2 in which 'carry' occurs to be inherently marked for initiator whether or not 'causative' or 'mediative' occur overtly. In such an analysis 'carry' would be considered to be a single morpheme manifested by ke but two lexemes 'go' and 'causative'. In a more detailed study of lexemic structure such an approach might be fruitfully applied to all of the actions.

The stream, on the other hand, is referred to implicitly or by a pronominal affix manifesting goal or purpose in each setting and terminus unit and in some sequent units throughout the story. The fact that it is not mentioned in the last paragraph is perhaps explained by the afterthought nature of the paragraph when it is viewed grammatically. In L-III the stream is agent in the optional result unit. In some of the other discourses examined during the course of analysis, an inanimate participant was also referred to as goal or purpose in setting or sequent units but as agent in result units.

The sequences of roles of the participants in this story are summarized in Chart 35 in Section 5.1. Similar sequences of roles occur in other discourses but usually not in every paragraph. For example, in L-paragraph I of the myth described in Section 5.2, Mabireri is the initiator or leader in the setting unit, and the follower is agent in the sequent unit. Somewhat different sequences occur in the other narrative paragraphs of the myth. Thus, in L-paragraphs II and III (see Diagram II) the deity Mabireri initiated a fishing trip, but a sequence similar to that in Chart 35 does not occur since Mabireri remained behind while the people went and did the work.

5.1.2. Selection of Nouns and Pronouns. We turn now to discuss the selection of nouns or pronouns for referring to participants in the fishing story. Nouns and free pronouns are enclosed in boxes in the right hand pages of Diagram I in order that the reader may see their occurrence more easily.

In L1 (G1) FATHER is referred to by a noun. Since the topic of this story refers to an event--the fishing trip--the first noun does not refer to the topic of the plot (cf. Sec. 3.7), but to a participant determined by observer viewpoint and the social setting. FATHER's role as the observer's focus of attention and his social role as initiator determine that he should be referred to by the first noun.

FATHER's role as focus is also a controlling factor in his being referred to by a noun in L11 (G13), L21 (G26), and L29 (G36). While he is the focus of attention throughout the story, L-clauses marked for focus occur in only one L-sentence of each L-paragraph. The only exception is in L11 where a clause marked for focus occurs within a direct quotation (L18) as well as in the sentence manifesting the sequent unit. Within each of the sentences in which the clauses are marked for focus, a noun referring to Father occurs in one clause --those listed above.[6] The occurrence of a noun referring to FATHER in these

[6]In Sec. 4.5 we stated that in sequence sentences all constituent clauses must be marked for focus or all of them unmarked. L11-13 and L23-25 are examples of this rule. L18-20 and L28-30 are exceptions which can be accounted for by qualifying the rule as follows: Ordinarily, all of the constituent clauses must be marked for focus or unmarked. However, the focus must be simultaneously referent, or beneficiary throughout. If it is beneficiary and one of the clauses is a type in which beneficiary cannot occur, e.g., L-motion, then that clause is unmarked for focus. With this qualification of the rule, then L18 and L28 are accounted for since they are L-motion clauses. (L20 and L30 are not exceptions since these clauses manifest units within the preceding clauses as shown by the square brackets in which they are enclosed.)

sentences is controlled by the observer's focus; the indentification of participants would be clear without it.

On the other hand, FATHER's role as initiator controls his being referred to by a noun and by singular forms in the verb in L8 (G11). All of the participants arrived and dammed the stream, but since Pablo was initiator there is no plural suffix in the verb and the noun 'father' occurs.

Within the quotations in the story, L4 and L5 and L17, a vocative occurs referring to the addressee, LUCIUS, by a noun. Although the addressee or indirect goal of the quotative in L16 is manifested by zero, he is identified by the occurrence of the vocative within the quotation in L17. In the other discourses studied a vocative usually occurs if the quotation is a command, but not so frequently in other kinds of quotations.

All other participants are referred to by a noun when they are introduced into the story with the exception of the stream which is implicitly included in the action of the L-clause in which it is introduced. In this L-clause the action is 'to fish by damming a stream'. When it is the goal of this action, comparison with other narratives shows that a stream is never referred to by a noun or pronominal affix. On the other hand, a stream is often referred to by a pronominal affix when it is the goal of the action 'to dam the stream'. This latter action is the particular step in the whole process which is referred to in L8-13. (Cf. Sec. 4.4 for the distinction between these two actions.) Of these L-clauses the stream is referred to implicitly in L11-13. The implicit reference is explained by the interaction between grammatical and lexemic structures. In the grammatical construction of verbs only one third person pronominal suffix can occur. FATHER's observer role as referent and focus has priority over plot roles such as goal and, therefore, the suffix refers to FATHER rather than to the stream.

Reference to the other inanimate participants is controlled by the plot within the context of lexemic paragraphs. They are referred to by nouns when they are introduced in the setting units of L-paragraphs II, III, and IV. In the sequent units of those paragraphs they are referred to once, either by a noun or by a demonstrative pronoun, but they are not referred to overtly in the terminus units. Thus, the structure of lexemic paragraphs is also a controlling factor.

Free pronouns occur in two cases. In L11 one occurs in a phrase with 'also' and in L29 narokerai 'I in contrast' occurs. The former occurs in a terminus unit in which FATHER alone is ordinarily referred to as agent. The occurrence of the free pronoun 'I' with 'also' emphasizes the fact that LUCIUS also helped in damming the stream. The fact that FATHER was the main agent is shown by his being mentioned alone in L8-10. In L29 'I in contrast' occurs to contrast Lucius' role in getting the dirt with FATHER's role of filling in the holes.

We have shown in the preceding paragraphs the factors which control the use of nouns throughout the story--new elements in the plot, social roles, and focus of attention. We now add that there appears to be also some correlation between the occurrence of noun phrases and grammatical paragraph boundaries. A check of the first sentence in each G-paragraph in Diagram 1 shows that there is a noun in each except G-V. The omission there can be explained by the fact that the preceding paragraph ends with a free pronoun so that a noun is not required paragraph initially as a cue to a boundary. At this point it is not certain whether G-paragraph boundaries help to determine the use of nouns or whether the occurrence of a noun is, along with other features, one of the cues which mark G-paragraph boundaries.

5.2. Correlation Between Social Roles and Plot Roles in the Mabireri Myth. A discussion of one version of the Mabireri, or tosorintsi 'deity', myth will illustrate some of the solutions to the encoding and decoding problems applied to myth.

Before turning to the myth as a whole we shall discuss the relations of the participants to one another. Within each L-chapter of this myth, except the first which is not complete in this version, there are the following plot roles: villain, victim, and mediator. One or more participants perform each of these roles, e.g., Mabireri and his relative are villain and co-villain in the first chapter. The victims are changed into another form by the villain in the conflict units, e.g., the children are changed into termites in the first chapter. In the resolution units the villains are changed into another form through the action of a mediator, e.g., Mabireri is changed into ashes and ascends to the sky in the second chapter. The L-chapter roles of participants are summarized in Chart 36.

CHART 36.--Participant roles in L-chapters in the Mabireri myth. Fates of villains and victims are shown by the symbol > followed by a noun phrase.

	L-chapter 1	L-chapter 2	L-chapter 3
Conflict Unit	Villain: Mabireri Co-villain; Mabireri's relative (the boy) Victim: children > termites	Villain: Mabireri Victim: people > rocks	Villain: Mabireri's relative Victim: baby > rock
Mediation Unit		Mediator: some of the people	Mediator: baby's mother, sister, and father
Resolution Unit		Villain > ashes	Villain > pifayo palm with edible fruit

The social kinship roles of the participants to one another have been deduced from the various kinship terms by which they are referred to or by which they address one another in the story. These roles are related to the L-chapter plot roles in that those who side together are parallel relatives while those who are against each other are cross relatives (cf. Charts 27 and 28 in Sec. 4.4 for summary of kinship terms).[7] The plot roles and kinship relations of each pair of participants are shown in Chart 37.

As seen in Chart 37, Mabireri and his relative side together as villain and co-villain and are parallel relatives of the same generation (cf. fn. on p.125 for the obsolete use of sa in isari 'his relative', i.e., brother or parallel cousin in this myth). Similarly, the father and the baby as mediator and victim are parallel relatives.

On the other hand, Mabireri and the people he turned into rocks are cross relatives, i.e., cross cousins or brothers-in-law. Similarly, the relative as villain and the baby as victim are also cross relatives, i.e., mother's brother and sister's son.

The role of the baby's mother is ambivalent. As the relative's sister, i.e., a parallel relative, she saved him from being burned along with Mabireri. (Note that this particular pair is not shown on the chart because of the ambivalence.) However, as the mother of the baby she is on the opposite side from her brother who turned the baby into a rock.

5.2.1. Free and Literal Translation of the Myth and Partial Analysis. Having previewed the story through consideration of the plot roles of participants in relation to their social roles, we turn now to present the myth as a whole.

A free translation of the entire story is given first. Then in Diagram 2, which is to be read in the same way indicated in Section 5.1 for Diagram 1, the grammatical analysis and partial lexemic analysis of G-clauses 1-53 is given. The rest of the actual surface form in which the story was told is given with G-paragraph boundaries indicated by Roman numerals and G-clauses numbered G54, etc. The paragraph numbers and G-clause numbers are enclosed in square brackets in the lines giving the vernacular forms. The paragraph boundaries indicated by the informant are symbolized ¶ within the square brackets giving the clause number in the vernacular. In the portion of the story in Diagram 2 the paragraph symbol is given in the paragraph number column.

[7]Further field work might reveal interesting present day correlations between cross relatives as in some sense at odds and parallel relatives as siding together, but ethnographic data are not sufficient at present to make such correlations.

CHART 37.--Correlations between plot roles and social kinship roles of participants in the Mabireri myth.

Pairs of Participants	Plot Roles in L-chapters	Kinship Roles
		Parallel Relatives
Mabireri and his relative	Villain and co-villain	Brothers or parallel cousins
People and some of them	Victim and mediator	Brothers or parallel cousins
Baby and mother	Victim and mediator	Son and mother
Baby and sister	Victim and mediator	Brother and sister
Baby and father	Victim and mediator	Son and father
		Cross Relatives
Mabireri and people	Villain and victim	Brothers-in-law or cross cousins
Mabireri's relative and baby	Villain and victim	Mother's brother and sister's son (uncle and nephew)
Mabireri's relative and baby's sister	Villain and mediator	Mother's brother and sister's daughter (uncle and niece)
Mabireri's relative and baby's father	Villain and mediator	Brothers-in-law

In Diagram 2, $\alpha 1$ = Mabireri, $\alpha 2$ = relative (used as a convenient cover name for Mabireri's relative who is unnamed), $\alpha 3$ = children, $\alpha 4$ = another group of children, $\alpha 5$ = the people, $\gamma 1$ = fish, $\gamma 2$ = the stream. The symbol δ with a number indicates participants in the speech event rather than in the events narrated: $\delta 1$ = '1, the story-teller', and $\delta 2$ = 'the old story-teller'.

Free translation of the Mabireri myth: (Each paragraph corresponds to the G-clauses numbered in square brackets.)

[G1-G5] 'Thus Mabireri did long ago when he changed (people into rocks, etc.). He was said of long ago.

[G6-G23] 'While he was changing (people into rocks, etc.), there was his relative whom he carried. It's said and I listened a little when (the old story-teller) told it in my presence. Mabireri would carry him and carry him; he would go far. His relative would advise him when he saw any children climbing. (Relative impatiently:) "Who is that climbing, relative?" Since Mabireri knew (he would answer): "It's just termites," (and the children turned into termites). (Again relative:) "Whoever is that climbing?" "It's just termites," Mabireri said (and they too turned into termites).

[Chapter 2, II G25-G44] 'After a while the people were disgusted (with Mabireri). He would say to them: "Brother-in-law, go dam the stream so that I can roast fish in leaves after a while." "Let's go dam the stream," they said to one another. They all went; they were gone.

[G36-G41] 'Rapidly they piled up the rocks. They piled and piled, then they brought (leaves) and dried up the stream.

[G42-G50] 'After they finished, Mabireri (said), "I'll go see my brother-in-law and roast fish in leaves and eat it right there." He left and arrived where they had dammed the stream.

[G51-G67] 'He said, "Have you dried up the stream, brother-in-law?" "Yes, I've dried it. Take some (fish), brother-in-law." "(Oh) you gave me just a bunch of leaves," he said. He thought it was leaves but it was really fish. Then he blew: "May he turn into a rock." Right then Mabireri turned the (one who had handed it to him) into a rock. If the man hadn't given him leaves, he wouldn't have changed him.

[G68-G74] 'Another time he would send them to dam the stream and right then he would change another person into a rock. Again and again he sent them to dam the stream and changed others into rocks.

[G75-G88] 'Then they were really disgusted with him. "Now truly what can we do to him? How many times will he go on changing our people into (rocks)? Come let's kill him," (one of them) said. They were really disgusted. Then Mabireri, the deity, said to them, "Brother-in-law, go dam the stream." "Okay, let's go, all of us, and dam the stream as brother-in-law ordered us."

[G89-G91]'They all went to dam the stream. The rocks sounded toro, toro, toro (as they piled them up). Rapidly they caused the stream to dry up.

[G92-G99] 'Mabireri arrived there and looked around. "Have you dried it?" "Yes, we've dried it, have some (fish)." They took (a bunch to give him) but just gave him leaves. "Have some fish."

[G100-G109] 'They had already piled lots of wood in the fire. Mabireri was there by the fire shading his eyes (from it). "Now!" They grabbed him and lifted him up and threw him into the fire. "Good enough for him! Thus, no one will change us into (rocks) any longer." They hurried to finish gathering the fish.

[G110-G117] '"Tear down the dam (so his ashes will wash down)." They tore down the dam (so his ashes would wash down); the water rushed in siararara. His ashes rose to the top and floated. They were gone; he ascended to the sky.

[Chapter 3, G118 - G136] 'Now the relative (a boy) whom Mabireri had carried was left alone. One of the people went down river and said to him, "Your relative has been burned." "Come let's kill him, too, lest he follow in Mabireri's steps and change us into rocks," they said. But the boy's sister said, "Don't burn him; I'll take him for my servant, he can help me." So she took him home with her. "Stay here with someone (us)," (she said to him).

[G137 - G146] 'Then she said to the boy, "Swing your nephew in his hammock for me so that I can make something for you to wear without interruption." "Okay." He swung the baby, and as he swung he said: "Swing, swing tsionia. Swinging may (he) appear termite. Swing, swing may (he) apear a rock. Swing may (he) appear a termite."

[G147 - G166] 'Then his sister scolded him, "Don't play that way, don't talk that way lest you change your little nephew. You'll do just like the one who used to carry you; you'll change us." "Sis, I'm going now to go tear down the canal my dead relative dug with me some time ago." "Don't go," she said, "lest you burn it. You say you're thinking of the canal your dead relative dug with you. (Forget it.) You (just) stay here and swing your nephew for me so that I can hurry and make (your robe)." Then he went on swinging him.

[G167 - G177] 'Suddenly the boy disappeared; he was gone there where he had been thinking of to his relative's canal. Then his sister said. "What's happened that my son hasn't cried; he's been sleeping a long time?" She got up(and looked), and there was only a rock lying there in the baby's hammock.

[G178 - G196] 'Then she said, "That worthless brother of mine has changed his little nephew into a rock on me. Where's he gone to now?" "Run, go tell your father." So the daughter ran and advised him, "My uncle has changed my little brother." The baby's father ran. "His uncle has changed his little nephew into a rock on me," (the mother said). "Go, follow him and beat him to death. He was going to tear down his relative's canal he said a little while ago." "Now why on earth has my worthless brother-in-law changed his nephew on me? I'll go beat him to death," (the father said).

[G197 - G211] 'The father left and came out (of the jungle) there where already his (brother-in-law's) corn was. (It had just been planted as the boy went along and had grown up miraculously.) He came out (farther) and already there was corn maturing. He came out (farther) and already the ears were ripening. He came out again, and again, and again; then as he arrived he heard the boy pounding rocks there where he was feeling for crabs.

[G212 - G221] 'Upon arriving he called to him, "You worthless brother-in-law, why did you change your nephew on me? Come I'll kill you." He answered, "No, don't kill me, instead nail me down with a pifayo tree stake. Then I'll turn into a pifayo tree and you can eat my fruit."

[G222-G234] 'The father took him to nail him. "Where shall I nail you, brother-in-law?" "Here on my head." Then he hammered, tok (hammering

DIAGRAM 2.--Partial Analysis of

G-paragraph No. and Type of ¶	G-paragraph Constituent Units of ¶	G-Clause No. and Internal Structure
Topic Background	SimpleDiscontinuous Sen(1,2,4)	G1 Adjunct Pred α1 Adjunct Sub α1 | G2 aro i-kanta hirai NOW HE-DO BEFORE
		G2 Sub α1 Pred α1 ira mabireri-ta-tsi THAT MABIRERI...UNSPECIFIED_PERSON
	Parenthesis | Paratactic Discontinuous Sen (3,5)	G3 Pred α1 i-nganti-ngani HE-IS_SAID_OF-PASSIVE
		G4 Adjunct Pred α1 kara i-pegainatanti WHEN HE-CHANGE_INTO
		G5 Pred α1 Adjunct i-nganti-ngani kara hiraira HE-IS_SAID_OF-PASSIVE WHEN BEFORE
¶ I Cpd Progressive	Start | RedunParatacticSen	G6 Pred α1 i-pegainatanti HE-CHANGE_INTO
		G7 Pred Sub(α1α2) ainta i-sari THERE_IS HIS-RELATIVE
	Progression | USimpleSen	G8 Pred(α1 α2) Comp i-ke-ri | G9 HE-CARRY-HIM
		G9 Sub α2 Pred α2 ira komantageti-ri THAT ADVISE-HIM
	Parenthesis | CIusterU SimpleSentences	G10 Pred o-kanta-gani IT-IS_SAID-PASSIVE

Mabireri Myth

L-paragraph		Cl.	Participants			Actions
No. and Type of ¶	Constituent Units of ¶	No.	Mabireri	Relative People	Children	or States
Intro	Paraphrase Sen	L 1 G1, 2	ag:HE-THAT MABIRERI		g:IMPLICIT	DID
		L 2 G4, 6	ag:HE-			CHANGE INTO
	Reportive Paraphrase Sen	L 3 G3	g:HE-			SAY PASSIVE
		L 4 G5	g:HE-			SAY PASSIVE
I Narrative	Setting OMon-ClausalSen	L 5 G7	poss'r: HIS-	id:RELATIVE		IS
	USequence Sen	L 6 G8	ag:HE-	g:-HIM		CARRY
		L 7 G13	ag:HE-	g:-HIM		CARRY
		L 8 G14	ag:HE-	g:-HIM		CONTINUE TO CARRY

DIAGRAM 2--Continued

G-paragraph		G-clause No. and Internal Structure
No. and Type of ¶	Constituent Units of ¶	
		G11 Pred δ1 Comp Sub δ1 na-kemëmati arosatapagi naro I-LISTEN A_LITTLE I
		G12 Pred(δ2 δ1) Comp δ1 i-kengitsata-mo-eti-na-ro naro HE-NARRATE-IN_PRESENCE_OF...ME-IT ME
	Progression |UParatactic Sen	G13 Pred (α1 α2) i-ngianë-ri HE-CARRY-HIM
		G14 Pred(α1 α2) i-ngianë-ri HE-CARRY-HIM
		G15 Pred α1 Adjunct i-riata hanta HE-GO FAR
	Progression |USimpleSen	G16 Pred α2 Comp i-raniopë |G17 HE-SEE
		[G17 Sub α3 Pred α3 ...Sub α3 pairiraka i-rata-ig-e hanekihegi WHOEVER HE-CLIMB-PLURAL...CHILDREN]
IISimple Dialogue	Opening |Quotation Sen	G18 Sub α3 Pred ...Sub α3 Voc(α2 α1) pairi ata-tsi-ri ira-ri na-sari WHO CLIMB-UNSPECIFIED THAT-BUT MY-RELATIVE _PERSON...
	Parenthesis |LSimpleSen	G19 Connective Pred α1 atirama i-rate SINCE HE-KNOW
	Response |Quotation Sen	G20 Pred α3 Sub α3 iri-anti kahiro HE-ONLY TERMITE
	Reply |Quotation Sen	G21 Sub α4 Pred pairiroko atobintëngi-tsi-ne WHO_MAYBE CLIMB-UNSPECIFIED_PERSON...

L-paragraph No. and Type of ¶	L-paragraph Constituent Units of ¶	Cl. No.	Participants Mabireri Relative	Children	People (2 groups)	Actions or States
		L 9 G15	ag:HE-			GO FAR
	Reportive Paraphrase Sen	L 10 G10				IT IS SAID
		L 11 G11				I LISTENED A LITTLE
	Sequent UCircum-stanceSen	L 12 G16	ag:HE-	g:WHOEVER		SEE
		L 13 G17	ag:HE-	CHILDREN		CLIMB
	UQuota-tionSen	L 14 G9	i g:-HIM	ag:THAT		ADVISE
		L 15 G18	Voc:RELA-TIVE	poss'r: MY-	ag:WHO	CLIMBS
	Closure Cause-Ef-fectSen	L 16 G19	ag:HE-			(SINCE)KNOW
		L 17 G20		Id:HE	TERMITE	(factitive)
Narrative Para (em-bedded)	Sequent UQuota-tionSen	L 18 G21		ag:WHO		CLIMB

DIAGRAM 2--Continued

G-paragraph No. and Type of ¶	G-paragraph Constituent Units of ¶	G-clause No. and Internal Structure
	Response |Quotation Sen	G22 Pred α4 Sub α4 iri-anti kahiro HE-ONLY TERMITE G23 Pred(α1 α2) i-kanĕ-ri HE-SAY_TO-HIM
¶ IIICpd Progressive	Start |LkParatacticSen	G24 Adjunct Pred α5 aro i-kanka NOW HE-DO G25 Pred α5 i-tsirisiobagitaka HE-DISGUSTED
	Progression |CpdDialogue Paragraph QtnSen	G26 Pred(α1 α5) Comp(α1 α5) i-kanti-ri ir-aniri HE-SAY_TO-HIM HIS-BROTHER_IN_LAW G27 Voc(α1 α5) Pred α2 n-ani n-ani pi-ngomointegiteni MY-BROTHER MY-BROTHER YOU-DAM_STREAM _IN_LAW _IN_LAW G28 Pred α5 pi-ngomointegite YOU-DAM_STREAM G29 Connective Pred α1 Comp γ1 Adjunct ora n-atasiibageginteta mitiri karaka THAT I-ROAST_IN_LEAVES FISH LATER
	[Quotation Sen]	G30 Pred intsome LET'S_GO G31 Pred α5 o-ngomo-ig-ete WE-DAM_STREAM-PLURAL...

L-paragraph No. and Type of ¶	Constituent Units of ¶	Cl. No.	Participants Mabireri	Relative	Children	People (2 groups)	Actions or States
	Closure | UQuotationSen	L19 G23	ag:HE-		i g:-HIM		SAY
		L20 G22				id:HE TERMITE	(factitive)
Chapter Summary	Paraphrase Sen	L21 G24				ag:HE-	DO
		L22 G25				ag:HE-	BE DISGUSTED
II NarrativePara	Setting | UQuotation Sen	L23 G26	ag:HE- poss'r: HIS-			i g:-HIM BROTHER-IN-LAW	SAY

Cl. No.	Participants Mabireri	People	Stream	Fish	Actions or States
L24 G27, 28		Voc:BRO-THER-IN-LAW	g:IMPLICIT		FISH BY DAMMING STREAM
L25 G29	ag:I-			g:FISH	ROAST IN LEAVES
L26 G30		ag:Ø			LET'S GO
L27 G30		ag:WE- -PLURAL			FISH BY DAMMING STREAM

DIAGRAM 2--Continued

G-paragraph		G-clause No. and Internal Structure
No. and Type of ¶	Constituent Units of ¶	
	[Quotation Sen]	G32 Pred intsome LET'S_GO
	[Quotation Sen]	G33 Pred intsome LET'S_GO
	Progression |Paratactic Sen	G34 Pred(α5 α5) i-tsongaitanak-a HE-FINISH_AWAY-REFLEXIVE
		G35 Pred α5 hatake (∅)-inane GONE HE-EXIST
	Progression |Paratactic Sen	G36 Manner Pred(α5 γ2) omanapage i-komopë-ro RAPIDLY HE-DAM_STREAM-IT
		G37 Pred(α5 γ2) i-komopë-ro HE-DAM_STREAM-IT
		G38 Pred (α5 γ2) i-komopë-ro HE-DAM_STREAM-IT
	Progression |Paratactic Sen	G39 Pred (α5 γ3) i-agë-ro HE-TAKE-IT
		G40 Pred (α5 γ2) i-ogakë-ro HE-DRY-IT
IVCx Develop-mental	Theme |RedunPara-tacticSen	G41 Pred(α5 β1 γ2) i-ogakë-ro HE-DRY-IT
		G42 Adjunct Pred(α1 β2) Sub α1 kanta i-atahe iriro THERE HE-GO HE

L-paragraph No. and Type of ¶	L-paragraph Constituent Units of ¶	Cl. No.	Participants Mabireri	People	Stream	Fish	Actions or States
	UQuotationSen	L28 G32		ag:Ø			LET'S GO
	UQuotationSen	L29 G33		ag:Ø			LET'S GO
	Closure TMonoclausalSen	L30 G34, 35		ag:HE-			FINISH GOING
III NarrativePara	Setting OSequence Sen	L31 G36		ag:HE-	g:-IT		DAM STREAM
		L32 G37		ag:HE-	g:-IT		CONTINUE TO DAM STREAM
		L33 G38		ag:HE-	g:-IT		CONTINUE TO DAM STREAM
	Sequent UMonoclausalSen	L34 G39		ag:HE-			TAKE (g:-IT leaves)
	Closure UMonoclausalSen	L35 G40, 41		ag:HE-	g:-IT		DRY

DIAGRAM 2--Continued

G-paragraph		G-clause No. and Internal Structure
No. and Type of ¶	Constituent Units of ¶	
	Parenthesis | LkQuota- tionSen	G43 Adjunct Pred α1 Comp(α1 α5) aro na-niahateni n-anirirangi NOW I-GO_SEE MY-BROTHER_IN_LAW G44 Pred γ1 Comp γ1 n-atasibaigitëteta mitiri I-ROAST_IN_LEAVES FISH G45 Adjunct Pred α1 aito na-hagabagëgiteta RIGHT_THEN I-EAT
	Development | RedunSim- pleSen	G46 Pred(α1 β2) i-ake HE-GO
	Development | RedunSim- pleSen	G47 Pred(α1 β2) i-ake HE-GO G48 Pred(α1 β3) i-agaitinai HE-ARRIVE_AT_RIVER
	Development | RedunSim- pleSen	G49 Pred(α1 β3) Adjunct i-agaitinai | G50 HE-ARRIVE_AT_RIVER [G50 Adjunct Pred α5 kanta i-komo-ig-e THERE HE-DAM_STREAM-PLURAL...]
VDia-logue	Opening | Quotation Sen	G51 Pred α1 i-kane HE-SAY G52 Pred(α5 γ2) Voc(α1 α5) p-ogakë-ro-ma n-ani YOU-DRY-IT... MY-BROTHER_IN_LAW
	Response | Quotation Sen	G53 Affirmation Pred(α5 γ2) hee n-ogake-ro YES I-DRY-IT

L-paragraph: No. and Type of ¶	L-paragraph: Constituent Units of ¶	Cl. No.	Participants: Mabireri People	Participants: Stream	Participants: Fish	Actions or States
IVNarrative	Setting | OIntentSen (embedded inQuotation)	L36 G43	ag:I- poss'r:MY-	g:BROTHER IN-LAW		SEE
		L37 G44	ag:I-		g:FISH	ROAST IN LEAVES
		L38 G45	ag:I-		g:	EAT
	Sequent | UMono-clausalSen	L39 G46, 47, 42	ag:HE-			WENT
	Closure | TMono-clausalSen	L40 G49, 50	ag:HE-			ARRIVE
VConversation	Initiating | Utterance Quota-tionSen	L41 G51	ag:HE-	i g:Ø		SAY
		L42 G52		ag:YOU-	g:-IT	DRY
	Initiating | Response QuoSen	L43 G53		ag:I-	g:-IT	DRY

sound). "Harder, brother-in-law." Tok. "Harder, brother-in-law." Tok. "Harder, brother-in-law." Tok. "Harder, brother-in-law," he said.

[G235-G248] '"Now when you strike inside me, brother-in-law, run just a little ways, stop, turn around and look at me. That way the pifayo fruit will ripen quickly and not one will fall to the ground immaturely. (Go on hitting) harder, brother-in-law." He continued to strike, tok. "Harder, brother-in-law." Tok; he struck inside!

[G249-G258] '"Go, run." He ran. "Look around, brother-in-law, look around." But he didn't stop. He was gone for the boy's hot springs (which his blood turned into) were really frightful.

'That's all.'

Continuation of surface form and literal translation:

[G54] n-ogake-ro [G55] ne-ri-ka n-ani
I-DRY-IT TAKE-HIM... MY BROTHER_IN_LAW

[G56] iro-ntiri somantosira po-pai-na [G57] i-kanke-ri
IT-ONLY LEAVES YOU-GIVE-ME HE-SAY_TO-HIM

[G58] i-hiti-ro somantosi [G59] i-hiti-ri
HE-THINK-IT LEAVES HE-THINK-HIM

ira mitiri [G60] aka iriro mitiri inabita
THAT FISH BUT HE FISH EXIST

[G61] irorota-me i-me-ri ora somantosi [G62] kero-me
IT-CONDITIONAL HE-GIVE-HIM THAT LEAVES NOT-CONDITIONAL

i-pegi-ri
HE-CHANGE_INTO(ROCK)-HIM

[VI G63] aro i-kanti [G64] irontiri po-pai-na
NOW HE-SAY IT-ONLY YOU-GIVE-ME

somantosi [G65] i-piakani piho [G66] mopë
LEAVES HE-CHANGE_INTO (BLEW) PIHO ROCK

i-megi-ma [G67] aito i-pegobike-ri mopë
HE-CHANGE_INTO-MAY RIGHT_THEN HE-CHANGE_INTO-HIM ROCK

[G68] aro i-kanka [G69] i-gati-ri [G70] komota-tsi
NOW HE-DO HE-SEND-HIM DAM_STREAM-UNSPECIFIED_PERSON

[G71] aito i-megobitahi-ri [G72]i-gati-ri
RIGHT_THEN HE-CHANGE_INTO-HIM HE-SEND-HIM

[G73] komota-tsi [G74] aito i-megobitahi-ri
DAM_STREAM-UNSPECIFIED_PERSON RIGHT_THEN HE-CHANGE_INTO_HIM

[¶ VII G75]aro i-tsirisiaka-ri [G76] kanta
NOW HE-DISGUSTED_WITH-HIM THERE

atirosonoriko a-nganti-ri-ra [G77] te e-raita
HOW_TRULY_MAYBE WE-DO-HIM... NO US-HOW_MANY_TIMES

i-megainatënte yaka [G78] intsome [G79] a-tagi-ri
HE-CHANGE_INTO HERE LET'S_GO WE-BURN-HIM

[G80] i-kanke [G81] iri-raiko i-tsirisiobagita
HE-SAY HE-HOW_MANY_TIMES HE-DISGUSTED_WITH

[G82] i-kanti ira mabireri tosorintsi-ta-tsi
HE-SAY THAT MABIRERI DEITY...UNSPECIFIED-PERSON

[G83] i-kanti-ri ora [G84] n-ani pi-ngomointegite
HE-SAY_TO-HIM (HESITATION)[8] BROTHER_IN_LAW YOU-DAM_STREAM

[G85] aro intsoma-ig-e [G86] intsoma-ig-e omagaro
NOW LET'S_GO-PLURAL... LET'S_GO-PLURAL... ALL

[G87] kara o-ngomoitegite [G88] ka i-gaki-na n-aniri
THERE WE-DAM_STREAM THERE HE-SEND-ME MY-BROTHER_IN_LAW

[VIII G89] i-ata-si-ke-ro [G90] i-komo-ig-apë
HE-GO-PURPOSIVE...IT HE-DAM_STREAM-PLURAL...

toro toro toro [G91] omanapage omanapage
SOUND OF PILING UP ROCKS RAPIDLY RAPIDLY

i-o-biriatë-ro [G92] areepa i-areepa kanta
HE-CAUSATIVE-DRY-IT (HESITATION) HE-ARRIVE THERE

[G93] i-netsapë-ro [G94] p-ogake-ro [G95] hee n-ogake-ro
HE-LOOK_ARRIVING-IT YOU-DRY-IT YES I-DRY-IT

[G96] ne-ri-ka [G97] i-agë [G98] ora somantosi i-pë-ri
TAKE-HIM... HE-TAKE THAT LEAVES HE-GIVE-HIM

[G99] ne-ri-ka mitiri
TAKE-HIM...FISH

[IX G100] aroka aro i-tsimabota-ig-ë
NOW_IF NOW HE-PILE_FIREWOOD-PLURAL...

[G101] i-tsimaboke kanta [G102] kanta iri-roni kanta kanta-tsi
HE-PILE_FIREWOOD THERE THERE HE THERE DO-UNSPECIFIED_PERSON

nega [G103] i-otapitapiogitaka kara tsitsikë
WHERE HE-SHADE_EYES_WITH_HAND THERE FIRE_AT

[G104] ha i-agë-ri [G105] i-tsomake-ri [G106] i-hokobogitë-ri
NOW! HE-TAKE-HIM HE-LIFT-HIM HE-THROW_INTO_FIRE-HIM

[8]Most hesitation forms are demonstrative pronouns with high tone and length on the second syllable. Elsewhere the high tone occurs on the first syllable of the demonstratives.

kanta [G107]asate pi-nganti-ri [G108] negara te iri-raita
THERE GOOD_ENOUGH YOU-DO-HIM WHERE NO HE-HOW_MANY_TIMES

pegaʾnata-i-ne [G109] omanapage i-obitë-ri mitirira
CHANGE_INTO-US... RAPIDLY HE-GATHER-HIM FISH

[G110] i-tsonganake-ri [G111] kanta pi-ntisongë-go-të-ri
HE-FINISH-HIM THERE YOU-TEAR_DOWN_DAM-INCLUDED...HIM

[G112] i-tisongë-go-të-ri siaararara
HE-TEAR_DOWN_DAM-INCLUDED...HIM SOUND OF WATER RUSHING DOWN

[G113] i-gomantareganaka [G114] kanta i-amatë [G115] i-amatane
HE-RISE_ASHES THERE HE-FLOAT HE-FLOAT

[G116] hatake [G117] i-sorokire-ngani
GONE HE-ASCEND_TO_SKY-PASSIVE

[Chapter 3, X G118] irinibani ira irinibani ira
(HESITATION) HE_ALONE HE

i-giani [G119] i-abatetane komatenta [G120] i-kanti-ri
HE-CARRY HE-GO_DOWNRIVER DOWNRIVER HE-SAY_TO-HIM

[G121] i-take-ngani pi-tsiarineni [G122] aro
HE-BURN-PASSIVE YOUR-DEAD_RELATIVE NOW

intsome [G123] a-ntsibatë-go-tantima-ri [G124] iriroke
LET'S_GO WE-KILL-INCLUDED...HIM HE-AND

agaganai-ro-ni [G125] i-ripegana-i-ri i-tsiarine
PASS_ON-IT... HE-CHANGE_INTO-US... HIS-RELATIVE

[G126] i-megaibagentina-i [G127] i-kanke [G128] o-kanti
HE-CHANGE_INTO-US HE-SAY SHE-SAY

ora iri-tsiro [G129] kero pi-tagi-ri
THAT HIS-SISTER NOT YOU-BURN-HIM

[G130] n-agai-ri-ni [G131] no-meraro irirota
I-TAKE-HIM MY-SERVANT HE

[G132] no-merataima-na-ro
I-COMMAND-ME-IT

[G133] oka iagairi iagairi p-agai-ri kanta
THAT (HESITATION) SHE-TOOK-HIM THERE

[G134] o-tentaha-ri pongotsikë [G135] p-inaga pairini
SHE-TOOK-HIM HOUSE-AT YOU-REMAIN WHO

[G136] pi-naga pairini kanta
YOU-REMAIN WHO THERE

[¶ XI G137] aro o-kanti-ri okantiri ora
NOW SHE-SAY_TO-HIM (HESITATION)

[G138] pi-sionkati-na-ri pi-tinerira
YOU-HAMMOCK_SWING-(BENEFACTIVE)-ME-HIM YOUR-NEPHEW

[G139] pi-sionkati-na-ri pi-tinerira
YOU-HAMMOCK_SWING-(BENEFACTIVE)-ME-HIM YOUR-NEPHEW

[G140] omanata n-agat-anon-tahë-mi [G141] pi-ngaera
RAPIDLY I-TAKE-BENEFACTIVE...YOU YOU-WEAR

[G142] aro [G143] i-sionka [G144] i-sionkatë-ri
NOW HE-HAMMOCK_SWING HE-HAMMOCK_SWING-HIM

[G145] i-kanti i-kanti ora [G146]
HE-SAY (HESITATION) (song follows):

sionka sionka tsionia isionka tsiomontë kahiro tsiomontë
SWING SWING TSIONIA HE_SWING APPEAR TERMITE APEAR

sionka sionka tsiomontë mapi tsiomontë isionka tsiomontë
SWING SWING APPEAR ROCK APPEAR HE_SWING APPEAR

kahiro tsiomontë
TERMITE APPEAR

[¶ XII G147] aro o-kanti [G148] pi-gesantëbagiti
NOW SHE-SAY YOU-PLAY_BADLY

[G149] pi-kantabagiti [G150] kara po-megatë-na-ri
YOU-SAY_AIMLESSLY THERE YOU-CHANGE_INTO-(BENEFACTIVE)-ME-
-HIM

ika pi-tineri-ani [G151] po-sigana-ri [G152] hanaari
THAT YOUR-NEPHEW-LITTLE YOU-FOLLOW-HIM LIKE-HIM

kihi-mi hirai ora [G153] po-megaibagentana-i
CARRY-YOU BEFORE (HESITATION) YOU-CHANGE_INTO-US

[G154] hoe aro na-hake [G155] na-ntisongëte i-ginareni
SISTER NOW I-GO I-TEAR_DOWN_DAM HIS-CANAL

[G156] i-kinat-ag-i-na-ni na-sarini hirai
HE-DIG-ACCOMPANIMENT...ME... MY-DEAD_RELATIVE BEFORE

[G157] o-ngantimata [G158] kero pi-ati [G159] pi-sagantë-ro-ka
SHE-SAY NOT YOU-GO YOU-BURN-IT-IF

[G160] pi-sagantë-ro-ri [G161] pi-kengetinai-ri i-ginareni
YOU-BURN-IT... YOU-THINK-HIM HIS-CANAL

[G162] i-kinat-ag-i-mi pisarini hirai
HE-DIG-ACCOMPANIMENT...YOU YOUR_DEAD_RELATIVE BEFORE

[G163] pi-ngane [G164] pi-sionkati-na-ri pi-tineri
YOU-SAY YOU-HAMMOCK_SWING_(BENEFACTIVE)-ME-HIM YOUR-NEPHEW
[G165] omanata na-ngant-anon-ti-mi [G166] aike i-sionka
RAPIDLY I-DO-BENEFACTIVE...YOU THEN HE-SWING

sionkatë-ri
SWING-HIM

[¶ XIII G167] aro i-peganaka [G168] aro i-peganaka [G169] hatake
NOW HE-CHANGE_INTO NOW HE-CHANGE_INTO GONE

[G170] hatake inane [G171] kanta i-kenganaka-ri-kenta i-ginarekë i-sari
GONE HE_EXIST THERE HE-THINK-HIM-AT_THERE HIS-CANAL HIS-RELATIVE
[G172] aro o-kanti [G173] ati i-piaka [G174] te i-raragahema
NOW SHE-SAY WHERE HE-CHANGE_INTO NO HE-CRY

no-tomirangi [G175] iri-raiko naarai i-samë [G176] o-kabitanaka
MY-SON HE-RECENTLY RECENTLY HE-SLEEP SHE-GET_UP

[G177] iro-nti mopë kisagesëga-tsi-a kara i-sionkarokë
IT-ONLY ROCK LIE-UNSPECIFIED_PERSON... THERE HIS-HAMMOCK_IN

[¶ XIV G178] aro o-kanti [G179] i-pegatanai-na-ri-niri
NOW SHE-SAY HE-CHANGE_INTO-(BENEFACTIVE)-ME-HIM...

i-tineri-ani hai-kimingarani [G180] atike i-ake yamai [G181] pi-ha
HIS-NEPHEW_LITTLE BROTHER-WORTHLESS WHERE HE-GO NOW YOU-GO

[G182] pi-ngomantëti-ri p-iri [G183] pi-siganaka iri-sinto [G184] o-komantëti-ri
YOU-ADVISE-HIM YOUR-FATHER SHE-RUN HIS-DAUGHTER SHE-ADVISE-HIM
[G185] i-peganai-ri-metsi hai-ani no-kongirirangi
HE-CHANGE_INTO-HIM... BROTHER-LITTLE MY-UNCLE

[G186] i-sigopë ir-iri [G187] i-pegatanai-na-ri
HE-RUN HIS-FATHER HE-CHANGE_INTO-(BENEFACTIVE)-ME-HIM

i-tineriani iri-kongiri ora [G188] pi-hate [G189] pi-giatë-ri
HIS-NEPHEW HIS-UNCLE (HESITATION) YOU-GO YOU-FOLLOW-HIM

[G190] pi-takiti-ri ora [G191] pi-takiti-ri ora
YOU-KILL_WITH_STICK-HIM (HESITATION) YOU-KILL_WITH_STICK-HIM (HESI.)

[G192] i-ginare i-sari i-ntisongëte [G193] i-kanëni naarai [G194] atirasonori
HIS-CANAL HIS-RELATIVE HE-TEAR_DOWN_DAM HE-SAY RECENTLY HOW_TRULY

i-kanta [G195] i-pegatanai-na-ri i-tineriani n-aniri-kiminga
HE-DO HE-CHANGE_INTO-(BENEFACTIVE)-ME-HIM HIS-NEPHEW MY-BROTHER_IN_LAW-WORTHLESS

[¶ G196] na-takiti-ri-ta
I-KILL_WITH_STICK-HIM...

[XV G197] i-ake [G198] aroke aroke p-ine
HE-GO (HESITATION) NOW_AND IT_EXIST

[G199] i-ake [G200] i-kontetane [G201] aroke p-inane singi
HE-GO HE-COME_OUT NOW_AND IT-EXIST CORN

i-singine [G202] i-kontetane [G203] aroke p-agabagaka
HIS-CORN HE-COME_OUT NOW_AND IT-MATURING

[G204] i-kontetane [G205] aroke o-këterigisigi
HE-COME_OUT NOW_AND IT-RIPENING_EARS

[G206] i-kontetane basini [G207] i-kontetane basini
HE-COME_OUT ANOTHER HE-COME_OUT ANOTHER

[G208] i-kontetane basini aro [G209] i-kemopë-ri pëng pëng
HE-COME_OUT ANOTHER NOW HE-HEAR_ARRIVING-HIM SOUND OF

pëng [G210] i-kanti-ro mopë [G211] kanta
ROCKS POUNDING HE-DO-IT ROCK THERE

i-pasati-ri ir-osirote
HE-FEEL_FOR-HIM HIS-CRAB

[XVI G212] i-kaimë-go-tapë-ri n-ani
HE-CALL-INCLUDED-ARRIVING-HIM MY-BROTHER_IN_LAW

[G213] po-pegatanai-na-ri-niko
YOU-CHANGE_INTO-(BENEFACTIVE)_ME-HIM...

pi-tineri-kimingarani [G214] hoke
YOUR-NEPHEW-WORTHLESS_ONE COME

[G215] no-pasati-mi [G216] ma kero pi-pasati-na
I-KILL-YOU NO NOT YOU-KILL-ME

n-ani [G217] kero pi-pasati-na
MY-BROTHER_IN_LAW NOT YOU-KILL-ME

[G218] po-pëakitigi-na ora iroro këri-tsobiteki
YOU-NAIL-ME (HESITATION) IT PIFAYO_TREE-STAKE

ora [G219] aro këri no-meganëma
(HESITATION) NOW PIFAYO I-CHANGE_INTO_REFLEXIVE

[G220] aro po-pë-na-niri [G221] i-kanë-ri i-kanke-ri
NOW YOU-EAT-ME... (HESITATION) HE-SAY_TO-HIM

[¶ XVII G22] i-agë-ri [G223] i-pëake-ri [G224] ati
HE-TAKE-HIM HE-NAIL-HIM WHERE

no-peake-mi n-ani [G225] yaka na-gitokeka
I-NAIL-YOU MY-BROTHER_IN_LAW HERE MY-HEAD_ON

[G226] aro i-pëake-ri tok [G227] kabeni n-ani
NOW HE-NAIL-HIM HITTING_SOUND HARDER MY-BROTHER_IN_LAW

[G228] tok [G229] kabeni n-ani [G230] tok
HITTING_SOUND HARDER MY-BROTHER_IN_LAW HITTING_SOUND

[G231] kabeni n-ani [G232] tok [G233] kabeni
HARDER MY-BROTHER_IN_LAW HITTING_SOUND HARDER

n-ani [G234] i-kanka
MY-BROTHER_IN_LAW HE-SAY

[¶ XVIII G235] aike i-osananke-ri [G236] aroka
THEN HE-STRUCK_INSIDE-HIM NOW_IF

p-osananki-na n-ani [G237] pi-sigëmaigitigima
YOU-STRIKE_INSIDE-ME MY-BROTHER_IN_LAW YOU-RUN_A_LITTLE_WAY

[G238] p-aratianke [G239] pi-pisitakima [G240] pi-niabintëma
YOU-HALT_THERE YOU-TURN_AROUND YOU-LOOK_BEHIND

tëika [G241] aroke tsonabatëkaragitake kër̈i
(HESITATION) NOW_AND RIPENING_NOT_WASTE PIFAYO_FRUIT

Ø-inane [G242] i-siganaka [G243] kabeni n-ani
IT-EXIST HE-RUN HARDER MY-BROTHER_IN_LAW

[G244] tok [G245] i-ogagane-ri [G246] kabeni n-ani
HITTING_SOUND HE-CONTINUE-HIM HARDER MY-BROTHER_IN_LAW

[G247] tok [G248] sanare [G249] pi-ha [G250] pi-siganëma
HITTING_SOUND STRIKE_INSIDE YOU-GO YOU-RUN

[G251] i-siganaka [G252] pi-nebintima n-ani
HE-RUN YOU-LOOK_BEHIND MY-BROTHER_IN_LAW

[G253] pi-nebintima n-ani [G254] te [G255] hatake
YOU-LOOK_BEHIND MY-BROTHER_IN_LAW NO GONE

[G256] o-ngantima [G257] o-gobengaka ora i-maganite
IT-DO IT-FEARFUL THAT HIS-HOT_SPRINGS

[G258] aro o-karati
NOW IT-CUT_OFF

5.2.2. Grammatical Structure and Lexemic Structure of the Myth as a Whole. In this section we shall consider first some aspects of the grammatical structure of the myth and later some of aspects of the lexemic structure.

The topic unit of the myth as G-discourse is manifested by the equative clause ira Mabireritatsi 'he who was Mabireri'. The background unit of the story is manifested by hirai 'before, or long ago' in the first clause.

In the body of the myth there are developmental, progressive, and dialogue G-paragraphs, e.g., IV, I, and II, respectively. Of the eighteen grammatical paragraphs posited, seven are dialogue paragraphs, and dialogue also occurs embedded in some of the progressive paragraphs. Consequently, a little less than half of the total G-clauses--113 out of 255--are quotations. But three-fourths of the noun phrases in the discourse occur within these quotations.

Not only is the proportion of nouns higher in quotations than in narrative portions of the text, but also the occurrence in a single clause of both subject and complement manifested by nouns is more frequent. For example, in G179, G185, and G187 different participants are speaking in each instance and both subject and complement are manifested by nouns. In contrast, the occurrence of nouns manifesting both subject and complement in narrative portions is quite rare. The higher frequency of nouns in quotations makes identification of participants simpler than in narrative portions.

When the discourse as a whole is viewed lexemically, it comprises three L-chapters. The first, however, is not complete in this version, i.e., the mediation and resolution units are lacking. This abbreviated chapter serves, nevertheless, to illustrate the kind of conflict which occurs in the other L-chapters--the victims are changed into another form by the villain. Furthermore, the fact that Mabireri's relative is introduced in the first L-chapter as co-villain serves to link the L-chapters together. Mabireri alone is the villain in the second L-chapter and the relative is not referred to, but in the third L-chapter the relative, who was a co-villain in the first chapter, is the villain.

The following schema summarizes the lexemic structure of the myth. The manifestations of units are stated in terms of corresponding G-clause numbers since L-clause numbers are given only for the first portion of the story.

Introduction
|G1 - G5
Episode 1
|L-chapter 1 = Conflict
|G7 - G23

Episode 2
|L-chapter 2 = Summary Conflict Mediation
| G24 - G25 | G26 - G74 | G75 - G99 or G115

Resolution
| G100 - G117 or G116 - G117

Episode 3
| L-chapter 3 = Situation | G118 - G136 | Conflict | G137 - G177 | Mediation | G178 - G221 | Resolution | G222 - G257

Closure
| G258

5.2.3. Identification of Participants and Forms for Referring to Them. In this section, rather than trace the sequence of participant roles throughout the story, selected portions will be discussed. Similarly, the forms for referring to participants will be discussed in a selected portion only.

Consider the identification of participants in L-paragraph I in Diagram 2. In the setting unit the relative is introduced in an L-existence clause. The first action in the setting is 'carry'. Did the relative carry Mabireri, or vice versa? If we jump ahead to the third L-chapter, we know from the fact that the relative was told to swing the baby that he was a child, for in Nomatsiguenga culture a sister does not tell an adult brother to help care for her baby. It would be natural to assume then that Mabireri as an adult carried the child. But in the beginning of the story the feature of age is not yet known and, therefore, the agent must be identified by other means. The means used here is identification through a sequence of roles in narrative paragraphs similar to that shown in Chart 35. Since Mabireri is introduced first in L1, we can assume that, like FATHER in the story discussed in Section 5.1, he will be the initiator or agent in the setting unit of at least some of the narrative paragraphs. We shall assume then that Mabireri carried the relative. In the sequent unit, if we follow the system illustrated in Chart 35, the relative is identified as the one who saw the children climbing and who advised Mabireri. Then, in the terminus unit Mabireri is identified as the agent who answered, 'It's just termites' (and turned the children into termites).

There is, in addition, in the first L-paragraph an embedded narrative paragraph in which the sequent and closure units are repeated to give the effect that this kind of event happened repeatedly. Here also the relative is agent in the sequent unit and Mabireri in the terminus unit.

Turning now to G-paragraph IV in Diagram 2, we shall consider contributions there to identification. The paragraph is linked in G41 to the preceding by the repetition of the last verb root of G-paragraph III, but the occurrence of the free pronoun iriro 'he' in G42 indicates that the subject is different from the subject in G41. Since Mabireri sent the people to dam the stream and the preceding clauses narrate their carrying out of the order, the different subject in G42 is then identified as Mabireri.[9] He is identified as

[9]Powlison (1965) describes the appearance of a new character or the re-entry of one as a cue to a paragraph boundary in Yagua.

subject in the rest of the paragraph by the particular pattern of verb root repetition which occurs only when the subject is the same, i.e., in complex developmental paragraphs.

Consider now the compound dialogue paragraph which includes G178 - G196. In this paragraph there are several instances in which the referent of the beneficiary unit is not simultaneously the referent of the focus of attention. The beneficiaries, i.e., the ones who are harmed by the action of turning the baby into a rock, are the mother and father but the relative is the focus of attention in the third L-chapter. In these cases, e.g., G179, G187, and G195, the beneficiary is manifested by -na 'me' referring either to the mother or father, but the fact that the relative is focus of attention is indicated by reference to the baby as 'his (the relative's) nephew' rather than 'my son'. Thus, the relation of the goal to the focus of attention is expressed rather than the relation of the goal to the beneficiary.

In the introductory paragraphs of Section 5.2, the relations between the plot roles and social roles of participants were pointed out. Agent and goal on the L-clause level and villain and victim on the L-chapter level are plot roles characterizing participants. Simultaneously, however, villain and victim are characterized by appropriate kinship relations, i.e., they are cross relatives. We see now that the observer's focus of attention is another role which is also intimately linked to the other two. Consequently, the kinship roles are expressed in terms of relation to the participant who is focus of attention rather than in terms of relation to non-focal participants.

5.3. Informant Reaction in Relation to Paragraph Boundaries. In Chapter 1 the technique followed in eliciting reaction to boundaries of units beyond the sentence from a preliterate informant was described. Here we shall discuss some correlations between his reactions and units which I have posited.

When questioned about specific phrases such as ainta basini 'there is another' and aro ikanka 'thus he did', Mr. Chimanca stated that the story almost always changes a little when they occur. He also stated that when the passive form ingantingani 'he is said of' occurs, there is a boundary very soon afterwards. Note, for example, in Diagram 2 that he indicated a boundary after ingantingani in G5 in the myth.

None of the above forms occur in the biographical narrative described in Section 5.1 and yet the G-paragraph boundaries posited exactly match the places where Mr. Chimanca indicated that the story breaks occur. I suspect--but was unable to get him to verbalize all of his reasons for indicating boundaries--that he recognized completion of surface structure patterns such as the end of the verb root repetition patterns in developmental G-paragraphs.

In the myth discussed in Section 5.2 the eleven paragraph breaks indicated by the informant almost exactly match eleven of those which I have posited. However, I have posited seven additional ones. It is possible that

in this myth he was not paying close attention and missed some of the boundaries. Occasionally while I read the stories to him I felt there was a paragraph break although he said nothing. When I asked if he thought there was, he often replied affirmatively and explained that he had not been paying close attention. At other times, however, he was quite sure there was not a paragraph break.

Beyond lack of attention another possible explanation for the lack of complete correlation between the paragraph boundaries I have posited and those he indicated is that I have failed to see some cases which could be handled better as embedded paragraphs rather than serially ordered paragraphs. For example, G63 might begin an embedded paragraph rather than a paragraph on a par with II beginning at G18.

There is yet another explanation which strikes me as being more plausible: in some cases the boundaries of units in L-chapters were more obvious to him than the boundaries of G-paragraphs. For example, the summary and conflict units of the second L-chapter comprise G24 through G74 within which the informant indicated no paragraph boundaries. Similarly, the mediation unit of the second L-chapter comprises G75 through G99 or possibly G115. The informant indicated no breaks between G75 and G115 but said G116 is the beginning of a new unit. Thus, in these cases the informant reacted to lexemic units rather than to G-paragraphs.

In the third L-chapter of the myth I have posited only one G-paragraph, G212 through G221, which the informant did not also indicate. It is a dialogue paragraph which can conceivably be embedded in the preceding progressive paragraph rather than being in serial relation with it.

Consider now the two cases, G116 and G196, in which the boundaries indicated by the informant precede by one or two clauses the boundaries which I have posited. G116 and G117 are surely a part of the resolution unit closing the second L-chapter. At the same time the ascent of Mabireri's ashes to the sky is the circumstance of his relative's being left alone in G118. The sentence telling of the ascent, then, forms a bridge between the two L-chapters. In other words, the sentence is shared by both L-chapters. If a boundary is placed it is arbitrary, as it is in every instance of shared units.[10]

Similarly, the paragraph boundary between G196 in which the father states that he is going to go kill the boy and G197 where he sets out can be placed aribitrarily but is actually indeterminate. For analytical purposes a cut is convenient, and I have chosen to leave G196 with the preceding clauses which are also grammatically part of the same direct quotation. On the other hand, the informant apparently responded to a lexemic link between the declaration and its carrying out.

[10]Shared, i.e., fused, units are discussed in some detail by Pike (1967.546ff).

In general, however, he placed boundaries between grammatical rather than lexemic structures. A review of the paragraph boundaries indicated by the informant in other discourses, as well as these two, shows that there is a high degree of correlation with the grammatical paragraphs I have posited on formal grounds.[11] Nevertheless, as in the case of the Mabireri myth, L-chapter units which are more inclusive than either G-paragraphs or L-paragraphs sometimes override the grammatical cues.

More fluency in the vernacular on the part of the investigator might make it possible to elicit from an informant distinctions between grammatical structures and lexemic structures beyond the sentence. If this could have been done with appropriate eliciting techniques, then it might have been possible to get him to verbalize his reasons for placing both surface structure and deep structure boundaries. While that was not accomplished during the field work, nevertheless, the boundaries indicated help to confirm the hypothesis that there are units beyond the sentence and that the competence of native speakers includes recognition of them.

[11]Some of the parallels between the results obtained from eliciting reaction to boundaries from a preliterate informant and those obtained in an experiment with college undergraduate students are striking. Koen, Becker, and Young describe an experiment in which undergraduate students were instructed to place paragraph markers at appropriate junctures in both English and nonsense passages. The students were able to verbalize reactions to various systems, but "it appears that formal cues are more important than semantic ones in the task of recognizing paragraph structure" (Koen, Becker, and Young 1967.13).

SIMULTANEITY OF ASPECTS OF FORM AND ASPECTS OF MEANING

The hypotheses underlying this study are:

1) Three aspects of form--lexemic, grammatical, and phonological--each contribute to the identification of participants in a discourse.

2) Three aspects of the total situation are defined as meaning--the plot or referent of the events narrated, the observer's viewpoint, and relevant components of the social setting. These aspects of meaning simultaneously exercise control over the forms selected for referring to participants.

3) The intersection of an aspect of form with an aspect of meaning composes units at hierarchical levels above the sentence as well as below.

In Chapter 3 the intersections of grammatical form with the three aspects of meaning, i.e., grammatical structures, were described with special reference to identification of participants. In Chapter 4 the intersections of lexemic form with the three aspects of meaning, i.e., lexemic structures, were also described with reference to that identification. In this concluding chapter the simultaneous character of relations between lexemic, grammatical, and phonological structures will be discussed.

6.1. Narrative Discourse Types Distinguished by Simultaneous Lexemic and Grammatical Contrasts. Throughout this study we have been concerned only with identification of participants in biography and myth. In this section these discourse types will be related to the over-all system of discourse types.

Within this over-all system the two basic classes of discourse are monologue and dialogue. However, there are several kinds of data which make it impossible to separate rigidly these two classes of discourse. On the one hand, dialogue is often quoted, i.e., embedded, in monologue. On the other hand, monologue is normally embedded in dialogue, i.e., monologue is normally preceded by sufficient dialogue to permit exchange of greetings and is followed by farewells. Although the greetings and farewells were not included in the recording of some of the data, they were part of the larger context in which the recording was made. Greetings and farewells are not only a part of the more inclusive dialogue within which monologue occurs; they are also a way in which the speaker-addressee relationship of the participants in the speech event is established--or severed at the close--as the basis of communication in the monologue.[1] In addition, the two types are not rigidly segmentable since an addressee may make comments or additions during a monologue,

[1]K. L. Pike has suggested (private communication) that the relationship between speaker and addressee is the basis for all communication.

or addressees may comment among themselves. In treating discourse as a whole, then, the participants in the speech event, as well as the participants in the plot, must be considered.

In spite of the fact that they sometimes cannot be rigidly separated--nor segmented when they occur embedded in one another--there are sharp differences between the two classes of discourse. For example, a dialogue about a trip includes question and answer sentences, whereas they are not included in a monologue about the same trip unless a dialogue is quoted or unless the speaker is interrupted by a question from an addressee.[2] Such differences are the basis for considering them to be contrastive classes of discourse.

Just as a rigid separation or segmentation of monologue and dialogue cannot be made, so also a rigid segmentation of monologues conjoined in a sequence cannot be made. For example, a recognized story-teller frequently tells more than one myth at a time. When this happens, a terminative sentence such as aro okarati 'that's all' occurs at the end of the first myth. Such a terminative sentence normally means a clear ending, but in this case it is overridden by a connecting phrase such as ira-ri basini ira mantsiakori 'that-but another, that moon' which occurs at the beginning of the next myth and serves simultaneously to indicate that the story which will follow is not the first of the sequence and also to introduce the new story. For the sake of simplicity of description of monologue discourse, these conjoined discourses have been treated as if they were rigidly segmentable, and the connecting phrases described as variants of the introduction unit of discourse. In fact, however, the boundaries are often fused and indeterminate.

We now turn to the contrastive monologue discourse types. The basic contrast here is between narrative and non-narrative monologue.

Non-narrative monologues have not been analyzed in detail since few examples occur in our data. The types tentatively posited include exhortation, instruction, and description. An exhortation is made to an individual by another whose kinship relation makes it appropriate. For example, a father's brother or mother's brother can advise a young girl about a contemplated course of action. Another kind of exhortation is an ethical statement by an individual based on a personal revelation or experience.

The narrative discourse system comprises contemporary discourse in contrast with folklore (rows in Chart 38). Contemporary discourse is oriented toward events and processes relevant to the lives of contemporary persons or their immediate ancestors, while folklore is oriented toward aspects of cosmology or other beliefs shared by the members of the society.

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[2]The difference between dialogue and interruption of a monologue is signalled mainly by phonological cues.

CHART 38.--System of narrative discourse types.

	Particularized	Generalized
Contemporary	1. Biography	2. Exposition
Folklore	3. Myth	4. Intoctrination

A further set of contrasts intersects with the above. It comprises particularized and generalized discourse (columns in Chart 38). Particularized discourses are told with reference to particular participants and their actions. Generalized discourses, on the other hand, are told with reference to any participant who might engage in the actions discussed. For example, a myth is told about ostensibly historical participants, i.e., it is particularized, and serves to explain some aspect of the tribal cosmology or other beliefs. An indoctrination discourse, in contrast, deals with cosmology or other beliefs but is generalized to include any participant to whom the belief discussed could apply.

The following are the narrative discourse types posited:

Particularized contemporary discourse is named biography. The name is not intended to indicate that the narration covers the entire life story of a person but rather that it covers some event or series of events relevant to the lives of the participants--a trip or an earthquake, for example.

Generalized contemporary discourse is named exposition. It is usually an exposition of some process which is narrated as a sequence of events--the steps in weaving or the steps in a shaman's curing ceremony, for example.

Particularized folklore is named myth. Many of the myths in the data are about animals who were formerly people; others concern the origin of manioc, the sun, or some other phenomenon of nature.

Generalized folklore is named indoctrination. Examples in the data include a narration of the beliefs concerning success in hunting and a narration about life after death.

Each of the aspects of meaning is relevant in distinguishing narrative discourse types from one another. Similarly, each of the aspects of form contributes to the contrasts in a way which is not characteristic of other hierarchical levels. Thus, the boundaries of lexemic and grammatical units as form-meaning composites coincide at the discourse level so that the system of narrative discourse types is the same for L-discourse and for G-discourse. In contrast, the boundaries of lexemic and grammatical units of other levels do not necessarily coincide. L-paragraph boundaries, for example, do not always coincide with G-paragraph boundaries so that the system of L-paragraphs is not exactly the same as the system of G-paragraphs.

In Chart 39 the contrastive lexemic forms of narrative discourses are given on the left side and the contrastive grammatical forms on the right. The sections of the chart are numbered to match the cells in Chart 38. A vertical arrangement of units within a numbered section is intended to indicate simultaneity of all of the units of one row with all of the units of the other rows while horizontal arrangement within lexemic or grammatical structure indicates some degree of linearity of units. The top row in each section represents units with observer meaning, the middle row represents units with plot meaning, and the bottom row represents units or features with social meaning. The units of lexemic structure on the left and the units of grammatical structure on the right are also simultaneous with one another. Since phonological structures have not been analyzed in detail, they are not included on the chart.[3]

A comparison of biography (Sec. 1 of Chart 39) with exposition (Sec. 2 of Chart 39) and of myth (Sec. 3) with indoctrination (Sec. 4) shows that, with the exception of an optional elucidation unit, the contrasts in lexemic form between particularized and generalized narrations are contrasts in units with observer meaning. The indicative mode occurs in particularized narration, while the contingent mode occurs in generalized narration; modal distinctions indicate the observer's judgment of the truth value of the events in the plot.

In addition, in particularized discourse the speaker, i.e., the observer, refers to the participants as though they are specific contemporary individuals or specific historical individuals, whereas in generalized discourse he refers to them in general terms and omits proper names entirely. For example, in an exposition of the weaving process tsinane 'woman' refers to any woman who weaves. Thus, the lexemic distinction between particularized and generalized discourse reflects contrast in observer viewpoint rather than in the plot.

On the other hand, the lexemic distinction between contemporary discourse and folklore reflects contrasts both in plot meaning and in observer meaning. A comparison of biography (Sec. 1) with myth (Sec. 3), and of exposition (Sec. 2) with indoctrination (Sec. 4), shows that there are plot contrasts such that temporal episodes occur in contemporary narrative whereas climactic episodes occur in folklore. Comparison of the same pairs shows that there are observer contrasts also such that a reportive unit occurs along with the plot units in folklore but does not occur in contemporary discourse. This unit indicates that the speaker as observer is merely a reporter of that which he has heard from the old story-tellers. Furthermore, the focus of attention is fixed, i.e., the speaker may not optionally choose to focus his attention on someone other than the main character in the story. In contrast, in biography the observer can optionally focus his attention on any one of a number of participants and can vary focus within a story.

[3]Wode suggests that there are intonational differences in English between nursery rhymes as a whole and other kinds of discourse (1966.214). My impression which is not substantiated by detailed analysis is that there are characteristic intonation patterns in myths which contrast with others in biography in Nomatsiguenga.

CHART 39.--Contrastive forms of narrative discourse types. In each numbered section the top row lists units with observer (Obs) meaning, the middle row lists units with plot meaning, and the bottom row lists units or features in square brackets with social meaning (Soc). Lexemic structure is given on the left and grammatical structure on the right.

	Lexemic structure	Grammatical structure
1. Biography (Particularized Contemporary)	Obs--±Focus +IndicativeMode +Particularization of Participants Plot--+Intro +Temporal Episode^{n} ±Elucidation +Closure Soc--[Social roles such as initiator relative to participants in speech event]	Obs--[Passive 'he was said of' does not occur] Plot--+Topic +Background +Body +Closure [25% redundancy] Soc--[Can be told by any member of the society]
2. Exposition (Generalized Contemporary)	= Obs--±Focus +ContingentMode +Generalization of Participants Plot--+Intro +Temporal Episode^{n} +Closure Soc--[Social roles such as initiator relative to participants in speech event]	Obs--[Passive 'he was said of' does not occur] Plot--Topic +Background +Body +Closure [12% redundancy] Soc--[Can be told by any member of the society]
3. Myth[a] (Particularized Folklore)	= Obs--+Reportive +IndicativeMode +Particularization of Participants Plot--+Intro +ClimacticEpisode^{n} ±Elucidation +Closure Soc--[Correlation of kinship relation and plot relations of participants]	Obs--+Passive 'he was said of' indicating uninvolved observer Plot--+Topic ±Background +Body +Closure [12% redundancy] Soc--[Told only by recognized story-teller]
4. Indoctrination (Generalized Folklore)	= Obs--+Reportive +ContingentMode +Generalization of Participants Plot--+Intro +ClimacticEpisode^{n} +Closure Soc--[Correlation of kinship relation and plot relations of participants]	Obs--+Passive 'he was said of' indicating uninvolved observer Plot--+Topic ±Background +Body +Closure [6% redundancy] Soc--[Told only by recognized story-teller]

[a]Myth is distinguished here from other discourse types by contrastive lexemic and grammatical features rather than according to technical definitions of folklorists. However, those discourses which I consider to be myths meet Thompson's practical definition: "Myth has to do with the gods and their actions, with creation, and with the general nature of the universe and of the earth" (1955.106).

The grammatical contrasts between narrative discourse types involve differences in observer and social meaning, as well as differences in the amount of redundancy in the distribution of plot information. As shown on the righthand side of Chart 39, there is twice as much redundancy in contemporary narratives as in their corresponding folklore types, i.e., there is 25 per cent redundancy in biography in contrast with 12 per cent in myth, and there is 12 per cent redundancy in exposition in contrast with 6 per cent in indoctrination. There is also twice as much in particularized narrative as there is in generalized narrative.

In folklore periodic occurrence of the passive form ingantingani 'he was said of'--referring to the participant who is topic of the plot--adds the meaning that the observer is uninvolved. Passives rarely occur in contemporary narrative, and this particular passive expression does not occur at all.

While observer units such as focus and reportive indicate the viewpoint of the speaker as a participant in the speech event, the social setting determines in some cases the roles of the participants in the speech event. The oldest man, relative to any particular group assembled, is the recognized story-teller and the only one who may appropriately tell myths. Thus, Julio Mishicuri may tell myths when Roberto Casancho is not present but when the latter is there, it would be improper for Mr. Mishicuri to do so. Moreover, it is improper at all times for a younger man--say under 40--to tell a myth. While away from his village, however, one informant of about 35 wished to contribute to the collection of myths by telling one not recorded previously. His account does not contain a single instance of 'he was said of' or of any of its variations. Hence, the narration is ungrammatical on the discourse level by comparison with myths narrated by the older men.[4]

6.2. On Simultaneous Relations of Lexemic, Grammatical, and Phonological Structures. We have discussed above both lexemic and grammatical contrasts in narrative discourse types with only brief references to phonological contrasts. The discourse types are distinguished from one another not by contrastive structures of any one hierarchy but by simultaneous contrasts in all of them.

Not only are the structures of all three hierarchies simultaneous but also they interact with one another in various ways. In this section we shall discuss first some relations between L-clause units and grammatical units which refer to participants and then other ways in which all three of the hierarchies interact with one another.

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[4]One myth narrated by a recognized story-teller lacks any instances of this passive form also. It should probably be considered ungrammatical on this as well as other grounds since the informant who explained the story to me said it was incomplete.

The subject of an active G-clause can be associated with the agent unit of an L-clause (Juan in example 1a) or with the initiator of an L-clause (Pablo in 1b). The subject of a passive G-clause, on the other hand, can be associated with the goal (Pablo in 1c), indirect goal (Pablo in 1d), instrument (iroro... carro in 1e), or purpose (hompiki in 1f).

(1) (a) Juan i-niake-ri yaniri
JOHN HE-SEE-HIM HOWLER_MONKEY
'John saw the howler monkey'

(b) Pablo i-ogi-montië-ri Juan
PAUL HE-CAUSATIVE-CROSS_RIVER-HIM JOHN
'Paul helped John across the river'

(c) Pablo i-ogë-ngani
PAUL HE-KILL-PASSIVE
'Paul was killed'

(d) Pablo i-pe-ngani kireki
PAUL HE-GIVE-PASSIVE MONEY
'Paul was given money'

(e) iroro ka-ha-anta-ge carro
IT UNSPECIFIED_PERSON-GO-INSTRUMENT...PASSIVE CAR
'cars as instruments are utilized for travelling'

(f) hompiki o-poka-si-kë-ngani
MEDICINE IT-COME-PURPOSIVE...PASSIVE
'a trip for getting medicine is undertaken'

Conversely, the L-clause unit agent can be associated with the G-clause unit subject in G-active clauses, e.g., Juan in (2a) is lexemic agent and grammatical subject. Or, it can be associated with the pronominal prefix in a verb, e.g., i- 'he-' in (2b). Or, it can be associated with both a clause-level subject and a word-level prefix, e.g., Juan and i- in (2c). Or, the agent can be associated with the complement in a G-clause and/or a pronominal suffix in the verb if there is an initiator in the L-clause, e.g., in (2d) Pablo and -ri '-him' are associated with the agent. Or, it can be associated with the possessor in a G-possessive noun phrase and the pronominal prefix in a noun, e.g., pasi and pi- are associated with the agent in (2e).

(2) (a) Juan niake-ro inato
JOHN SEE-HER MOTHER
'John is the one who saw mother'

(b) i-niake-ro inato
HE-SEE-HER MOTHER
'he saw mother'

(c) Juan i-niake-ro inato
JOHN HE-SEE-HER MOTHER
'John saw mother'

(d) Juan i-ogi-montiẽ-ri Pablo
JOHN HE-CAUSATIVE-RIVER_CROSS-HIM PAUL
'John caused Paul to cross the river, i.e.,
he helped him across'

(e) pasi pi-kamane
YOUR YOUR-DEATH
'your death, i.e., you die'

The lexemic unit agent, then, can be associated with two units of the G-clause level, with the possessor of G-noun phrases, with a prefix or suffix of the verb class of G-words, or with a prefix of the noun class of G-words. The non-isomorphic nature of the relation between units such as agent and goal with those such as subject and complement is one of the reasons why I consider it preferable to separate deep structure from surface structure. If, instead, agent is considered to be the meaning of grammatical units--as in Becker's four-aspect tagmeme discussed in Section 2.1.4.2--then several G-clause level units as well as units of G-phrase and G-word levels can have the same "meaning". I find this uncongenial because it does not seem to represent the actual independence of elements of deep structure from elements of surface structure. However, since I do not consider meaning and form to be independent of one another, I have set up both lexemic form-meaning composites and grammatical form-meaning composites.

Although there is perhaps "less meaning" in grammatical structures in the approach I have followed than in Becker's, other meanings have emerged in Nomatsiguenga: passive clauses as a whole mean that the observer has an uninvolved attitude, and nominal clauses as a whole add the meaning of specific pointing to the participant who is subject. For example, in (2a) Juan is pointed out as 'the one who saw mother' in contrast with someone else, whereas in (2c) the statement is made with no contrastive pointing.

Another reason for separating L-units such as agent and goal from G-units such as subject and object is the fact that the sequence of roles such as agent and goal in events chronologically ordered is one of the major factors in identification of participants in discourse. Since the chronological order of deep structure does not always match the actual surface order, it is important to separate agent from subject.

However, the fact that the two kinds of order do not match is the source of one of the main questions left unanswered in this thesis: Since the orders are different, how should lexemic structures be mapped onto grammatical structure or vice versa? In the right-hand pages of Diagrams 1 and 2 in Chapter 5, the result of a kind of mapping is shown by the correlation of G-clause and L-clause numbers, but no generative rules are given to show the relationship between the two kinds of structure. Such rules would be a further stage of analysis. Some possible frameworks within which such rules might be formulated are:

1) The anatactic rules of stratificational grammar[5] could be adapted for structures beyond the sentence. These rules are intended to handle differences of order in relating constructions of two adjacent strata. However, just how such rules should be adapted is not clear.

2) Another possible starting point for formulating rules to map lexemic structures onto grammatical structures is to let the chronological order of a story represent the emic or contrastive order of the lexemic structure and to let the actual order represent not only the emic order of grammatical structure but also the etic or variant order of the lexemic structure. Thus, there would be an intermediate step in which etic manifestations of lexemic structure would be mapped onto emic grammatical structures, whereas in Diagrams 1 and 2 the mapping is shown in a single step.

A set of formal rules for mapping lexemic structures onto grammatical structures and the latter onto phonological structures is a desirable goal for simplicity in stating encoding processes. However, structures of all three hierarchies interact with one another in such a way that the facts of language would be reflected more accurately by a set of rules which show simultaneous multi-directional relations rather than the one-directional relations implied above. Examples of some of the ways in which the hierarchies interact with one another follow.

The occurrence of the passive G-clause ingantingani 'he is said of' is obligatory in myth and conditions the form of the corresponding L-clause in that it precludes the occurrence of the agent unit. In passive G-clauses no unit can occur which is associated with either the agent or the initiator.

On the other hand, the distribution of 'he was said of' in a myth is an instance of lexemic conditioning of grammatical structure. The expression can occur in any part of the myth viewed as G-discourse except for that part which corresponds to the mediation unit of an L-chapter.

[5]According to Lamb, "anataxis...can be handled by the addition of... the numeral superscript to be attached to certain symbols in the specification of environment in subrules. The function of the superscript is to specify a deviation from the usual order of the execution of the rules" (Lamb 1964.117).

Phonological structures may also condition grammatical structures. For example, -nta 'since' must be phonologically attached either to te 'negative,' aroke NOW-AND 'already', or to a free pronoun. If neither of the first two are selected by plot meaning, then a free pronoun must occur manifesting subject in a nominal active G-clause. The phonological fact that -nta must be attached to certain grammatical forms is thus the controlling factor in some occurrences of the nominal active clause type and indirectly controls the form for referring to a participant.

In songs and other poetic forms which we have not discussed in this study phonological structure may condition grammatical structure and lexemic structure. Conversely, lexemic structure may condition phonological structure; for example, new phonemes or different distributions of phonemes may be introduced into a language through loan words.

Grammatical structures may also condition phonological structures. For example, in Nomatsiguenga, the phoneme /t/ or the sequence /ta/ is generated between certain combinations of morphemes in verbs. In (3a) the verb root a 'go' is immediately followed by -k but in (3b) when -si 'purposive' occurs ta is generated between it and the verb root.

(3) (a) i-a-k-e
HE-GO...COMPLETIVE
'he went'

(b) i-a-ta-si-k-e-ri
HE-GO-(GENERATED SEQUENCE)-PURPOSIVE...
COMPLETIVE-HIM
'he went (to see) him'

We have now mentioned ways in which structures of each of the hierarchies may interact with those of each of the others. In Chapter 3 and Chapter 4 we also showed ways in which structures of different levels interact with one another: structures above the sentence in the grammatical or lexemic hierarchy may condition the form of structures below the sentence in the same hierarchy. For example, the variant of L-narrative paragraphs in which there is no terminus is conditioned by the fact that the paragraph manifests an L-chapter summary. Conversely, lower level structures may condition higher level structures. For example, in Section 3.2 we pointed out the fact that possessive noun phrases occur only following the predicate so that the order of units in the clause is conditioned by the phrase type.

These kinds of conditioning are summarized in Chart 40 where the symbol > is intended to indicate that the kind of structure on the left conditions, in some cases the kind of structure on the right.

There is, then, multi-directional interaction between the hierarchies. A phenomenon such as phonological conditioning of lexemic and grammatical structures in poetry is an example of this interaction which is not basically

CHART 40.--Directions of interaction between hierarchies.

L > L	L > G	L > P
G > L	G > G	G > P
P > L	P > G	P > P

different from ordinary grammatical conditioning of phonological structure. It is accounted for directly since multi-dimensional conditioning is an integral part of tagmemic theory.[6] An adequate set of formal rules for either encoding or decoding must account for multi-dimensional relations: they must account for simultaneity of the aspects of form, simultaneity of the aspects of meaning, and simultaneity of form and meaning in units which are form-meaning composites.[7]

6.3. Participants Identified by Aspects of Form and Participant Reference Controlled by Simultaneous Aspects of Meaning. Participants in a discourse are identified by concomitant lexemic, grammatical, and phonological aspects of form, i.e., by the forms of lexemic, grammatical, and phonological structures. Although phonological contributions to identification have not been described in detail, the buzzard's speech cited in Chapter 1 is one way in which phonological forms contribute. I expect other cues to become evident with further analysis.

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[6]In stratificational grammar the relations between non-adjacent strata cannot be stated directly. Therefore, Taber explains phonological conditioning of semology in poetry as follows:

> It is well known that in many literary genres, the speaker/writer not only makes choices at the semological level, but makes these choices in anticipation of certain features of the results at the lower strata. The most obvious case is that of poetry, in which the poet has to work in anticipation of the phonological system of the language (Taber 1966.69, quoted by permission of the author.)

[7]In tagmemics not only are units of the different hierarchies related in a multi-directional manner, but also the units of each are considered to be form-meaning composites. There is no need to posit skipping of strata to account for phonological meaning as Cromack does for stratificational grammar:

> Room must be made in the theory for occasional skipping of strata. Some meanings, for example, are realized directly in phonological units, without finding a place in grammatical structure at all. Much expressive as well as referential meaning is carried by interjections or ideophonic material (Cromack 1968.13-4).

Recurring sound sequences, ideophones, intonation, etc., are in tagmemics, simply examples of phonological form-meaning composites.

The kinds of contributions of grammatical structures are divided into the following: the occurrence of certain units, the agreement rules between constituent units of a construction, and the dimensions of contrast in the system of a given level. Noun phrases are among the units which contribute to the identification of participants by their occurrence. Agreement rules between constituent units help to identify the participants as same or different, e.g., the subject of each constituent clause in theme and development units of a simple developmental G-paragraph is the same. At least one category from each dimension of contrast in the systems of a level contributes to identification. Thus, developmental paragraph types--simple, complex, and compound--contribute directly to identification, whereas progressive paragraph types do not.

Lexemic structures also contribute to identification by the occurrence of certain units, e.g., a lexeme naming the participant; agreement rules between units, e.g., the fact that the goal of an L-clause can refer to the same participant as the agent, whereas the indirect goal cannot; and the dimensions of contrast in the system of a given level, e.g., in clauses marked for focus one participant is identified as the observer's focus of attention.

In addition, lexemic structures characterize participants and the characterization in turn helps to identify them when they are referred to by pronominal affixes only. Contrastive lexemic units characterize the participants by their roles or by the class of which they are a member, e.g., antsiato 'tree' characterizes a participant in one myth as a member of the generic class 'tree'. Variant forms for referring to them add other characterizations, e.g., the species term kontërero characterizes the tree by the addition of the species of which it is a member. The distribution of lexemic forms in the appropriate sequence in a myth characterizes participants by their chapter roles, e.g., the naming of the tree first among the participants characterizes it as the villain of that chapter.[8]

The selection of forms for referring to participants is controlled by simultaneous aspects of meaning. The topic of the plot ordinarily controls the referent of the first noun, but the focus of attention of the observer controls the occurrence of some of the other nouns. Thus, in the biography analyzed in Section 5.1 the noun 'father' occurs once in each L-paragraph except the last and refers to the participant in focus, although identification is clear without the noun. Or, the focus of attention on a woman in a mixed group may be the determining factor in the occurrence of a feminine form for referring to the group while the social role of initiator may be the determining factor in the use of a singular rather than a plural form.

[8]In the tree myth the resolution unit occurs first and is manifested by an embedded L-chapter. The tree is the villain of the embedded chapter but the mediator of the independent L-chapter within which it is embedded. As mediator, it was the means of dispelling the total darkness in which man used to live.

In Section 5.2 we showed some interrelations between these three kinds of meaning in a myth. The plot roles of participants in an L-chapter of a myth are: villain(s), victim(s), and mediator(s). The social kinship roles of the participants are simultaneous and inter-related with the plot roles in that those who side together, i.e., co-villains, co-victims, or victim and mediator, are parallel relatives while those who are against each other are cross relatives. The observer role of focus of attention is also simultaneous and inter-related so that participants are referred to according to their relation to the one who is focus of attention, e.g., the baby who is changed into a rock is referred to by the mother not as 'my son' but as 'his nephew (of the one who changed him and who is focus of attention)'.

Although no formal rules for encoding or decoding have been suggested in this study, we have described the structure of Nomatsiguenga sufficiently to show the following: 1) Three aspects of form--lexemic, grammatical, and phonological--contribute to the identification of participants. 2) Three aspects of meaning--the plot of the events narrated, the observer's viewpoint, and the social setting--simultaneously control the forms for referring to participants. 3) The three aspects of form and the three aspects of meaning, as they interact with one another in various ways, are each relevant for the solution of the principal problems. Along with certain properties of structures beyond the sentence they allow a hearer to identify the referent of pronouns, or conversely, they allow a speaker to determine whether to use a noun or a pronoun in Nomatsiguenga discourse.

APPENDIX A: PHONEMIC SKETCH AND SOME MORPHOPHONEMIC RULES

The transcription of Nomatsiguenga illustrations in this study follows, in most respects, Harold Shaver's phonemic analysis in "Phonemics and Morphophonemics of Nomatsiguenga," (1962), unpublished manuscript. It differs from his analysis in that /i/ and /y/ are both transcribed /i/, and the contrast between high and low tone is not indicated in the transcription.

The phonemes posited are enclosed in slant lines in Charts A and B, the principal allophones of the phonemes are enclosed in square brackets, and the orthographic symbols used in the transcription are enclosed in quotation marks.

Rounded allophones of velar consonants occur in the following environment: /o/___ /ė/; palatalized allophones of velar consonants: ____/front vowel/; rounded allophones of labial consonants: /back vowel/ or word initial position ___/ė/.

[b] fluctuates word initially with [β]: [β] occurs elsewhere.

[ř] and [ɾ] freely fluctuate, although [ɾ] occurs more often between back vowels and [ř] occurs more often elsewhere.

CHART A.--Consonant phonemes, allophones, and orthographic symbols for Nomatsiguenga.

	Labial	Alveolar	Velar
Stop	/p/ [p] "p" [p^w]	/t/ [t] "t"	/k/ [k] "k" [k^w] [k^y]
Nasal	/m/ [m] "m" [m^w]	/n/ [n] "n"	/ŋ/ [ŋ] "ng"[a] [$ŋ^w$] [$ŋ^y$]
Frica-tive Vd.	/β/ [β] "b" [$β^w$] [b]	/r/ [ɾ] "r" [ɾ]	/γ/ [γ] "g" [$γ^w$] [$γ^y$]
Vl.		/s/ [s] "s"	/h/ [h] "h"
Affricate		/ts/ [ts] "ts"	

[a]/ŋ/ is transcribed as "n" preceding a velar stop and as "ng" elsewhere.

CHART B.--Vowel phonemes, allophones, and orthographic symbols for Nomatsiguenga.

	Front	Central	Back
High	/i/ [i] "i" [ɪ]		/o/ [u] "o" [o]
Mid		/ə̈/ [ə̈] "ë"	
Low	/e/ [ɛ] "e" [æ]		/a/ [a] "a" [ə]

The sequences /tsi/ and /si/ become [č] and [š], respectively, when followed by a back vowel or /ə̈/.

In addition to the vowel allophones listed in Chart B, all vowels have a nasalized allophone which occurs contiguous to nasal consonants. They also occur if there is a nasal consonant in the word and /h/ is the only intervening consonant: /niha/ [nįhą] 'water'. Nasalized allophones also occur in a few /h/ initial words in which there are no nasal consonants, but no minimal contrasts with oral vowels in this position occur in the data: /hoke/ [hǫkʸe] 'come!' and /hara/[hąrą] 'jungle'.

The phonemes posited for Nomatsiguenga differ from those posited by Pike and Kindberg for the dialect of Ashaninka Campa spoken along the Mantaro and Apurimac Rivers in that /ə̈, ɤ, and ŋ/ are posited for Nomatsiguenga but not for Ashaninka Campa. On the other hand, /š and č/ are posited as contrastive phonemes in Ashaninka Campa but not in Nomatsiguenga. Dirks adds /tʸ and nʸ/ for the dialect of Ashaninka Campa spoken along the Tambo River.

Stress was posited by Pike and Kindberg as contrastive for Ashaninka Campa, whereas Shaver posits tone as contrastive for Nomatsiguenga. My guess is that both stress and tone are contrastive on different hierarchical levels in Nomatsiguenga although neither carries a high functional load.

Some of the more common morphophonemic changes in Nomatsiguenga are listed below. The exact conditions in which these changes occur have not yet been analyzed except for 1.a and 1.b. Rules 1.b and 1.c are ordered with respect to each other.

1.a. A nasal consonant followed by morpheme-initial /ə̈/ is lost: i- kan -b -ə̈ -ri >ikabə̈ri HE-SAY-ARRIVING-ASPECT-HIM 'he said to the one arriving'.

1.b. Nasal consonants assimilate to the point of articulation of the following stop: i- kan -p -ə̈ >ikampə̈ HE-SAY-ARRIVING-ASPECT 'he said upon arriving'.

1.c. A morpheme-initial labial or velar stop is lost when preceded by the nasal allomorph of the prefix 'contingent': no- ng- komo -keni > nongomokeni I-CONTINGENT-DAM_STREAM-CONTINUATIVE 'I am going to go dam the stream'.

2.a. /a/ frequently becomes /o/ when followed by a labial consonant. Compare, for example, the verb root nia~nio in the following examples: iniakeri 'he saw him' and iniopëri 'he saw him upon arriving'.

2.b. /a/ frequently > /ë/ when followed by a velar consonant. Compare, for example the verb root gisa~gisë in the following examples: igisanaka 'he continues to be angry' and igisëgotakari 'he is angry with him'.

3.a. Morpheme final /k/ followed by morpheme initial /k/ > /ik/: i-pok -ko -keni pitotsikë > ipoikokeni pitotsikë HE-COME-INCLUDED-CONTINUATIVE CANOE_IN 'he came in a canoe'.

3.b. Morpheme final /mo/ followed by morpheme initial /mo/ > omo: na- timo -mo -ti -ri > natiomotiri I-LIVE IN_PRESENCE_OF-ASPECT-HIM 'I lived at his place'.

4.a. Morpheme initial /h/ is frequently lost when preceded by a prefix. Compare, for example, the verb root ha~a in the following examples: hatake 'gone' and i-ake 'he-went'.

4.b. Morpheme medial velar fricatives and a preceding or following front vowel frequently are reduced to /i/. Compare the alternates of verb roots siga~sia and kahema ~ kaima in the following examples. isiganaka 'he ran away' isiaka 'he ran (escaped)'; nakaimari 'I call him' and iriro kahematsi 'he calls'.

5. Either /t/ or /a/ or /ta/ is generated in verbs between certain morpheme sequences. Compare, for example, the following forms with the verb root ha ~ a. i-a-ke HE-GO-ASPECT 'he went', i-a-ta-si-ke-ri HE-GO (GENERATED)-PURPOSIVE-ASPECT-HIM 'he went (to see) him', and ha-ta-ke HE-GO-(GENERATED)-ASPECT 'gone'. The exact conditions under which one of these phonemes or the sequence /ta/ is generated are not yet clear.[1]

The generation of a, t, and ta between morphemes may conceivably be related to the occurrence of two-syllable allomorphs of certain affixes which are otherwise a single syllable, but the relation is not yet clear. Compare, for example, -pinin ~ -pen 'repeatedly' in the following examples: o-ma-pinin-t-i-ro kireki WE-GIVE-REPEATEDLY-(GENERATED)-ASPECT-HER MONEY 'we repeatedly give her money' and i-ra-nets-a-pen-t-ë-ro HE-CONTINGENT-LOOK_AT-(GENERATED)-REPEATEDLY-(GENERATED)-ASPECT-HER.

[1]Cf. W. Kindberg (1961.521) for a description of a similar phenomenon in Ashaninka Campa.

If a particle view of this phenomenon is taken, a, t, and ta could be termed empty morphs. In a wave view (cf. Pike 1967.510ff for discussion of particle, wave, and field views), however, it could be considered an example of indeterminacy between borders of units.

APPENDIX B: INVENTORY OF AFFIXES

An inventory of some of the most frequently occurring affixes in Nomatsiguenga is given below. It is taken from the following unpublished manuscripts: "Nomatsiguenga Verb Morphology," Harold Shaver (1967); "Nomatsiguenga Noun Morphology," Betty Shaver (1967); and "Manifestations of Clause-Level Tagmemes in Nomatsiguenga," Mary Ruth Wise (1967).

Affixes which occur in verbs are listed first. Those which can occur in most grammatical word classes and clitics are listed next, and those which occur with non-verb classes are listed last. Pronominal affixes are not repeated since they are listed in Chart 16 in Section 3.4.

Affixes are listed according to order from the root outward. The orders for verb affixes, however, are not well established. Probably in a detailed description of verb morphology an approach in which levels or layers of affixation are posited would be more useful than a linear listing of orders.[1]

An approach by levels might be usefully supplemented by distinguishing emic and etic order also. Mutually exclusive distribution is one factor in determining emic order, whereas etic or actual order does not always indicate mutually exclusive distribution with affixes of other orders.[2]

In the following inventory the approximate order of suffixes is indicated by decade and century numbers. Specific morphemes within an order are assigned digits.

11. -gan 'mediative': po-ma-gan-ti-ri YOU-GIVE-MEDIATIVE...HIM 'send it to him'.

12. -se ∞ -si 'much, profuse': o-tohë-si-të-ni SHE-COUGH-MUCH... ANIMATE 'she coughs a lot'.

13. -biri ∞ -bi 'reason': pairora ni-a-biri-ke WHY I-GO-REASON... 'why should I go?'

14. -tio 'having to do with emotions': no-kogi-tio-ba-ig-at-a I-SAD-EMOTIONS-RECIPROCAL-PLURAL...REFLEXIVE 'we are sad'.

21. -garan 'partitive': i-pogiria-garan-të-ri HE-KILL-PARTITIVE...HIM 'he killed some, but not all, of them'.

22. -ko ∞ -go 'included': n-aree-go-t-an-ë-ni I-FLY-INCLUDED... AWAY...ANIMATE 'I arrived flying by plane'.

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[1] Cf. Wise (1963) for an approach by levels to verb affixation in a related language.

[2] Emic and etic orders are distinguished in Murui verb morphology by Bryan Burtch and Mary Ruth Wise in "Murui (Witotoan) Clause Structures," Linguistics 38.12-29 (1968).

23. -pompoi 'action having to do with a pile of something': o-pama-së-pompoi-tanë-ri IT-BURN-MUCH-PILE...THERE 'the whole pile was burning intensely'.

24. -an 'instrumental': pairo pi-ken-an-ta-pa WHAT YOU-TRAVEL-INSTRUMENTAL...ARRIVE 'by what means did you travel?'

31. -si 'purposive': i-poka-si-ti HE-COME-PURPOSIVE... 'he came for '.

41. -nt ∞ -nte ∞ -ntë 'habitual, characteristic, long-continued action': na-tima-nte-ke I-SLEEP-HABITUAL... 'I'm going to sleep all day'.

42. -ge ∞ -gi 'distributive': i-pogo-ta-ge-t-ah-i-ro HE-GRAB... DISTRIBUTIVE...RETURN...IT 'he grabs them up here and there'.

43. -bin 'desiderative': i-poko-bin-ti-ni HE-COME-DESIDERATIVE... ANIMATE 'he wants to come'.

51. -tsë 'action with actor partly hidden from view': i-netsa-n-tsë-t-an-ë HE-LOOK...HIDDEN...AWAY... 'he looked from behind the brush as he went along'.

61. -pinin ∞ -pen 'repeatedly': i-ra-netsa-a-pen-të-ro HE-CONTINGENT-LOOK...REPEATEDLY...IT 'he will go look at it often'.

62. -ma 'half, a little': i-a-ta-kagë-ma-ke-ri HE-GO...ACCOMPANI-MENT-HALF...HIM 'he went halfway with him'.

71. -kag(a) ∞ -k(a) ∞ -g(a) ∞ -a 'accompaniment': te na-nia-kag-i-ri NOT I-SEE-ACCOMPANIMENT...HIM 'I didn't see with him, or I didn't cause him to see'.

81. -ig ∞ -i 'plural': i-kaima-ig-a-p-ë-ri HE-CALL-PLURAL...ARRIVE ...HIM 'upon arriving, he called them'.

91. -se 'location': n-oga-ig-a-se-ga I-DRINK-PLURAL...LOCATION... 'we were drinking there'.

92. -ba 'random, aimlessly': i-kena-ba-gi-të-ni HE-TRAVEL-RANDOM-DISTRIBUTIVE...ANIMATE 'he has gone hunting'.

93. -te 'toward': i-hoka-te-ta-be-ka-ri HE-THROW-TOWARD...FRUSTRA-TIVE...HIM 'he threw (his knife) toward him but missed'.

94. -nga 'a little': o-kogintim-ai-nga-p-ë IT-WIND...LITTLE-ARRIVE... 'the wind blew a little'.

95. -be ∞ -bita 'frustrative': i-kan-ta-be-ka-ri HE-SAY...FRUSTRA-TIVE...HIM 'he told him in vain'.

101. -ni 'continuing': i-po-biri-ni-ta-ri HE-PILE-REASON-CONTINUING ...HIM 'that's why he piled up (turned up the bat's nose)'.

111. -ki ∞ -kin 'go and return': pi-nia-ki-ti-ri YOU-SEE-GO_AND_RETURN...HIM 'go to see him'.

121. -ba 'reciprocal': i-ogo-ba-ka HE-KILL-RECIPROCAL... 'they killed each other'.

122. -mo 'in presence of': pi-ngenga-ba-gi-to-mo-ti-na YOU-NARRATE-AIMLESSLY-DISTRIBUTIVE...IN_PRESENCE_OF...ME 'just tell me about anything'.

123. -ben 'referential': na-ngaki-ben-ki-m-a I-AWAKE-REFERENTIAL...UNINITIATED-REFLEXIVE 'I stay awake on account of (it)'.

133. -memega 'pretended action': i-sama-memega-ka HE-SLEEP-PRETEND... 'he pretends to be asleep'.

141. -man 'early in the morning': i-oga-man-a-ro HE-DRINK-EARLY_IN_MORNING-REFLEXIVE-IT 'he drank it early in the morning'.

142. -ning 'at night': o-mariga-ning-ë IT-FALL-AT_NIGHT... 'it would rain at night'.

143. -na 'back and forth motion': i-ken-ta-gi-te-na-ntaka-ri HE–MOVE...DISTRIBUTIVE-TOWARD-BACK_AND_FORTH...HIM 'he moved (his knife) back and forth toward him'.

144. -sëre 'near': p-are-sëre-p-a-ri IT-ARRIVE-NEAR-ARRIVE-REFLEXIVE-HIM 'it came close to him'.

145. -gani ∞ -ngani 'verbal passive': o-nio-b-ë-gani SHE-SEE-ARRIVE...PASSIVE 'she was seen coming'.

146. -ge ∞ -genga 'nominal passive': iroro ka-tsima-ge IT UNSPECIFIED_PERSON-EAT-PASSIVE 'it is edible'.

151. -p ∞ -b 'arriving': p-ago-b-ë-ri YOU-TAKE-ARRIVING...IT 'catch it as it arrives'.

161. -an 'away': pi-sig-an-ë-m-a YOU-RUN-AWAY...UNINITIATED-REFLEXIVE 'run'.

171. -ah 'return to former state or location': no-ma-b-ah-i-mi-ro-me I-GIVE-ARRIVE-RETURN...YOU-IT-CONDITIONAL 'I would give it to you to take back'.

172. -t 'distant action': n-nga-t-ë-ni I-BATHE-DISTANT_ACTION...ANIMATE 'I'm going to go bathe'.

181. -e ∞ -ë 'completive aspect': na-kan-ë I-SAY-COMPLETIVE 'I said'.

182. -i 'incompletive aspect': pi-hok-i-ro YOU-THROW-INCOMPLETIVE-IT 'throw it away'.

183. -m 'uninitiated': teni aree-t-ah-i-m-a NOT ARRIVE...RETURN-INCOMPLETIVE-UNINITIATED-REFLEXIVE 'he hasn't returned yet'.

191. -a 'reflexive': i-to-k-a-ni HE-CUT...REFLEXIVE-ANIMATE 'he cut himself'.

201. -ne ∞ -anon ∞ Ø 'benefactive': p-ag-an-ë-ne-ri YOU-TAKE-AWAY-COMPLETIVE-BENEFACTIVE-HIM 'take (it) away for him'.

Verb prefixes:

1. (o)gi- ∞ omi- ∞ o- 'causative': i-ogi-mont-ë-ri HE-CAUSATIVE-RIVER_CROSS-COMPLETIVE-HIM 'he caused him to cross the river'.

2. n- ∞ ri- ∞ ra- 'contingent': i-ra-nio- p-ë-ri HE-CONTINGENT-SEE-ARRIVE-COMPLETIVE-HIM 'he would see him arrive'.

Affixes and clitics which occur in most word classes.

15. -ri 'reversative': na-katsi-ri-nga-të-ni I-COLD-REVERSATIVE...ANIMATE 'I'm hot'.

16. -tso 'word': pa-tso-ro ONE-WORD-NON_MASCULINE 'one word'.

17. -get ∞ -git 'atmospheric': o-këta-get-an-ë IT-DAWN-ATMOSPHERIC-AWAY-COMPLETIVE 'it dawned'.

18. -niro 'bad': i-a-niro-ke HE-GO-BAD... 'the bad person went'.

32. -san ∞ -sano ∞ -sono 'genuine, true': i-sama-san-ti HE-SLEEP-GENUINE... 'he slept well'.

211. -ti 'inanimate': maba-ti THREE-INANIMATE 'three things'.

212. -ni 'animate': i-to-k-a-ni HE-CUT...REFLEXIVE-ANIMATE 'he cuts himself'.

221. -ka 'here': i-ka HE-HERE 'this one'.

222. -ra 'there': i-ra HE-THERE 'that one'.

223. -nta 'over there': i-nta tima-ig-a-tsi-nta HE-OVER_THERE LIVE-PLURAL...UNSPECIFIED_PERSON-OVER_THERE 'the one who lives over there'.

231. -henga 'I think': i-kan-ke-ri-henga HE-SAY...HIM-I_THINK 'I think he told him'.

232. -ta 'subjunctive': no-pisi-tai-ri-ta I-TURN_OVER...HIM-SUBJUNCTIVE 'I'm going to go turn him over'.

233. -sati 'also': i-sam-i-ni-sati HE-SLEEP-INCOMPLETIVE-ANIMATE-ALSO 'he is sleeping also'.

234. -ni 'long ago': i-kan-ta-gani-ni HE-SAY...PASSIVE-LONG_AGO 'he was said of long ago'.

235. -ko 'maybe': obiro-ko YOU-MAYBE 'was it you'.

241. -sia 'impatience, urgency': pi-kamëma-t-a-sia YOU-BE_CAREFUL ...REFLEXIVE-URGENCY 'be very careful'.

251. -me 'conditional': kero-me i-peg-i-ri NOT-CONDITIONAL HE-CHANGE_INTO-INCOMPLETIVE-HIM 'he wouldn't have changed him'.

261. -ka 'when, if': pi-ha-te-ka YOU-GO...IF 'if you go'.

262. -ri 'there': i-pok-e-ni-ri HE-COME...ANIMATE-THERE 'he came there'.

Affixes which occur with non-verb classes:

15. -tomako 'late': no-varerio-tomako-te-ni MY-VALERIO-LATE-POSSESSED-LONG_AGO 'my late son, Valerio'.

16. -tsari ∞ -tsiori 'classificatory kin': paba-tsiori FATHER-CLASSIFICATORY 'father's brother or stepfather'.

25. (-ne ~ -te ~ -e)∞ -re 'possessed': na-haneki-te MY-CHILD-POSSESSED 'my child'.

44. -hani ∞ -ani 'diminutive': na-haneki-te-hani MY-CHILD-POSSESSED-DIMINUTIVE 'my little one'.

45. -sati 'person': magasamari-sati MAZAMARI-PERSON 'the ones who live at Mazamari'.

52. -hegi ∞ -egi 'plural': haneki-hegi CHILD-PLURAL 'children'.

63. -kë 'at, in': no-bango-kë MY-HOUSE-AT 'at my house'.

APPENDIX C: NOTES ON LINGUISTIC CLASSIFICATION OF NOMATSIGUENGA AND TRIBAL HISTORY

Nomatsiguenga is a member of a closely related subgroup of Pre-Andine Arawakan languages which comprises 1) Ashaninka Campa which is spoken by persons living along the Apurimac, Ene, Tambo, and Perene Rivers, 2) Pajonal Campa, 3) Machiguenga, and 4) Nomatsiguenga. Nomatsiguenga is mutually unintelligible with all of the other languages in the group. Although most Nomatsiguenga men are bilingual in Ashaninka Campa and their own language, the converse is not true because of sociological factors.

Speakers of Ashaninka Campa and Pajonal Campa call themselves ashaninka or asheninka 'people', while speakers of Nomatsiguenga and Machiguenga call themselves matsiguenga 'people'. All except the Machiguenga, however, call themselves Campa when talking to outsiders.

Nomatsiguenga seems to be somewhat more closely related to Ashaninka Campa than to Machiguenga in structure and vocabulary, but detailed comparative work may show that the greater degree of similarity should be attributed to geographical proximity to the Ashaninka rather than to historical closeness. All of the four groups named above are located between 10^{o} - 13^{o} S. latitude and 73^{o} - 76^{o} W. longitude. Speakers of Nomatsiguenga live at 11.5^{o} S. and 74.5^{o} W. along the Sanamoro or Pangoa River system which flows into the Perene, and along the headwaters of the Anapati which flows into the Ene. This area is surrounded by Ashaninka speakers.

Nomatsiguenga is not distinguished from Campa in the classifications of Mason, McQuown, Tax, or Noble. Some of these, however, list various Campa groups by river name. For example, Mason includes Pangoa and Kimbiri as Pre-Andine Arawakan languages. Nomatsiguenga is currently spoken along the Pangoa, while Ashaninka Campa is currently spoken at Kimbiri (Kimpiri). Some classifications of Arawakan languages are listed in Section II of the Bibliography.

Other Arawakan languages in the area include Piro, which is usually listed as Pre-Andine Arawakan, and Amuesha which is generally considered to be less closely related. Descriptive studies of both of these as well as of Ashaninka Campa and Machinguenga are included in Section III of the Bibliography.

The Nomatsiguenga and other groups in the area have had contact with western civilization for over 350 years. Some statements of an ethnographic nature have been made throughout this time by explorers and missionaries, although to date no comprehensive ethnography of any Campa group has appeared. Varese cites a contact in 1595 as being the first one described in detail:

> EL padre jesuita Joan Font y el hermano Nicolás Duran o Nicolás Mastrillo emprendieron la exploración de la selva por el este de Jauja y Andamarca en noviembre de 1595... Las cartas de Font y Mastrillo constituyen la primera relación algo detallada sobre los indios campa. (1966, pp. 72-3).

In 1635 the Franciscans founded a mission near La Merced for the Campa and Amuesha. The first missionaries were driven out in 1642, but the Franciscans returned in 1673 and established a mission at Santa Cruz de Sonomoro. Campas of Pangoa, Menearo, and Anapati where Nomatsiguenga is currently spoken were among those who were Christianized there and at other missions in the area. In 1742 all Whites were driven from the Campa and Amuesha areas in a revolt and massacre led by Juan Santos Atahuallpa, a Quechua who had been educated by the missionaries in Spain. During the next hundred years or more hostility between Whites and Campas continued. At present, however, the Nomatsiguenga--and Ashaninka Campa in the surrounding area--live peaceably with both the Quechua and mestizos who have entered as colonists.

Selected references to Campa groups of an ethnographic or historical nature are listed in Section IV of the Bibliography. Since the Bibliography in J. O'Leary is fairly exhaustive, I have limited the references to some of the more detailed works.

Early vocabularies and references to the "Campa" language are also included in Section IV of the Bibliography. In the earlier works which I have checked, the vocabulary items cited are Ashaninka rather than Nomatsiguenga. For example, inchato is invariably listed for 'tree' rather than anchato /antsiato/ which is the Nomatsiguenga form.

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