

HISTORIC
Edgar Gregersen

LUO

A Grammar

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This dissertation is a structural analysis of Luo, a Nilotic language spoken in Kenya and Tanganyika by some 800,000 people. The data are drawn from field work in Kenya (summer, 1959) and a year's work with informants in New York City (1960-1961).

Methods used follow the familiar field techniques of modern linguistics --but in all instances, expedience and simplicity have been the final criteria for analysis and presentation.

The monograph has four parts.

- (1) Introduction (including ethnographic data, a discussion and evaluation of previous work done on Luo, together with a statement of linguistic method and orientation)
- (2) Phonology (dealing with phoneme inventory, distribution, and--in part--alternation; a special discussion is devoted to intonation and emotive features)
- (3) Syntax (a presentation of the rules of occurrence of words in sentences)
- (4) Morphology (and syntax of the phrase).

A text with both interlinear and free translations is appended.

Justification for this dissertation may be based on the following considerations:

- (1) This is the first extensive account of Luo, and represents also the first attempt to apply the methods of American structural linguistics to any Nilotic or even (to my knowledge) to any Sudanic language--this is of primary importance because the Sudanic languages constitute the second largest linguistic stock of Negro Africa.
- (2) It is among the first linguistic monographs to deal with the intonation of a tone language.
- (3) It provides part of the necessary information permitting more accurate language subclassification within the Sudanic superstock, as well as reconstruction of the protolanguage. This in turn contributes to the evaluation of historical reconstructions for the area, based in large part on linguistic data--e.g., Murdock's hypothesis for 'Nilo-Hamitic' origins, presented in his book Africa (1959).

To

MAMMA

TANTE

CATHERINE

Mrs. MARLEY

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I. INTRODUCTION

1.1. IDENTIFICATION

1.1.1. Location and number of speakers. Luo is spoken in western Kenya and northwestern Tanganyika. A considerable number of native Luo speakers is said to live in the larger urban areas, particularly Nairobi; but despite this and the exigencies of migrant labor, Nyanza province and particularly the area around Kisumu remain the focal point for the Luo speech community. A closely related dialect, Fadhola, is used by a rear-guard Luo tribe in Uganda.

Crazzolara, writing in 1950, states there are 560,000 speakers of Luo (1950:6). In her survey of Nilotic groups in general, Butt says of the Luo population that 'estimates are various; perhaps the most likely is between 400,000-600,000 souls' (1952:8). But according to official figures based on the 1948 census, there are 757,043 Luos in Kenya (see Statistical Abstract 1955, table 16; Tucker and Bryan [1956:105] quote the same census, but give the number as 725,585 in Kenya, and 50,000 in Tanganyika).

1.1.2. Designation. A wide variety of names for both the people and their language exists in the literature. But these are all essentially variants or combinations of four basic terms.

(1) Awa-Nyoro. The word is presumably a Bantu term. Its use is restricted to Hobley (1902).

(2) Nifa. Presumably also a Bantu term, it is used with various changes by Macdonald (1899) and Hobley (1902). Variants: Wa-Nifa, Nife, Wa-Nife.

(3) Kavirondo. Its etymology is uncertain; it designates both an area of western Kenya round part of Lake Victoria (Kavirondo Gulf), and

by extension the peoples—both Luo and other—living there. The term is nowadays considered insulting, but has historical priority, occurring in the first references to the language, made by New in 1873, by Cust in 1883, and by others. Variants include:

Kavirondo - used by Wakefield (1887)

WeKavirondo - used by Millikin (1906)

South Kavirondo - used by Macdonald (1899)

Nilotic Kavirondo - used by Hartmanh (1928) and Wagner (1940).

The two last variants attempt to distinguish the Luo from certain Bantu-speaking groups living in the northern Kavirondo area, viz., Hayo, Logoli, Vugusu, and Wanga (see Wagner 1940, 1949; Murdock 1958).

(4) Luo. This is the Luo designation both for themselves (ǰǰ 'luo' [ǰǰ - 'people of']) and their language (ǰǰ 'luo' [ǰǰ - 'language of']).

The term has now gained general acceptance and is used here. Variants include:

Lwo - used by Hartmann (1906)

Lwoo and Lwoo-Kavirondo - used by Crazzolara (1950 and elsewhere); the spelling Lwoo is now commonly employed for a subgroup of Nilotic languages (see below).

Tho-Luo - used by Hobley (1902)

Dholuo - used by Malo (1952) and Huntingford (1959)

Luo-Kavirondo - used by Köhler (1955).

1.1.3. Ethnography. Description of the Luo has so far been scanty. What has been done is summarized in Butt (1952) and Murdock (1958). At present, cereal agriculture constitutes the principle subsistence activity, but the cattle complex remains an important cultural focus, with both milk and blood used for food. Social organization is 'patri'-oriented: patrilineal descent and kin group affiliation (the incest tabu is

extended to all known relatives on either side, even among Christians), patrilocality, residence, patrilineal inheritance and succession. Analysis of the kinship terminology is somewhat confused: in 1957, Murdock listed cousin terminology as an Omaha type; in 1958, as essentially Sudanese (following Roscoe, 1915). My own data indicate that they have a Hawaiian pattern (using Murdock's 1949 definition of the term whereby the word for sister = mother's brother's daughter = mother's sister's daughter = father's brother's daughter = father's sister's daughter; similarly for male relatives). Uncle and aunt terms are bifurcate merging (mother = mother's sister, but not father's sister; etc.). Polygyny is general and a bride-price required. Residence involves clusters of separated hamlets with mother-child households grouped in family compounds.

Many of the details of the older culture are fast disappearing due largely to the wide-spread and conscious adoption of European customs. Luos seem to be quite aware of such change, and, despite occasional nostalgia, not infrequently call themselves 'Black Europeans'. The third largest group in British East Africa, they are proving to be of considerable political importance; this is indicated in part by the international reputations of such Luo politicians as Tom Mboya and Oginga Odinga.

1.1.4. Linguistic affiliation. Scholars are agreed that Luo is a Nilotic language, i.e., it is genetically related to Shilluk, Nuer, Lango (Lang'o), Acoli (Acoli). Classifications by Greenberg and Köhler indicate further ties and pinpoint relationships still more clearly. In the latest scheme (see Greenberg 1955, 1957, 1959; Köhler 1955; Welmers [no date]), Luo is West Nilotic and thus more closely related to Shilluk, Nuer, Lango than to Eastern Nilotic languages such as Maasai, or the Southern Nilotic cluster including Nandi-Suk. Within this West Nilotic group, Köhler further specifies it as Southern Luo. Nilotic itself is an eastern branch of the

Chari-Nile family (formerly called Macro-Sudanic, and by Murdock [1959], Sudanic), in turn a substock of the Sudanic superstock. This superstock comprises most of the languages spoken in Negro Africa not belonging to the Niger-Congo group.

Rejection of so extensive a genetic classification characterizes the position of certain European scholars, notably Tucker, Bryan, Huntingford, and Hohenberger. Bryan has in fact labelled Greenberg's Macro-Sudanic family a 'macromonstrosity' (1959:8). Their position rests on a different conception of and divergent criteria for linguistic classification, a generally more cautious approach in setting up essentially geographically delimited typological subgroupings, and an acceptance of the Mischsprache hypothesis according to which it is meaningful to say that a language has two or more lineal 'ancestors'.

Luo is also characterized by several pan-African linguistic traits (cf. Greenberg 1959), specifically: (1) a register tone system; (2) initial nasal plus voiced-stop consonant clusters such as mb-, nd-, ng-; (3) absence of rounded front vowels; and (4) certain semantic idioms, e.g., 'mouth of the house' for 'door', and the use of 'child' as a diminutive. These traits may point to an ultimate genetic relationship with Niger-Congo languages (which include the Bantu group), rather than with the Afro-Asiatic family (the newer term for Hamito-Semitic) which many scholars --including Meinhof, Sapir, and Greenberg--have thought of as probable.

1.2. PREVIOUS WORK DONE ON LUO

1.2.1. Nineteenth Century. Rudimentary linguistic work on Luo began in the late nineteenth century. The first account appeared in 1873 with Charles New's sixteen-word list in the appendix to his account of travels in East Africa. His transcription is extremely bare but reasonably ac-

curate within its limitations. His spelling "chara korn" for cam 'kuɔŋ 'eat porridge' (cam - 'eat!', 'kuɔŋ - 'porridge')--which he translates as 'food'--merely indicates that his own dialect of English was probably an r-less one. His glosses are usually fair, tho he translates "kula" (presumably 'kuɔlɔ) as 'river' rather than 'to fetch (water)', and glosses the Luo word for 'chicken' as 'child'.

The next reference is the Rev. M. Wakefield's considerably more ambitious vocabulary of 246 items which appeared in 1887. (In the introduction to this work, Cust mentions that Joseph Thompson and the missionary Bishop Hannington had previously visited the Luo area. However, I have found no pertinent work on Luo by them.)

Wakefield's work is the first to provide symbols for the dental stops, which he writes 'd, t'; furthermore, he employs numerous diacritics to distinguish vowels--often superfluously. While adding greater potential accuracy of transcription, these symbols were not always consistently used; thus 'd, t' (=the present /ð, θ/) were frequently confused with ordinary 'd, t'. One peculiarity is the use of 'gn' for /ŋ/, which he also writes 'ng' (and mistakenly as 'n' as well: "nūr" for nōr 'beans'). Possibly in both instances we are dealing with printing errors. The sporadic use of 'sh' for /ç/, which he also writes as 'ch' and 'tch', may in fact reflect allophonic variation. Wakefield's glosses are of mixed reliability, his most egregious errors including the translation of "ario" (a'riyɔ) 'two' as 'ears', and of "mā e" (ma ɛ) 'this (one)' as 'foot'. An interesting feature of the lexical inventory is the general absence of Swahili words.

In 1894, Baumann published the first recorded text in Luo, in addition to a list of numerals. The most striking thing about his work

is surely the idiosyncratic spacing in his transcription, which makes for very hard reading. Examples of this are the following two sentences:

di el ma dópi. 'The goat drinks water.' (presumably: drél máðð 'pi;
'drél - 'goat', 'máðð - 'to drink' / everything but
water: the correct word is 'máðð /, pi - 'water')

ami di(o) el pi. 'I'm giving the goat water.' (presumably: 'Á mryð
drél 'pi; 'Á - 'I, durative', 'mryð - 'give').

A list of 108 words appeared in Macdonald's 1899 article based on work done by C.W. Hobley. The transcription is far more accurate than previously, and the work includes an interesting discussion of linguistic affiliation, in which Luo is grouped with Shuli (Acooli), Madi, Bari, Beri as comprising the 'Negro languages', but as distinct from the 'Nuba-Fulla languages' (including Maasai, Lotuxo, Karamojog, etc.) and the 'Suk languages' (including Suk and Nandi).

For comparison, I present the transcriptions of Luo numerals from one to ten as found in Wakefield (1887), Baumann (1894), Macdonald (1899), and, anticipating the next section, Johnston (1904).

	Wakefield	Baumann	Macdonald	Johnston
one	áshíél	ajyed	acheli	aciel
two	ario	ario	ario	areio
three	adég	adék	adek	adek
four	agnúwén	angwan	ongweni	añwen
five	ábirio [sic]	abíd	abich	abity'
six	áwishéi	audyéð	auchiel	awuciel
seven	--	abirió	aboro	abereó
eight	--	abéro	abereó } [sic]	aburo
nine	--	abúngwan	luedoákachiel	offaciel
ten	apáre	apáre	apar	apar

Part of the divergence amongst these writers is explained by dialect difference, e.g., the entries for 'nine' (for which Macdonald, however, uses a mistaken form). Perhaps also the informant was not a native speaker (tho this has not been acknowledged)--this seems likely in view of Macdonald's "acheli" and "ongweni" with final '-i'.

1.2.2. Twentieth Century. The early twentieth century saw a continuation of travelers' lists, including those of Hobley (1902), Czekanowski (1924), and--perhaps the most important of these--that of Sir Harry Johnston (1904). He recorded over 200 words and several phrases in a highly detailed transcription (repeating, however, many of the previous mistakes, notably a regular confusion of /s,θ/ with /d,t/).

Missionaries in this period were, however, the ones who began and continued the most important work on Luo. Köhler (1955) points out that by 1911 both an edition of Genesis and the New Testament in Luo were issued by the British Foreign Bible Society. According to Richards (1956), on the other hand, the single gospel of St. Luke was available in Luo only in 1916, and the whole New Testament translated only in 1938. I have not been able to verify these statements independently. In 1930, a Luo version of the Book of Common Prayer (Kitap Somo gi Pogo Sakrament) appeared, and in 1946 Pilgrim's Progress (Wuodh Jawuodh), which apparently had come out in an abridged version some time before. In the meanwhile, Roman Catholic Mill-Hill missionaries produced a translation of a prayer book (Kitaplemo), and Seventh Day Adventists began the publication of several tracts. Of some interest is the recent revision of the Bible in Luo, undertaken by the Rev. A. Rabensteiner; native speakers often find the existing version (especially parts of the Old Testament) difficult to understand or simply not Luo.

More important for linguistic purposes has been the publication of

handbooks of Luo grammar, the first of which appeared in 1910, written by some Mill-Hill Fathers of St. Joseph's Society. An important revision was issued in 1920; and a third, less extensive one appeared in 1935 with vocabularies. Another independent work, written by a native Luo speaker, Shadrak Malo, was put out in a mimeograph edition in 1952. The most recent work is a set of introductory lessons by Huntingford. It appeared in 1959, but apparently has been privately circulated as a text in the School of Oriental and African Studies in London. All these works have various virtues and drawbacks, but prove valuable for their data, if not always for their analyses. The drawbacks are familiar ones. Word classes depend on English glosses rather than formal characteristics. Syntax takes its cues from Latin, English, and Swahili examples. Morphological analysis depends on the word divisions in the official orthography, which also lies at the bottom of the inadequate transcription employed in all these works. Thus, tone, stress, and length are completely ignored in the transcriptions, though one does find an occasional reference to these phenomena. Most of these discussions use five symbols for nine vowels. The 1935 grammar every once in a while makes a difference between /e,ɛ; o,ɔ/ by employing diacritics: 'è, é, ô, õ', respectively. Only Huntingford uses an adequate number of signs; /ɪ,ɛ,ʊ,ɔ/ are represented by 'i, e, u, o'. Now all these distinctions have considerable importance not only for a proper representation of pronunciation, but for the grammar as well. Thus the verb with its tonal aspectual system is perforce inadequately described. The 1920 Mill-Hill grammar notes a difference in pronunciation between 'future' and 'past'. Malo says that 'the difference between the Present Continuous Tense, and the Present Tense is in the pronunciation', and stops there (1952:1). Huntingford notes that 'intonation is complicated, but except in a very few cases words are not

distinguished by tone alone' (1959: no page number). These comments exhaust the subject as far as the handbooks go.

A relatively extensive Luo-English has been compiled by an anonymous source, presumably a Mill-Hill missionary. No date is given, and the work is now out of print--despite its enormous usefulness. An English-Luo dictionary in typed manuscript has also been compiled but is far less extensive. A third dictionary, by Shadrak Malo, exists uncompleted in manuscript and has also proved invaluable. I have often used examples from the first and last works, especially in discussing noun prefixation. The forms cited are interesting examples of certain patterns, but were unknown to my informant when checked with them. It would seem that a considerable turnover has taken place in the vocabulary, and an interesting study of such change could probably be done using these sources.

Published literature in Luo is gradually building up. Several primers have been put out, and a few collections of folktales exist. A study of Luo customs by Paul Mboya, some things by Shadrak Malo, and several miscellaneous essays from soil conservation to Queen Elizabeth's coronation add to the growing list of titles. There is a weekly newspaper in Luo as well, Ramogi.

1.3. THE PRESENT GRAMMAR

1.3.1. Work done. The present grammar is in large part the result of a summer's field trip to Kenya in 1959. The possibility for such a trip was provided by a project Prof. John Buettner-Janusch of Yale was carrying out under the auspices of the Southwestern Foundation. The summer's expenses were financed by a field grant from the Yale Anthropology Department.

Prof. Joseph Greenberg of Columbia specifically suggested a study of Luo, if there were an opportunity. Informant work begun in Africa was continued intermittently in 1959-1960 in New York. From June 1960 till March 1961, work progressed more or less continuously. During these two years, I enjoyed the good fortune of a Public Health Service fellowship for anthropological training and, in the second year, a Public Health Service research grant to be used specifically for my research on Luo.

1.3.2. Informants. Several native speakers provided the data for this study. Without exception they proved to be reliable and conscientious, kind and intelligent.

My first African informant was Clement Migenda from Kamagambo in South Nyanza. Unfortunately, our work was complicated by the fact that he spoke little English and I less Swahili so that communication was close to a bare minimum.

Stephen Owino was my major informant in Kenya and proved to be quite interested in linguistics, as well as a gold mine of short stories. He comes from Nyaundho in Gem location in South Nyanza.

Pamela Odede worked with me a good part of the summer of 1961. She is from Uyoma on the northern shore of Kavirondo Gulf. She had come to the United States to study sociology at Western College for Women, Oxford, Ohio.

The great bulk of data for this study was, however, provided by Nehemia Antipas Othieno and his wife Ruth Anna Othieno. Born in Alego, Mr Othieno has nevertheless modified his dialect thru residence elsewhere, especially in Central Nyanza. At present he is working for a doctor's degree in education at Columbia University. Mrs Othieno, the daughter of Paul Mboya, comes from Karachuonyo in Central Nyanza, and arrived in New

York in September of 1961. After December of that year she more or less took over all the informant work. In fact, her dialect is the basis for the tonal analysis here presented.

1.4. LINGUISTIC APOLOGIA

This monograph is both conservative and pragmatic in its linguistic orientation. It is conservative in that it exploits the well-established field techniques of modern linguistics, and organizes the data arrived at in terms of the familiar units and hierarchies of phonemes, morphemes, and words. The grammar is pragmatic because such units are set up as units of expedience only: their justification is that they work.

Much of the discussion of the fundamental elements of linguistics gets bogged down in a certain specious rigor. One approach depends upon distribution as the ultimate criterion (for example, much of Harris's work, especially 1949); but here the circularity or arbitrariness of setting up a 'first environment' poses insuperable difficulties. Another approach capitalizes on the apparent success of phonemic analysis and wants to extend phonological considerations to every stage of the grammar--the result of which almost inevitably ends up with superfluous odds and ends, some of which are very odd indeed (for examples see Hill's 1958 analysis of English). One of the most shaky theoretical approaches--and despite successful application in the field, even its staunchest advocates concede difficulties--is that employing meaning, or, rather, specific differences in meaning, to set up morphemes and words. With the little that is known of semantics it is not clear that the total field of meaningful utterances is susceptible of analysis into discrete semantic units (kinship and color terms provide examples that wet the tongue, but little more). And even if that kind of analysis were possible, it is difficult to imagine (the this is the crux of meaning-oriented analyses) that such semantic units would be

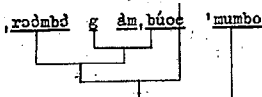
isomorphic with morphological ones.

The 'phonemes' and 'morphemes' discussed here, differ little from the straight-forward field-technique units. 'Words' are a bit different. They are unabashedly units of expedience; but perhaps a discussion of what they are not would be helpful.

The 'word' in the present analysis of Luo cannot be equated with Bloomfield's 'minimum free form'. In the first place, there is an important group of words which occurs only as enclitics in natural speech (the in metalinguistic discussion they are readily pronounceable); e.g., no 'that', a 'I, me'. Secondly, some nonenclitic forms cannot be pronounced out of context; e.g., appertentive forms in $-/n/$ or $-/g/$ preceded by another consonant (see 5.1.1.).

In general, it would be difficult to set up any sort of 'phonological word'. A sort of consonant linking across word boundaries normally occurs (see 2.2.2.). Stress is unpredictable. Apart from pause and various consonant clusters there are really no Grenzsignale.

Nor can the word be equated with Bloch's 'lexeme', the certain levels of an immediate constituent analysis closely parallel the breakdown of a sentence into words. The most important point of divergence: the phrase-final appertentive construction, very similar to the genitival construction in 'the king of England's hat' or 'John and Mary's house', where Bloch is forced to set up " 's " as a separate lexeme. In the Luo construction, the immediate constituent analysis of such a phrase requires a cut thru a word \sqrt{a} thoroughgoing lexemic analysis would have to posit lexemes with subphonemic content (see the discussion of case and morphophonemics below); e.g., the following phrase:



/'Mumbo's sheep and horse'. ('rodmbd' - 'sheep', g - 'with' variant of g before a vowel, ám'búoc - 'horse of', 'mumbo' 'Mumbo', a man's name)]
 Here only the final noun (ám'búoc) of the appertentive phrase is marked, tho clearly the whole phrase is involved.

The example just chosen naturally invites a further discussion of both the case analysis and morphophonemics in general. The present grammar deals with nouns in terms of four paradigmatic features (singular-plural, nominative-appertentive), one of which, the appertentive (denoting the case of the thing possessed rather than the possessor), is marked by a rather involved alternation of the final stem consonant--an alternation which very frequently coincides with the alternation of this same consonant before the plural ending. In addition, the appertentive plural is usually identical with the nominative plural.

There are pertinent syntactic considerations as well: (1) the appertentive form of the noun occurs only before another nominal; (2) most noun (N_1) - nominal (N_2) constructions require the first member to be in the appertentive. Only a few exceptions to the last statement occur but they will figure crucially in my argument: N_1-N_2 is not an appertentive phrase if (a) N_2 is in apposition with N_1 ; (b) N_2 is a quantitative or numeral; (c) N_2 is one of certain color terms--this may be a special instance of (a).

It is quite possible to admit a special marker, a kind of ad hoc juncture without phonemic content, and by so doing avoid a case interpretation altogether. But I think such an analysis would be a little perverse and clearly roundabout because there are clear-cut minimal

contrasts without any hint of juncture differences; e.g.,

<u>ná,royá</u> di'bá	'the white calf' (ná,royá - 'female calf', di'bá 'the white one, feminine--said of goats, sheep, but generally of cows)
<u>ná,róç</u> di'bá	'the calf of the white (cow)'
<u>ná,róç</u> di'bá	'the calves of the white (cow)'
<u>ná,rocá</u> di'boyé	'the white calves'.

Furthermore, the morphophonemics of the situation are not at all so simple; the four items which a case-number matrix would set up are frequently all contrasting (as in the example above). And the considerable amount of still greater variation (there is frequently one appertentive form before pronouns, another before nouns; a third before demonstratives) seems to me to be most efficiently handled in terms of case.

Thus, all the difficulties which the present case analysis faces, it does so 'to get...the simplest possible set of statements that will describe the facts of the language', as Bloomfield says (1933:212). However, I have had to disregard Bloomfield's doctrine that 'the existence of even a single over-differentiated paradigm implies homonymy in the regular paradigms' (1933:224). It would prove a monstrous complication of the morphology to describe as syncretism the fact that most Luo nouns have not got the numerous variants of 'brán 'cow' (see 5.1.1.). The grammatical model has to be tempered in all directions in the interests of economy.

As for morphophonemics, it must be noted that with the exception of vowels such as /ɔ/ and /o/ that alternate in clitics in accordance with vowel harmony--such vowels being denoted when convenient by capital letters, e.g., {O}--no morphophonemic symbols have been used. Luo would permit a plethora of them. There are several reasons why morphophonemes are not used. First, they tend to make quoted examples unmanageable for

the reader unfamiliar with either Luo (e.g., a professional linguist) or linguistics (e.g., a native speaker of Luo). Secondly, morphophonemes ultimately require translation into lower-level phonemes anyway. This is one of the difficulties inherent in any morphophonemic treatment and in many instances involves a multiplication of symbols where statements would suffice. I do not agree with Halle (1959) that phonemics is rendered superfluous by the morphophonemics required in any description to account for homophony. For the morphophoneme must in turn be defined as a series of alternations of ordinary phonemes. Since all the series are presented here for Luo, the interested reader merely has to give them single-symbol labels and he winds up with morphophonemes.

In one area of the morphology, however, it might prove useful to deal in terms of components--something like Harris's long components. For noun inflection we could set up a feature of 'opposition'; i.e., a voiced phoneme plus this 'feature' would phonemically be a homorganic voiceless phoneme, and vice-versa (nasals, without a voiced-voiceless dimension, would be in opposition with a cluster of nasal plus voiced homorganic stop). Thus, using {~} as the symbol of 'opposition', {p̃} would be a /b/ morphologically derivable from a form in /p/; {ṁ} would be an /mb/ derivable from /m/. One could in fact describe the distinctive feature of the appertentive case as simply {~}, and formulaically list the plural-morpheme as {-E} (where {E} is any of several endings, and {~} affects the final consonant of the preceding noun stem). Introducing still further a difference between a simultaneous (super-scripted) as opposed to a successive {~}, we could readily account for homophony in the appertentive plural. Thus:

{ludm}	- 'grass'	{lud̃}	(= /'lumbé/) - 'grasses'
{lũm̃}	(= /lũmb/) - 'grass of'	{lũm̃é}	(= /'lũmbé/) - 'grasses of'

Now morphophonemes could very readily be employed to deal with aberrations from this pattern. Thus, one could set up a morphophoneme {H}, occurring in words such as ám {áH} 'thigh', where the appertentive singular ends in /m/ rather than the more normal /mb/, tho the plural forms have the regular alternation to /mb/. All these devices could be used (given some ingenuity and enough symbols), but they are not in this monograph because of the reasons given above.

The discussion of intonation, forming a major part of chapter three does not follow the familiar analysis into phonemic pitch levels suggested by Pike and Wells for English. Attempts to apply such a framework to 'tone languages' (i.e., languages where tones are phonemes as well as morphemes) --borderline cases tho they are-- have been made by Bloch (1950) for Japanese, and by Haugen and Joos (1954) for an eastern dialect of Norwegian. It seems to me, however, that the resultant incorporation of lexical contrasts into the pitch contour of a sentence (the 'intonemes' of a sentence in one jargon) is intuitively unsatisfying and descriptively redundant. Even for English, the Trager-Smith kind of analysis with discrete prosodic phonemes may well on closer inspection have to give way to a contour model.

For tone-languages such as Japanese and Norwegian, it seems definitely most elegant to talk in terms of a 'general sentence melody' or contour imposed on a string of morphemes composed of both pitch and nonpitch phonemes. [For Norwegian, any discrete pitch treatment would be particularly unfortunate because lexical tone is almost entirely predictable from morphology; e.g., tone contrasts occur only on root morphemes; inflectional endings are frequently accompanied by strict tone sandhi; etc.] In Luo, such a procedure is even more necessary; and the postulation of intonation levels together with certain tone morphemes constitutes the basis for the

present approach.

1.5. PLAN OF THE PRESENT GRAMMAR.

Originally, I had planned that subject matter would progress down the immediate constituent hierarchy, beginning with an outline of the syntax and ending with a discussion of phonological details. But such an arrangement has proved to be too much even for the trained reader, and so part of this scheme has been abandoned: all reference to phonology has been put in chapter one. The discussion of tones has been altered so that noun and verb contours come under the heading of noun and verb morphology, respectively. But note that details of morphology and comments on the syntax of the phrase still follow general notes on the syntax of the sentence. This much has been retained from the initial sequence because I still think that in a grammar of the present type it is more meaningful to go from the general to the specific.

II. PHONOLOGY

2.1. INTRODUCTION.

As suggested in the introduction, I use a conservative 'class of segments' kind of phoneme--tempered by expedience in light of the fact that it has occasionally proved more convenient to deal in terms of, say, components rather than segments (e.g. American English /er/, Japanese /sy/); furthermore, because the whole area of tones almost inevitably invites an overlap interpretation.

Symbols used are essentially those of the International Phonetic Association within the Africanist and World Orthography tradition of employing [y] for [j] and [j] for [ɟ] or [dʒ].

2.2. PHONEMICS

2.2.1. Tones. Even in applying the most exacting of definitions (probably Pike 1948:3), one must describe Luo as a 'tone' language because it has 'lexically significant, contrastive, but relative pitch on each syllable'. In the present analysis there are three tone phonemes of an essentially register type: 'low(-fall)' /v/, 'mid' /v/ (usually left unmarked), 'high (-rise)' /v/. To describe the general contours of these tonemes, one may divide the tonal range into a five-point scale so that '1' is the lowest value, '5' the highest. In terms of this scale, then, isolated monosyllabic utterances have the following contours: 'low' [31], 'mid' [3:], 'high' [45]. Anticipating other parts of this discussion, we may note the following allophones: unstressed 'low' is [32], as is 'low' after 'mid' in a vowel sequence; stressed 'mid' before 'mid' in another syllable tends toward [4].

Minimal contrasts demonstrating all three tonemes are relatively rare.

One set: wér 'song', wér 'sing!', wér 'milk pail'. Note, however, that

the imperative form wer also occurs with 'high', wár, in more lively utterances. A less minimal triad: kór 'pathway', kor 'prophecy!', kór 'chest'. In order to demonstrate that tone phonemes cannot be reduced further in number by some environmental conditioning or other, the following table has been drawn up. Abbreviations: V - any vowel, P - any fortis (voiceless) stop, B - any lenis (voiced) stop, C - any other initial consonant, K - any consonant or zero.

/ɔ/

VK	<u>ám</u> 'thigh', <u>ót</u> 'house'
PVK	<u>oóŋ</u> 'knee', <u>óim</u> 'woods'
BVK	<u>bó</u> 'to wrap', <u>gír</u> 'to sneeze'
CVK	<u>lák</u> 'tooth', <u>ná</u> 'who', <u>wáp</u> 'eye'

/ɔ/

VK	<u>ɛɛn</u> 'he', <u>ok</u> (or <u>ok</u>) 'not'
PVK	<u>koóm</u> 'chair', <u>toón</u> 'spear'
BVK	<u>óok</u> 'mouth', <u>gɛ</u> 'rubble'
CVK	<u>lep</u> 'tongue', <u>mec</u> 'fires', <u>ɾɛc</u> 'fish'

/ɔ/

VK	<u>ít</u> 'ear', <u>ú</u> (Alego dialect) 'puff adder'
PVK	<u>kíc</u> 'bee', <u>tík</u> 'chin'
BVK	<u>bú</u> (Karachuonyo dialect) 'horn', <u>dúd</u> 'place'
CVK	<u>lák</u> 'dream', <u>sóm</u> 'Son' (man's name)

Of these three, /ɔ/ is by far the rarest.

Utterance-final syllables, especially those in -PV (using the abbreviations employed above), tend to have voiceless vowels. Such a pronunciation is not easily elicited in isolation; but in unaffected speech, the final syllable of a word like 'nako 'girl' is completely voiceless: á 'nɛno, nakɔ. 'I saw the girl' (á - 'I' perfective, 'nɛno 'saw').

2.2.2. Stress. In utterances of more than one syllable, features of stress are unpredictable. Altho strictly minimal contrasts are lacking in my corpus, the following pairs point to the necessity of setting up a primary-stress phoneme /' / (placed before the stressed syllable):

'rudɛ 'chief': ru'dɛ 'bull'

'natɛ 'person': a'dɛk 'three'

'kɔnɛ 'beer': ka'lɛm 'pencil' (one variant).

High tone is regularly but not exclusively associated with primary stress:

'mama 'my mother': ɔ'pɪk 'tortoise'

'umɪ (pet name for Auma, Ouma): 'a'a or 'a'd 'no'.

'Long' (geminate) vowels or other vowel sequence nuclei with complex tone contours are almost invariably associated with primary stress: 'koɔkɔ 'shout', 'tɔtu (king of) bird', 'o'byɔ 'no'. But note: 'kitɔngɔ 'onion'.

Despite the further absence of unambiguous contrasts, it is clear that a secondary-stress phoneme must be set up, /, / (placed before the stressed syllable). In point of fact, within most utterances secondary stress is a reduced primary stress. Thus,

'pilɛ, pilɛ 'always': ,pu'tɪ'pɪtɪ 'very much'.

An overloud or emphatic stress /" / is considered in 3.3.4.

Juncture phenomena are largely explicable in terms of stress rather than any additional feature. In normal speech, a sequence C₁VC₂V is stressed either 'C₁VC₂V or C₁V'C₂V regardless of morpheme boundaries. For example, the sequence o'k en 'not him' is morphemically o'k 'not' plus en 'he, him'. Similarly with sequences involving stop consonants followed by /r, l, s/:

,jɔ mɛ 'beyɔ, o'k ru. 'Only the good die young' (lit. people who are good are not old; jɔ - 'people', mɛ - 'who',

'beyə - 'are good', ok - 'not', ru - 'get old').

A kind of juncture has, however, been noted--but only very exceptionally. Occurring across morpheme boundaries, it involves a 'compensatory' lengthening of the nasal in a nasal-stop cluster before a word beginning with a homorganic stop, e.g., ton: 'guənd' [for tong 'guənd'] 'egg' (tong - 'spear of', 'guənd' - 'chicken').

2.2.3. Vowels. A minimum of nine short nondiphthongal vowels occur which are mutually contrasting. Several phonemicizations are no doubt possible, but the following distinctive features are unambiguously required: front (F), back (B), high (H), mid (M), low (L); one may choose for the other features either a tense (T) vs lax (unmarked) dichotomy, or add two more heights: lower high (h) and lower mid (m). In the present analysis all nine vowels are set up as independent phonemes. Schematized, they present a 2 x 4 + 1 pattern.

FH or FHT	i	u	BH, or BHT
Fh- or FH	ɪ	ʊ	Bh or BH
FM or FMT	e	o	BM or BMT
Fm or FM	ɛ	ɔ	Bm or BM
L	a		

[Altho such a five-level system is not recognized in Hockett's 1955 survey of phonemic systems in Manual of phonology, it is not unique. Maasai and Nuer reportedly have a 2 x 5 pattern: /i ɪ e ɛ a e o-o u u/. In Crazzolara's analysis for Acooli, we find essentially the same pattern --in his transcription /i ɪ e ɛ a ɛ o o ɔ u/; an additional phoneme /ɘ/ mentioned by him has really not been demonstrated. Trubetskoj, altho maintaining that five-level systems are an exceptional rarity (1939:101), noted as examples the Schweizerdeutsch dialect of the Glarus Canton, and

Fanti of Ghana. (More recently, Welmers has tried to reduce the Fanti system to a three-level one by adding a phoneme of 'raising' //, but the change in analysis is only superficially different.)]

It has proved impossible to get a complete series of contrasts agreeing in consonants and tone, and differing only with respect to the vowel phonemes. Probably the best set follows: 'bifro 'to come', bir 'to be cross', ber 'split! (intransitive)', ber 'beauty', bar 'split! (transitive)', bɔr 'fat' (noun), bor 'height', bɔr 'boil' (noun), bdr 'hole'. In the accompanying charts, this series is extended to permit a fuller view of the distribution of vowels in monosyllabic utterances. For convenience the syllable ends in /r/ and only the initial consonant varies. These charts also give some idea of the distribution of consonants.

Complex tones within a single syllable are interpreted as a sequence of single tones with geminate vowel nuclei. Minimal contrasts include: ne 'mumbo. 'know Mumbo!' (ne - 'know!', 'mumbo-'Mumbo'/'man's name') vs neé 'mumbo 'Mumbo's back' (neé - 'back of'); 'túutu '(kind of) bird' vs 'tutu 'pus'. There are very few contrasts of single vowels with geminate vowels having a simple tone contour (i.e., a contrast like \dot{v}_1 / $\dot{v}_1\dot{v}_1$). The only pertinent examples in my corpus involve a morphological boundary as well: 'ɔand 'person' vs 'ɔaa nd 'that woman' (ɔaa - variant of 'ɔakɔ 'woman', nd 'that'). Or else the contrast is not minimal, e.g., kɛc 'orphan' as opposed to any one of the following: kic 'bee', ic 'stomach', wic 'head'. Structurally, such long vowels are paralleled by complex vowel sequences with a simple tone contour; e.g., 'ciémo 'to eat'. But in connected discourse, and particularly with reduction in stress, all such long nuclei tend to be simplified; thus, words with long citation forms have shortened (unstressed) allomorphs: sen - en 'he', toon - ton 'spear'.

/r#/	/i/	/ɪ/	/e/	/ɛ/	/a/	/ɔ/	/ɑ/	/ʊ/	/u/
/#-/	ir 'toward'	ɪr 'give evil eye'	—	—	—	—	or 'send'	—	—
/b-/	—	bɪr 'to be cross'	bɛr 'split'	bɛr 'beauty' bɛr 'to be beautiful'	bər 'split'	bər 'fat'	bər 'height' bər 'to be far away'	bʊr 'boil'	bʊr 'hole'
/p-/	pɪr 'nurse'	pɪr 'get back debt'	—	pɛr 'cover'	pər 'mat'	pər 'add'	pər 'tell' pər 'weigh' pər 'to elope'	pʊr 'to be mouldy'	pʊr 'dig'
/ð-/	ðɪr 'push'	—	ðɛr 'get thin'	—	—	—	θ	—	ðʊr 'pile up'
/θ-/	θɪr 'be stunted'	θɪr 'long stick'	—	θɛr 'add more'	—	θɔr 'talk a lot'	θər 'hit'	—	θʊr 'country' θʊr 'slop'
/d-/	—	dɪr '(near) by'	—	—	dər 'to move'	—	—	—	—
/t-/	—	tɪr 'to be straight'	tɛr 'take'	—	tər 'mislead' tər 'to be white'	—	—	tʊr 'break'	—
/j-/	—	[jɪr - Alogo form of gɪr]	jɛr 'avoid'	—	jar 'avoid'	—	—	jʊr 'to sulk'	jur 'throw'
/c-/	—	cɪr 'bravery' cɪr 'bad luck'	cɛr 'despise'	cɛr 'find out'	cər 'despise'	cər 'to be blind'	cər 'to push'	—	cʊr 'to groan'
/g-/	—	gɪr 'to sneeze'	gɛr 'to be wild'	gɛr 'build'	gər 'spread'	gər '(kind of) animal'	gər 'write'	—	gʊr 'hammer'
/k-/	—	kɪr 'straw'	—	kɛr 'separate'	kər 'spread'	kər 'path'	kər 'chest' kər 'prophesy'	—	—

/-r#/	/i/	/ɪ/	/e/	/ɛ/	/ə/	/ɔ/	/o/	/ʊ/	/u/
/m-/	—	—	—	mēr 'to be drunk'	mar 'like very much!'	mōr 'delight'	mor 'thunder'	mur 'warm!'	—
/n-/	—	—	nēr 'mother's brother'	—	nār 'tie around'	—	—	nūr 'to bedrowsy, be plenty'	nūr 'to wither'
/p-/	—	pīr 'keep on!'	—	—	—	—	pōr 'fold of the neck'	pūr 'throw away!'	—
/g-/	—	gīr 'grin!'	—	gēr 'wail! scream!'	gār 'to be sweet'	—	gār 'beans'	gūr 'to grumble'	—
/f-/	—	fīr 'make burn!'	—	fēr 'find out!'	—	—	—	[fur - variant of hūr]	—
/s-/	—	sīr 'support!'	sēr 'make love to!'	sēr 'make love to!'	sār 'scarify!'	sōr 'walk quickly!'	—	sūr 'keep burning!'	—
/h-/	—	—	—	hēr 'love!'	hār 'grind!'	—	—	hūr 'throw hard!'	—
/l-/	—	līr 'slice!'	lēr 'tendon'	lēr 'brightness 'to be bright'	lār 'fight!'	lōr 'descend!'	lōr 'close!'	lūr 'to be barren'	lūr 'walk quickly!'
/r-/	—	—	—	rēr 'pile up!'	—	—	—	—	rūr 'confuse!'
/w-/	wīr 'smear!'	wīr 'come back!'	wēr 'pail' wēr 'return bride price' wēr 'song'	—	mār 'remove thatch!' 'redom bride price!'	—	—	—	—
/y-/	—	—	yēr 'spread out!'	—	yār 'spread out!'	yōr 'wade!'	yōr 'plow (for second time)!'	—	—

In the present work, the symbols 'w' and 'y' are used for consonantal high vowels. They are probably best considered allophones of /u, i/ respectively, and can be unambiguously noted by the absence of tone marking. Here, an unmarked vowel indicates a vowel with mid tone, but this is purely an orthographic and typing convenience. Something of a case can be made for the separate status of semivowels, however: they pattern like consonants and are involved with consonantal morphophonemic alternations. Thus, /w/ occurs before high-vowel sequences such as /uo, uo/ in 'wudòrè' 'father', 'wudòd' 'to walk'; /y/ shows morphophonemic alternations with /c/ quite regularly: ǎ'tooyǎ 'hyaena' - ǎ'toocǎ 'hyaenas', 'kuayǎ 'to bite, transitive' - 'kueed 'to bite, intransitive'.

Vowels before the palatal consonants /c, j, n/ often have a slight high-front off-glide, especially noticeable with /u/, e.g., oun 'liver', phonetically [cu^hn]. Such an off-glide is regarded as part of the vowel allophone, not a diphthong or other sequence.

Any uninterrupted sequence of vowels is a vowel chain. With the exception of geminate vowels and chains the first member of which is /i, i, u, u/, these sequences most frequently cut across morpheme boundaries, e.g., 'yad 'to open' (yaw-'open', ǎ - 'verbal ending'), 'adrǎ 'river' (a - 'nominal prefix', orǎ 'to flow'), etc. The following list gives examples of all chains not involved in morpheme boundaries that occur in my corpus.

/ii/ ki'jiikǎ 'spoon'

/ii/ 'riingǎ 'to run', rd'ǎriip 'grey'

/ie/ 'o'ǎmo 'to eat', 'yid 'to believe'

/ic/ 'orǎnd 'to bewitch', 'h'ian 'trees'

/ia/ 'o'ǎ 'charm, good looks', 'kia 'not to know how to'

/ia/ 'ǎriip 'cow'

/iu/ ǎ'(h)iu 'breakfast', 'o'iu 'center of hut'

/uɔ/	' <u>ɲuɔt</u> 'neck', ' <u>tɔutu</u> '(kind of) bird'
/uɔ/	' <u>cuɔndɔ</u> 'to force'
/uo/	' <u>buɔm</u> 'wing', ' <u>ɣuɔk</u> 'dog'
/uɔ/	' <u>buɔcɔ</u> 'to be sterile', ' <u>ɔ'puɔɔyɔ</u> 'rabbit'
*/ua/	<u>bɔ'ruɔ</u> 'letter'
/ua/	' <u>kuɔr</u> 'ancestor', ' <u>ru'ɔɔ</u> 'bull'
/uɛ/	' <u>ɣuɛndɔ</u> 'fowl, chicken', ' <u>cuɛ</u> 'to be fat', ' <u>cu'e</u> 'leach'
/uɛ/	' <u>ɣuɛcɔ</u> 'to kick', ' <u>cɔɛ</u> 'to rain'
/uɪ/	' <u>duɪr</u> 'to be agile', ' <u>cuɪrɪ</u> (Alego dialect) 'rainy season'
/ui/	' <u>kuɪndɔ</u> 'to be cruel'
/ee/	<u>ki'seɛrɔ</u> 'marriage rite', ' <u>rd'teɛɔ</u> 'black'
/ee/	<u>ɛɛn</u> 'he, she, it'
/ei/	' <u>sei</u> 'signature'
/eu/	' <u>seu</u> '(kind of) fish'
/oo/	' <u>koɔkɔ</u> 'shout', ' <u>mɔɔn</u> 'women'
/oo/	' <u>roɔmbɔ</u> 'sheep'
/ou/	' <u>lɔɔ</u> 'ground'
/aa/	' <u>caɔndɛ</u> 'that (spoken of)'
/aɔ/	' <u>raɔ</u> 'hippopotamus', ' <u>taɔ</u> 'bowl'
/aɪ/	<u>mɪ'kaɪ</u> 'first wife', ' <u>di'faɪ</u> 'wine'
*/aɪ/	<u>mɔ'saɪ</u> 'Maasai', ' <u>ndɪ'roʔɪ</u> 'Nairobi' (also: <u>mɔ'roʔɪ</u> , <u>nɔ'roʔɪ</u>)
/ɪev/	' <u>kiɪv</u> 'straight line'
/uoi/	' <u>wuoi</u> 'boy'
/eeɪ/	' <u>ɲgeɪ</u> 'Igei' (name of a woman)
/aaɪ/	<u>mɔ'saaɪ</u> 'god', ' <u>rd'ɔaaɪ</u> 'rooster'

Sequences preceded by an asterisk occur only in recent loan words (from Swahili).

General allophonic characteristics of vowels include neutral lip-rounding--except for /u, u/ after /w/, the sequence being strongly rounded and quite protruded. Vowels occurring in the environments N-N, h-N (where N represents any nasal consonant), tend to be slightly nasalized. /u/ before high-front vowels and especially after /y/ is fronted [u[~]]. /a/ before /ŋ/ is [a[~]]; before /c, j/, [a]; elsewhere /a/ varies from [a] to [a-]. /e/ before /k, g/ is [ɛ̃], otherwise [ɛ]. /o/ after a high-back vowel (/u, o/) is [õ], almost [ə̃]; otherwise [ɔ̃]. Stressed /ɛ, o/ are [ɛ̃, ɔ̃] respectively; unstressed [ɛ, ɔ]. The vowels /i, ɪ, u, u/ are respectively [i, e[~], o[~], u[~]].

In the pronunciation of my Alege informant all vowels (except /a/) were markedly more retracted than described above.

2.2.4. Consonants. The consonant phonemes of Luo are: /p θ t c k; b ɓ d j g; m n p ŋ; f s h; l r; w y/.

/w, y/ are consonantal [w̃, ĩ] and their status has already been discussed in the preceding section. They do not occur after another consonant in the same syllable, and words with such initials have variants with syllabic high vowels, e.g., ɓt 'wəp. 'The house is burning.' (in a clarity norm); more usually ɓ'twəp (ɓt - 'house', wəp - 'is burning').

All the spirants--/f, s, h/ are voiceless. /f/ is labiodental. /s/ is an alveolar sibilant. /h/ is a glottal with relatively more friction than initial English /h/; intervocally, it has lengthened allophones, at times murmured. Finally, /h/ is a velar fricative [χ] or [x̃].

The liquids are comprised of /l, r/. /l/ is a lateral with relatively neutral coloring. /r/ has flap and spirant allophones, and the combination /rr/ (which occurs only across morpheme boundaries, e.g., 'gar r i 'support yourself!' [gar - 'support!', r - prepronominal variant of re

'self', ɔ̃ - 'you, singular'] is a strongly trilled [ʀ]. Both /l, r/ are voiced and alveolar.

The stop series shows a five-position system, with positions-labeled bilabial, dental, alveolar, palatal, velar. They include two groups: fortis (voiceless) and lenis (voiced). The fortis series is always voiceless. Finally, in the Karachunyo dialect, such stops have glottalized and aspirated allophones (apparently in free variation), but other dialects have only aspirated allophones in this environment. Initially in a stressed syllable, and before /l, r, n/, they are strongly aspirated; before another fortis or lenis stop, aspiration varies with lack of aspiration. Unaccented syllables usually have unaspirated stops. Intervocally, /θ, c/ -- normally [tθ; tʃ ~ tʃʰ] have spirantal variants [θ, ʃ]. One informant from Gem used [x] as a spirantal variant of /k/, but this usage has not been noted for other informants.

Lenis consonants are as a rule aspirated and voiced -- initially and intervocally fully so. Finally after a nasal, they have 'medial' allophones (e.g., [b̥, ɖ̥]) in free variation with voiced unaspirated ones. For this reason the distinguishing feature between /b, p/ cannot strictly be considered as voice vs voicelessness. Intervocally /θ, j/ -- otherwise [dθ, dʒ ~ dʒʰ] have spirantal allophones [θ, ʒ] in free variation with affricate ones. Before another stop, liquid, or nasal, there is a vocalic off-glide with timbres in the range of [ʷ, ɪ].

In normal use, the nasals show a certain skewness in that they parallel the stops in all positions except the dental. /n/, otherwise alveolar, is dental in the cluster /nθ/. But see 2.2.5.

Recapitulating our discussion schematically, we may set up the following chart of consonants:

	labial	dental	alveolar	palatal	velar
fortis stop	p	θ	t	c	k
lenis stop	b	ð	d	j	g
nasal	m		n	ɲ	ŋ
spirant	f		s		h
liquid			l, r		
(semivowel				y	w).

2.2.5. Subsystem phonemes.

/'/ - 'glottal stop' usually occurs across morphological boundaries and in special emphatic contours, as in:

cák 'wa'áac. 'The milk is so sour.' (cák - 'milk', wác - 'is sour').

/'/ also occurs as a constituent phoneme of specific words, notably 'a'á or 'a'á 'no'.

The clicks /c'/ (lateral) and /t'/ (dental) occur as independent interjections of surprise or doubt.

An ingressive (inhaled) sequence /ht/ is a traditional utterance at the end of a story.

An ingressive voiceless 'l' /ɬ/ occurs as an interjection more or less equivalent to 'ouch!', especially when the speaker has just been burnt.

A sequence which is phonetically [tɕihh] or the like is used in describing something very cold.

Breathy vowels are both allophonic (see 3.3.4.) and an 'Appelmittel', e.g., the utterance ¹'á_h indicates disgust, and ²'a_h'a_h'a_h indicates pain. Note, however, that all final vowels tend to have a voiceless coda; further, that /h/ occurs finally in at least one word, /poh/ (see 7.2.1.).

A dental 'n' /N/ occurs in a word of uncertain use and equally uncertain meaning: 'oNó. One of my informants brought up the point himself: Stephen Owino, who was very much interested in the linguistic analysis and in details of transcription, asked how I'd write the word. It meant nothing according to him, but he maintained that Paul Mboya had offered a prize at one time for the best suggestion on how to represent the sound in ordinary orthography (I have checked with Mr Mboya, who does not seem to recall the matter). Other informants are aware of the word, but 'do not remember what it means'. With the inclusion of this precarious item, Luo would have five nasal consonants directly paralleling the stop series. According to Hockett (1955:119), however, 'the number of nasal phonemes (differentiated solely by position of articulation) which appear in various languages ranges from none at all to four'. But it seems that a five-nasal pattern is really nothing new; at least two other Nilotic languages, Shilluk and Muer, have the same setup (see Westermánn and Ward [1933:62], where they are listed as /m nh n ny ŋ/).

In words recognized as having a Swahili or English origin, many people attempt to imitate the foreign pronunciation. The most prominent addition to the phoneme repertory is /s/, which occurs in proper names, e.g., 'Shadrak' /'šadrák/, and elsewhere, e.g., šó 'inglīš (more commonly šó 'ingéresá) 'the English language'. Most people use /s/ in such words.

Less commonly /v, z/ also occur, in Biblical names and elsewhere, e.g., nó'vembá 'November' (also nó'fembá, even nó'wembá). But such pronunciations are clearly restricted to proficient bilinguals.

2.3. PHONOTACTICS

In the following discussion, subsystem phonemes are not considered and unique appertentive patterns are ignored. Examples are given for less

frequent clusters only.

All consonants occur initially before a vowel and intervocalically.
/w/ does not occur before /o, ɔ/ in stressed syllables.

All consonants except /b, j, f, y/ occur finally after a vowel.

The following clusters occur initially before a vowel:

- (a) the 'normal' clusters of nasal plus homorganic lenis stop (note that /nɔ/ is really /nɔ̃/): /mb, nɔ̃, nd, nj, ŋɛ/
- (b) clusters of the type C₁C₂ which have alternants with vowels, C₁VC₂ (see 2.4.3):

/ml/ 'mlɛɛ (refrain in a song)

/kr/ 'krɛsɪ 'drizzle'

/ki/ 'klas 'class'; native words beginning with this cluster are essentially onomatopoeitic, associated with movement thru the air, e.g., 'klele, klɪn'drɪlɪkɪ' 'lindɪ' -- both used with reference to the flapping of wings; 'kiurɪ -- said when hawks are seen.

(Other examples are given in 2.4.3.)

- (c) certain foreign clusters:

/mp/ 'mpɪrɪ 'football'

/mt/ 'mtɔka '(motor)car'

/mk/ 'mkatɛ 'bread'

/mf/ mfɪn'gand 'Mfanganu' (a place name)

/gl/ 'glɪs 'eyeglasses, mirror'

/fr/ 'fransɪ 'France'

/br/ 'brandɪ 'veranda'.

The following clusters occur intervocalically within a morpheme:

- (a) the 'normal' clusters: /mb, nɔ̃, nd, nj, ŋɛ/

(b) consonant + /n/:

- /ɔn/ 'kɛɔnd 'gall bladder', 'kiɔnɛ '(kind of) tree, buphagia'
 /ɔn/ 'kiɔni 'insect'
 /ɛn/ 'kɔkɔnɛ 'nail', (nɛ) 'rɔkɔnɛ 'kidney'
 /ɔn/ 'kannɛ 'donkey', rɛ 'biɔnɛ 'spotted white and brown'
 /ɔn/ 'luannɛ 'fly'
 /ɔn/ 'ɔvarnɛ 'bug', θɛ 'mɔrnɛ 'safari ant'

(c) consonant + /m/ (in various dialects these words have /u/ instead of /m/):

- /ɔm/ 'ɔgurmɛ 'pig' ('ɔguruɛ - Karachuonyo dialect)
 /ɔm/ 'ndulmɛ 'trypanosomiasis' ('nduluɛ - Alego dialect)

(d) consonant + /r/:

- * /ɔr/ ɔ 'padrɛ 'priest'
 /ɔr/ ɔ 'rujrɛ 'rope, cable', si 'mejrɛ 'cicatrices'
 /ɔr/ 'faɔrɛ 'medicine', 'buɔrɛ 'silt', ɔ 'meɔrɛ 'mushroom'
 /ɔr/ 'lokrɛ 'Adam's apple'
 * /ɔr/ 'misrɛ 'Egypt'

(e) consonant + /l/:

- /kɔl/ ka 'gaklɛ 'scale (of fish), eggshell', ɔ 'taklɛ 'large forehead'
 /ɔl/ 'ndaɔlɛ 'magic charm', ɔ 'hiɔlɛ 'fish pot'
 /ɔml/ ɔ 'bamblɛ 'dried fish'
 /ɔgl/ ɔ 'gɔnglɛ 'snailshell', 'sɔnglɛ 'chaff of simsim'

(f) consonant + /t/:

- * /pt/ sɛ 'tɛmbɛ 'September'
 * /kt/ ɔk 'tɔbɛ 'October'

* /nt/ 'kontinent 'continent'

(g) consonant + /k/:

* /tk/ katka 'fɛɔm 'catechism'

*/sk/ 'paská 'Easter'
 /ndk/ k'ihondkó 'anxiety'

(h) consonant + /s/:

*/ns/ 'fransá 'France'
 */ks/ 'rukásá 'permission'.

Finally after a vowel, all the 'normal' clusters occur, and also /st, nt/ in recent loan words: 'pentékóst 'Pentecost', 'kontínét 'continent'. (In the table above, an asterisk indicates 'loan' clusters.)

2.4. MORPHOPHONEMICS

Suprasegmental alternations are discussed in the following chapter. Specifics of noun and verb alternations are presented in the chapters on the morphology of nouns and verbs respectively. Classification of remaining items follows terminology as used by Wells (1949).

2.4.1. Automatic alternation. In automatic alternation the conditioning environment is characterized in terms of phonemes, and the alternation is the same for all morphemes having a parallel allomorph in one same environment.

Polysyllabic morphemes with prepausal allomorphs in unstressed -V have allomorphs without the -V (i.e., lose a syllable) before an allomorph beginning with a vowel. This alternation is largely a matter of tempo, slower styles using prepausal allomorphs and even glottal stops across morpheme boundaries.

Examples: ,pal(d) ó 'dik. 'The knife is dull.' ('palá - 'knife',
 ó - 'it, present', dik-'is dull')

á 'nén(ó) é. 'I saw him.' (á - 'I, perfective', 'nén -
 'to see', é - 'him')

ki'tep(d) á'rívó 'two books' (ki'tepé - 'books',
 á'rívó - 'two')

2.4.2. Narrow static alternation. This kind of alternation has the characteristic that if one allomorph rather than another were placed in the conditioning environment, a sequence not occurring in the language would result.

The example suggested here is not altogether a matter of narrow alternation: there are in fact sequences which do not 'follow the rule'. But from a structural point of view, these sequences are negligible, and inclusion here of the overriding phenomenon is justified.

The phenomenon to be considered is a kind of vowel harmony. Discussion requires a twofold division of vowels, first into 'root' vs 'clitic', then into 'open' vs 'closed'.

ROOT		CLITIC	
Open	Closed	Open	Closed
i	i	i	i
e	e	e	e
o	o	o	o
u	u	u	u
a		a	a

As a rule, morphemes with root vowels (the vowels of stressed syllables essentially) that are open take open clitic vowels (the vowels of unstressed syllables as well as certain clitic words that are usually unstressed). Similarly closed root vowels take closed clitic vowels. When /a/ occurs as a root vowel, it is open; otherwise, for this one vowel only, the distinction between open and closed is neutralized.

Examples (1) within a word: a'riyd 'two', 'nako 'girl', 'liec
'elephant', 'liec 'elephants', 'luðrð 'to run, go round',
'luðrð 'to be afraid'

Examples (2) of clitics: ní~ní 'this', ǎ~ǎ 'he, she, it',
ǎ~ǎ 'him, her, it'

For convenience, such clitic vowels will often be represented by capital letters, thus: NÍ 'this'.

Most instances of vowel harmony require agreement with the root vowel. Before the nonclitic pronouns i 'your, singular' and ǎ 'their', nouns often exhibit (but only sporadically) a change in the root vowel in agreement with that of the pronouns. For ǎ, such alternations even occur with noun plurals in -E (note use of capital letter in accordance with comment on clitic vowels!).

Examples: 'kóm a 'my chair' but 'kóm i 'your chair'
'gǎǎ á 'my mountain' but 'gǎǎ i 'your mountain'
'buómbe ǎ 'these wings' } but 'buómbe ǎ 'their wings'
'buómbeǎ i 'your wings' }
'búǎǎ ǎ 'these books' } but 'búǎǎ ǎ 'their books'
'búǎǎ i 'your books' }

Before u 'you(r), plural', nouns regularly show no alternation, the ǎ (appertentive plural of ǎǎ 'person') has a variant ǎ here. On the whole, such retrogressive harmony is quite limited.

Quite clearly, the details of this system of vowel harmony suggest a morphophonemic transcription in which the correlative pairs /i-i, e-e, u-u, o-o/ are best represented digraphically so that, in one representation, {i} = /i/, {i} = /i/ ('closed' vowels are best considered the marked members because of the unique status of /a/). In the kind of 'morphonemic' analysis advocated by Halle (where a one-one relationship between sound and symbol is given up), even { } proves at times to be expendable--most obviously in unstressed syllables and clitics, but also in such morphemically delimited word subclasses as qualitative intransitive

verbs (see 6.3), which only have 'closed' vowel nuclei, or mutated plurals of nouns with /a/ as a 'root' vowel (these almost invariably have /e/; see 5.1.3.1.). However, several compensatory 'boundaries' (i.e., hocus-pocus junctures) are required, including:

- (1) a boundary between words, one or more of which counts as a clitic; symbol: {&}; e.g., {'e'm & ni} 'this thigh' (əm-thigh')
- (2) a boundary between all other words; symbol: {space}; e.g. {đ 'nɛn đ} 'I saw him' (đ - 'I, perfective', 'nɛn - 'to see', đ - 'him')
- (3) an intra-word boundary between allomorphs showing disparate vowels (i.e., not in harmony); symbol: {/}; e.g., {'cām/i} (form 2 of 'cām - 'to eat')
- (4) an intra-word boundary between allomorphs showing vowel harmony; symbol: {no space}; e.g., {'cām} 'to eat' (-'cām: 'cām - stem, đ - verbal suffix).

Naturally, certain difficulties arise even with all these devices. How does one deal with the sequence /ai/ as in nai'robi - 'Nairobi', where disparate vowels occur in the same syllable? (One might set it aside as foreignism, or simply mark it as such.) Where does {'} go in other sequences--after the sequence, after the first member, or what? Certainly in deciding the merit of such an interpretation on the whole, one must carefully weigh the choice of reducing phoneme inventory while stocking up on (nonphonemic) boundaries; also, whether the saving in morphological statements is not adequately made up for by complicating the phonology.

2.4.3. Miscellaneous alternations.

A group of monosyllabic words of the form CV has allomorphs without the vowel before an allomorph beginning with a vowel; e.g., -da 'if', gɛ 'with', ká 'when', má 'who (relative)', mɛ 'then', ne 'past

particle'.

The particle ní (also né in the Karachuonyo dialect) 'to, for', has allomorphs without a vowel before wá 'us' as well, and also elsewhere before a consonant if a preceding word ends in a vowel.

Examples: 'tóm, ní 'ká. 'Tom is here.' (ká - 'place')

but: 'tóm, é má n 'ká. 'Is Tom here?' (é - 'particle',
má - 'who, relative', ká - 'place')

ndí, robi n 'keend. 'Nairobi is in Kenya.'

'pako má n é 'ciá 'the charming girl' ('pako - 'girl',
má - 'who', é - 'with', 'ciá' 'charm')

The middle particle re has an allomorph /r/ before pronouns, but not before 'uru - 'plural particle'.

Certain weakly stressed initial syllables containing /t~r/ or /u~u/ and followed by a consonant, have alternants without the vowel. Some speakers seem to vary these forms according to tempo; others use one or the other--and not necessarily all with the same pattern. (See also 2.4.3.)

Examples: kí'ragí ~ 'kragí - 'evil'

kí'súdmó ~ 'ksúdmó - 'Kisumu' (a city on the Kavirondo Gulf)

sí'mon ~ 'smon - 'fifty-cent piece'

mí'ric ~ 'mric - 'razor'

músá'labá ~ 'má'slabá - 'cross'

mú'célé ~ 'mocéle - 'rice'

The morpheme 'diér 'middle' has an allomorph 'dié before consonants.

Examples: é, dié 'né é 'on his back' (é - 'in, on', 'né - 'back of',
é - 'him')

ó'dié, ciép 'daytime' (ó - 'noun prefix', 'ciép - 'sun')

The verb dú'ward 'to want, look for, hunt' has an allomorph dú'wa before a following word beginning with a consonant.

Example: 'á duwa, palá. 'I want a knife.' ('palá - 'knife')

The nouns 'ǎko 'woman', 'ǎko 'girl', 'ǎtǎ 'person', have the allomorphs ǎaa, ǎaa, ǎaa, respectively before the demonstratives ní 'this', nǎ 'that'. ('ǎtǎ' also has a variant ǎt in the same environment.)

Examples: 'ǎaa ní 'this woman'

'ǎaa nǎ 'that' person'

(dú'ward, 'ǎko, 'ǎko, 'ǎtǎ all use the full prepausal form as well in the positions described, in what is possibly best labeled a more deliberate style.)

Words with intervocalic /h/ have variant pronunciations without the /h/, as do words with initial /h/ following a word ending in a vowel.

Examples: ká'hepé ~ ká'epé 'coffee'

ǎ'hiu ~ ǎ'iu 'breakfast'

ǎ'ǎndí ~ ǎ'ǎndí 'Indian person' (ǎ - 'person of')

III. TONE, STRESS, INTONATION

3.1. SUPRASEGMENTAL CLASSES

3.1.1. Introduction. In the following sections, words are classified by the tone-stress pattern of their citation form. Relation of tone-class to word-class is pointed out when significant. Combinations have proved too various to permit an exhaustive listing, but the statistically most frequent classes have been covered.

The format used: \bar{y} - means any vowel nucleus with a single tone (even on geminate vowels); $\bar{v}\bar{v}$ - is used only for complex tone nuclei; a comma separates syllables. Demonstratives and pronouns are not included.

3.1.2. Monosyllables.

ƒ	<u>ít</u> 'ear', <u>kǒr</u> 'chest', (<u>fǐ</u>) 'puff adder', <u>ká</u> 'when(ever)'
v̄	<u>toon</u> 'spear', <u>koon</u> 'chair', <u>reǒ</u> 'fish'; <u>to</u> 'but'
↓	<u>ém</u> 'thigh', <u>pi</u> 'water'; <u>bǒr</u> 'to be beautiful', <u>wǎc</u> 'to be sour'; <u>é</u> 'in, on'
ƒv̄	<u>móon</u> 'women' (Karachuonyo dialect)
v̄v̄	<u>nútt</u> 'neck', <u>rad</u> 'hippopotamus'; <u>koǒ</u> 'to follow', <u>yad</u> 'to open'; <u>eé</u> 'yes'

We may note that the ƒv̄ class is rare; the only example in my corpus is the plural noun listed, which in the Alege and Uyoma dialects is pronounced móon. ƒ and v̄ are essentially nonverbal as far as citation forms go (verbs, e.g., imperatives, do in fact occur with these contours, which are then themselves morphemes). ↓ characterizes monosyllabic verbs of group II; v̄v̄, verbs of class III with monosyllabic allomorphs ending in a vowel before the suffix -ǒ. (see 6.1).

3.1.3. Dissyllables.

'f, v̄	' <u>mama</u> 'mama' (one variant), ' <u>lɔndon</u> 'London'; ' <u>bifiro</u> 'to come', ' <u>ciɛmo</u> 'to eat'
'f̄v̄, v	' <u>tɛtu</u> '(kind of) bird', ' <u>sɔmo</u> 'to read'
'v̄, v	' <u>buru</u> 'ashes', ' <u>tutu</u> 'pus', ' <u>guogi</u> 'dogs'; ' <u>mondo</u> 'in order that', ' <u>kaka</u> 'as'
'v̄, v̄	' <u>natɔ</u> 'person', ' <u>gari</u> 'train'; ' <u>namɔ</u> 'to open', ' <u>tɛtnɪ</u> 'to shiver', ' <u>kɛnkɛm</u> 'to be somewhat bitter'
'v̄, v̄	' <u>umi</u> 'Umi' (pet name for Auma, Ouma), ' <u>mamá</u> 'mama' (one variant)
'f̄v̄, v̄	' <u>koɔkɔ</u> 'shout, noun'; ' <u>rriɔgɔ</u> 'to run', ' <u>boɔɔɔ</u> 'to lisp'; ' <u>beɛndɛ</u> 'also'
'v̄, v̄	' <u>oɔyɔ</u> 'no'; ' <u>duúɔ</u> 'all' (Alego dialect)
'v̄, v̄	' <u>bɔɔɔ</u> 'prostitute', ' <u>kɔnɔ</u> 'beer', ' <u>mɔɔɔ</u> 'to drink (water), ' <u>páɔ</u> 'to think', ' <u>cáɔmɔ</u> 'to eat', ' <u>náɔ</u> 'up to'
'v̄, v̄	' <u>oɔgo</u> 'bone', ' <u>mɛsa</u> 'table', ' <u>kɛndo</u> 'again'
'v̄, v̄	' <u>ɔ'pɔk</u> 'tortoise', ' <u>ɔ'gɔal</u> 'frog'
'v̄, v̄	' <u>a'dɛk</u> 'three', ' <u>a'pár</u> 'ten'; ' <u>ru'dɔ</u> 'bull'
'v̄, v̄	' <u>ká'lám</u> 'pencil' (one variant)

Most verbs of the - ɔ class are dissyllabic and the following comprise the suprasegmental classes for such verbs: 'v̄, v̄ and 'f̄v̄, v̄ (by far the most frequent contours); 'f, v̄; 'f̄v̄, v̄; 'v̄, v̄. Verbs in - nɪ and reduplicated verbs have the pattern 'v̄, v̄. The 'v̄v̄, v̄ contour is rare, and in the Karachuonyo and Uyoma dialects occurs regularly only with 'oɔyɔ 'no'. v, 'v̄ is found primarily with numerals.

Of the tonal patterns themselves, it may be noted that: (1) high tone does not occur in an unaccented syllable except after mid tone; (2) stressed ultimate syllables contain only low tone; (3) complex tones

occur only in a stressed penultimate syllable.

3.1.4. Polysyllables. Only the more important classes are considered.

These most frequently comprize nouns, but also a few particles.

ɔ̄, 'v̄, ɔ̄	<u>ká'hawá</u> 'coffee', <u>káherá</u> 'tuberculosis', <u>kí'tabú</u> 'book', <u>sí'nezá</u> 'cinema, movies'; <u>á'hínd</u> 'very'
ɔ̄, 'v̄ɔ̄, ɔ̄	<u>kí'jiko</u> 'spoon'; <u>kí'seérá</u> 'marriage rite'
ɔ̄, 'v̄, v̄	<u>á'guata</u> 'calabash'
ɔ̄, ɔ̄, 'v̄	<u>ó'ogó'wad</u> 'crane'
ɔ̄, ɔ̄, 'ɔ̄	<u>ká'ld'áts</u> 'paper' (one variant)
v̄, v̄, 'v̄	<u>tete'te</u> 'all', <u>lilí'lí</u> 'very much'
'ɔ̄, ɔ̄, 'v̄, ɔ̄	' <u>míli,míli</u> 'to taste sweet'; ' <u>píle,píle</u> 'always, over and over'
'ɔ̄, v̄ɔ̄, ɔ̄	' <u>kitudugú</u> 'onion', ' <u>ókúombá</u> 'shed'
'v̄, v̄, v̄, ɔ̄	' <u>kalasaklá</u> 'scale (of fish)
v̄, ɔ̄, 'ɔ̄, v̄	<u>wira'wira</u> 'giddiness', <u>sura'súra</u> 'chickenpox'
v̄, ɔ̄, 'v̄, v̄	<u>nakó'gíli</u> 'love magic'
ɔ̄, 'ɔ̄, v̄	<u>ó'kíni</u> 'morning', <u>á'rátat</u> 'weakness'

A fair number of the items that fall into these classes consist of reduplicated stems and other native Luo derivations. But a considerable number is taken up by recent borrowing from Swahili or from English (generally thru Swahili). This fact accounts in some measure for the prevalence of penultimate stress in polysyllabic words--even in such English names as 'Pamela', pronounced pá'mela--and of the occurrence of final stress in a few other words. In Swahili, stress normally occurs on the penultimate syllable of a word (tho a few trisyllabic words have stress on the antepenult) and is accompanied by length and falling tone (Tucker and Ashton 1942:78). In Luo, a few loan words have dropped the

final vowel of the original Swahili form, but they have nevertheless retained the Swahili stress pattern; thus, ka'lám 'pencil' from Swahili kalamu, ka'lá'tás 'paper' from Swahili karatasi. Even in Swahili final vowels tend to disappear: /u, o/ after labial consonants, /i/ after dentals.⁷

3.2. MORPHOTONEMIC ALTERNATION

3.2.1. Sequences. It is difficult to delimit sharply the tone changes which are exclusively conditioned by the suprasegmental environment. What has been attempted in this and the following sections, is to give a résumé of the more important alternations, whatever the conditioning factor. (See also the morphological sections on nouns and verbs.)

Repetitions of the same item (of the type used in reading off a list) have the following general characteristics: vowels in monosyllables are lengthened; complex tones with initial high (mid if citation form is low tone) replace the contours of monosyllables; in dissyllabic words only the sequence 'v, v changes (to 'v, v).

Examples:	<u>ít</u> 'ear'	' <u>ít</u> , ' <u>ít</u> , ' <u>ít</u> .
	<u>móon</u> 'women'	' <u>móon</u> , ' <u>móon</u> , ' <u>móon</u> .
	<u>tóon</u> 'spear'	' <u>tóon</u> , ' <u>tóon</u> , ' <u>tóon</u> .
	<u>néc</u> 'newt'	' <u>néc</u> , ' <u>néc</u> , ' <u>néc</u> .
	' <u>buru</u> 'ashes'	' <u>buru</u> , ' <u>buru</u> , ' <u>buru</u> .
	' <u>naté</u> 'person'	' <u>naté</u> , ' <u>naté</u> , ' <u>naté</u> .
	' <u>éégo</u> 'bone'	' <u>éégo</u> , ' <u>éégo</u> , ' <u>éégo</u> .

Enumerations of the 'a, b, c...' type differ greatly from this pattern. The distinguishing feature is that all items except the final one have a mid-rise contour on the stressed syllable. The final member retains its citation contour.

Examples:

a'xífi, a'rriyó, a'deék, an'ucén, a'bic. 'One, two, three, four, five.' (Straight-forward counting.)

wic ó 'trínd', 'íit, 'wáá, 'uúm, 'óóók, 'tíik, lélá'wá. 'The parts of the head are: ear(s), eye(s), nose, mouth, chin, forehead.' (wic - 'head', 'trínd - 'to carry')

ne ní 'tíe', 'kíic, 'récé, nééc,.. 'There was once a bee, a fish, a newt,....' (ne - 'past' particle, ní 'tíe' - '(are) present', kíic - 'bee', réc - 'fish', nééc 'newt')

3.2.2. Noun-clitic phrases. Two sorts of phrases will be discussed: those with demonstratives and those with conjunctive pronouns (see 4.2.).

The inherent tone of monosyllabic demonstratives is low, e.g., cá 'that', ní 'this'. That of dissyllabic demonstratives is either 'v, v ('nóóé 'that very one') or 'v, v ('cáandé 'that spoken of'). All monosyllabic nouns occurring before demonstratives take a mid tone, no matter what the citation form is.

Examples:

<u>ít</u> 'ear'	<u>'ít</u> <u>cá</u> 'that ear'
<u>koom</u> 'chair'	<u>'kóm</u> <u>cá</u> 'that chair'
<u>ém</u> 'thigh'	<u>'ém</u> <u>cá</u> 'that thigh'
<u>gót</u> 'mountain'	<u>'gód</u> <u>cá</u> 'that mountain'
<u>mec</u> 'fires'	<u>'méc</u> <u>gó</u> 'those fires'

Polysyllabic nouns ending in unaccented /v/ in the citation form, show alternation of the final syllable to /v/ before a demonstrative; so also do demonstratives followed by other demonstratives.

Examples: 'buómbé 'wings' : 'buómbé gí 'these wings'
'nát 'cáandé 'that man spoken of' : 'nát 'cáandé cá
 'that very man spoken of'

'jé gó, gógó gó, e 'ké gí. 'Those very people, where are they?' (Note the three demonstratives: gó, 'gógó, gí.)

Conjunctive pronouns in construction with nouns have mid tone, except that the third singular pronoun has low tone after a low tone.

Monosyllabic nouns in the 'appertentive' construction with pronouns comprize two classes: (I) those with a high tone before first and second person singular pronouns, mid elsewhere (these are derived from all the tonal classes including inherently low); (II) those with low tone appertentives (these are derived only from citation forms with low tone).

Examples:

	I			II
	<u>it</u> 'ear'	<u>koon</u> 'chair'	<u>ém</u> 'thigh'	<u>gót</u> 'mountain'
(a 'my')	' <u>it</u> a	' <u>kóm</u> a	' <u>ém</u> a	' <u>gód</u> a
(i 'your' sg)	' <u>it</u> i	' <u>kóm</u> i	' <u>ém</u> i	' <u>gód</u> i
(E 'his')	' <u>it</u> e	' <u>kóm</u> e	' <u>ém</u> e	' <u>gód</u> e
(wa 'our')	' <u>it</u> wa	' <u>kóm</u> wa	' <u>ém</u> wa	' <u>gód</u> wa
(u 'your' pl)	' <u>it</u> u	' <u>kóm</u> u	' <u>ém</u> u	' <u>gód</u> u
(sI 'their')	' <u>it</u> sI	' <u>kóm</u> sI	' <u>ém</u> sI	' <u>gód</u> sI

In polysyllabic words, the stressed vowel (if a chain, then only the first vowel) and a final unstressed vowel are raised to high before the pronouns in what is, perhaps, the most common pattern.

Examples:	' <u>buóm</u> bé 'wings' :	' <u>búóm</u> bég a 'my wings'
		' <u>búóm</u> bég e 'his wings'
	<u>ò</u> , <u>regó</u> ' <u>régo</u> 'mill' :	<u>ò</u> , <u>regó</u> ' <u>régón</u> a 'my mill'

Compare the tone patterns: 'bugé 'books', 'búg sI 'their books', 'bugé sI 'these books'.

3.3. PROSODIC FEATURES OF THE SENTENCE

3.3.1. Intonation levels. Every Luo utterance consists of an intonation level (following the analytical practises of certain sinologists; see Chao, 1933; Martin, 1957) plus a residue composed of segmental and

suprasegmental phonemes. Possibly the end pitches of sentences and even phrases constitute a third class of elements, but information so far does not warrant such a treatment.

There are four intonation levels--indicated in transcription as the last element in a sentence:

- (1) Normal -- symbol /./; characteristics: the colorless, unemotional norm.
- (2) Raised -- symbol /!/: characteristics: compared with /./, all tones are higher, but tonal distinctions are maintained.
- (3) Falsetto -- symbol /F/; characteristics: 'head register' accompanied by general narrowing of tone range.
- (4) Creaky -- symbol /K/; characteristics: a lowered, generally narrow-range level especially characterized by pharyngealization.

These levels in themselves have numerous connotations, the /F/ and /K/ are severely limited in use.

/!/ generally indicates animation or concern; altho generally found as a component of questions, /!/ occurs in lively noninterrogative utterances as well. ká-clauses (if, when, etc. clauses) occur with this intonation when preceding the main predication; when following, both clauses are 'normal'.

Example: 'ká en ká , á brò 'nen é. 'If he's there, I'll see him.' (second ká - 'place', brò + verb = 'shall', 'nen é 'to see')

 'á brò 'nen é , ká en ká. 'I'll see him if (when) he's there.'

/!/ is also a component of the stylized speech associated with the rabbit in folktales; other components include velarization and over-

rounded back vowels (/w/), general 'choppiness', and a special 'lar' treatment of consonants (e.g., /x/ is elided intervocalically).

Example: né a 'né a , wúog'g oko W 'Uncle, uncle! Come outside! ('né a - 'my uncle', 'wúog - 'go out!', 'oko - 'outside')

/F/ is used in folktales in both direct discourse and singing as the stylized way of imitating young girls.

/K/ frequently accompanies utterances following hearty laughter (more precise specification is difficult). In folktales it is the major component of the stylized speech of the hyaena (a favorite story character).

3.3.2. End-tones. 'End-tones' are those tones which occur before pause, indicated either by an intonation level sign (followed directly by space), or by two other symbols: /,/ indicating 'internal' pause, and /./ indicating a 'suspension' or final hesitation. /./ is essentially a tempo phenomenon not affecting tone level but rather the vowel lengths of the whole preceding word.

Of the special tone-phenomena noticed, a raising before /,/ should be mentioned. This has been exemplified by the enumeration contour (p. 43); further, it occurs (p. 45) in the first sentence under the discussion of /l/: here ká 'place' becomes ká before /,/ . Such a phenomenon regularly takes place in nonparenthetical paratactic constructions and elsewhere.

Example: mbon 'wúoθo , cuð 'riiθgð. 'Women walk, men run.'
(mbon - 'women', 'wúoθo - raised form of 'wúθθo - 'to walk', 'cuð - 'men', 'riiθgð - 'to run')

To facilitate morphotonemic analysis, one might want to set up at

least two varieties (possibly three) of /,/ whereby one will be associated with no tone change, another with a rise to /4/ on the stressed syllable, and perhaps a third indicating the additional rise in a final unstressed syllable peculiar to enumerations.

A lowered low-tone appears to be an allophonic feature accompanying a prepausal stressed low-tone syllable following another low syllable (with or without intervening /,/).

Example: ,pat /,/ 'b_hr. 'Someone is good.'

[Cf. ,ne a 'd_hk. 'Look at three.']

In their grammar of Maasai, Tucker and Npaayi note a permeating feature of downdrift--'the gradual sinking of the voice as the sentence proceeds' (1956:170)--for this Nilotic language closely related to Luo. But apart from the allophonics mentioned here and elsewhere, there is no evidence for 'downdrift' in Luo. Welmers has pointed out a similar phenomenon in many Niger-Congo languages, which he calls 'terraced level tones'.]

Internal pauses /,/ can readily be correlated with the grammatical structure of an utterance. Anticipating syntactic discussion, I present the more important facts here.

Pause occurs between a nominal (phrase) subject and the predicate.

Examples: ,pat ma 'b_hr o, b_hnd_h 'du_ho. 'That man who is good is also old.' (pat - 'man', ma - 'relative', b_hr - 'to be good', b_hnd_h - 'also', du_ho - 'to be old')

'an, 'k_hnd a. 'I'm alone.' (an - 'I', k_hnd - 'being alone')

'in, 'b_hi. 'You, come!' (in - 'you, sg', b_hi - 'come!')

Pause occurs before a noun in the predicate (a) facultatively if

preceded by the predicate verb; (b) obligatorily if preceded by a particle phrase (the not if only the verb and conjunctive pronoun object precede).

Examples: n ɔ 'nɔl ɔ (,) 'ksuɔmo. 'I was born in Kisumu.' (n - 'past' particle, ɔ 'nɔl ɔ - 'one-gave birth to-me', 'ksuɔmo - name of a city')

'ɔ ɔɪ (,) 'ka cá. 'He's going there.' (ɔɪ - variant of 'ɔɪɔ - 'to go', 'ka cá - 'that place')

en ɛ, nat má 'nádɔ n ɔ, 'yɪɛn. 'He's the man who cut the wood for me.' ('nádɔ - 'to cut', n - = nɪ 'to, for', 'yɪɛn - 'wood')

miy a 'búk. 'Give me the book.' ('miyɔ - 'to give', búk - 'book')

But: ɔ 'miyɔ wá, kod ɪ, 'búk. 'He gave you and me a book.'
(lit. 'He gave us and you...')

The adverbs 'éé 'yes'; 'óyò, 'a'á, or 'a'á 'no', together with the preverbal temporal particles (see 7.2), are usually preceded and followed by /,/. Temporal particles before conjunctive subject pronouns with the durative-inceptive contour (see 6.1.) are usually not followed by /,/--but the pronoun is.

Examples: 'éé, 'n cɛn. 'Yes, it was him.'

'tom béndé, 'áɔ, n ɔ 'hól nɪ 'gí. 'Tom will also tell them.'
(béndé - 'also', 'áɔ - 'future' particle, n - 'future' particle, 'hól - 'to tell, confide')

ad 'gí, 'ncɛn ɛ. 'They have just seen him.' (ad - 'just', 'ncɛn - 'to see')

Pause occurs facultatively in appositive and synecdochial constructions (see 4.3.4.1.).

Example: 'mumbo (,) ɔ, ɔ ɛ 'lɛr. 'Mumbo is good-hearted.'
(lit. 'Mumbo, his liver [ɔɛ] is bright [lɛr].')

3.3.3. Interrogation. Questions of whatever sort usually occur with the raised intonation level /1/, but the essential feature of all interrogative sentences is either: (1) an interrogative nominal, ná 'who' or ánp 'what', or (2) a high-tone morpheme of interrogation, or both, and even all three.

The high tone morpheme can generally be characterized as occurring on the grammatical head of the relevant construction inquired about.

Examples: i já 'lud 'Are you a Luo?' (já - 'person of')
(i já 'lúú 'You are a Luo.'
'ngíma 'How are you?' (lit. 'Health?')
('ngíma. 'I'm fine.')

This high tone can, however, occur more than once in a sentence.

Example: ,ná ná ,tím 'ánp, 'ná! 'Who did what to who?' (lit. 'Who-
[is it] who-did-what-to who?')

Position of the high tone on different members of vowel chains has contrastive value. Thus:

a 'wéeri 'Should I sing?'
'wéeri 'A song?'

The difference in meaning in such instances probably hinges on simple questioning versus surprised. Such a surprised (or exclamatory)-nonsurprized contrast is paralleled in declarative sentences also.

Examples: ,náná 'tár. 'The cloth is white.' ('náná - 'cloth', tár -
 'to be white')
,náná 'táár. 'How white the cloth is!'
,náná 'táar! 'Is the cloth white?'

Occasionally, what would normally be the surprise contour is often the only possible interrogative one, e.g., in 's cúé 'Is he fat?' ('s cúé 'He is fat.'). But regular contrasts occur, for example, in the following:

ǎ 'kuár. 'It's red.' ('kuár - 'to be red')

ǎ 'kuár. 'How red it is!

ǎ 'kuáar! 'Is it red?'

ǎ 'kuaár! '(Did you say) it's red?'

3.3.4. Emphasis. Several prosodic techniques are included in the phonemic repertoire to express emphasis, indignation, etc.

One of these techniques includes stressing normally unstressed syllables, as in 'oó,yó. 'No!' ('oóyó 'no').

A special contrastive, overloud stress /"/ also occurs, characterized essentially by greater intensity of stress together with breathy vowels and a widening of the tonal contour of the syllable involved.

Example: 'tóm, nǐ "ká. 'Tom is here.'

Vowel length is a separate but frequently accompanying device.

Example: 'bug ní, 'kuá_ná_nár. 'This book is very red.'

High tone is a common emphatic technique usually accompanied by vowel length (the longer the vowel, the more emphasis). In a vowel chain, the high tone occurs on the first element.

Examples: 'bug ní, 'kóár. 'This book is so red.'

'oá nǎ nǐ kú má 'bóóor ,nǐóklú. 'That house is very far away.' ('oá nǎ - 'that house', kú - 'place', bóor - 'to be far', 'nǐóklú - 'very')

3.4. INTONATIONAL SENTENCES

Sentences where intonation is hummed (on /m/) occur for a limited number of short phrases in ordinary speech; e.g., 'má! 'What did you say?' (or the like); 'm'm. 'No!'

There is also a more extensive use of hummed intonations, where the

humming parallels normal sentences with both a segmental nucleus and intonation. Such usage is especially attributed to children, but apparently everyone knows and uses these sentences. The Luos themselves call it šš 'ci 'the language of Chi'--where Chi presumably refers to a nonexistent tribe who talk only in such a way.

Examples:

'm 'm 'm 'm. 'Someone's coming.'
 [natš 'bifro.]

'm 'm 'm 'm. 'Give me that thing.'
 [miv a 'gi nš.]

Probably only a small number of sentences have current hummed equivalents because of the otherwise unavoidable ambiguity.

A comparable use of whistling has been reported (for children), but not exemplified.

IV. GENERAL SYNTAX

4.1. INTRODUCTION

This chapter presents highlights of the syntax of the Luo sentence. (syntax of the phrase is given elsewhere, particularly in the discussion of nominal and verb constructions).

No general definition of the 'sentence' is attempted. Some linguists, e.g., Bloch, Jordan, and Martin in their Japanese studies; and especially Trager, Smith, and Hill in their analyses of English, have tried to define the sentence in terms of intonation contours. To a certain extent the same approach is implicit in Welmers's discussion of terraced level tone languages. Clearly intonation must be accounted for—even in a transformational analysis, as Stockwell (1960) suggests. Chapter three of the present grammar has tried to deal with such problems. But there, the treatment of intonation was not concerned with delimiting or classifying or defining sentences. Rather, the recent insistence of the so-called transformationalists has encouraged me to regard a structural analysis of a language as essentially an extended definition of the grammatical sentences of that language.

The 'word' constitutes the basic unit in the present syntactic analysis. The plan of this analysis requires the prior classification of words into classes and then the presentation of the rules of occurrence of these classes. In light of the relatively full discussion of the word in 1.4., it need only be remarked that words are continuous forms, the boundaries of which are indicated by space.

4.2. WORD CLASSES

Luo has three major word classes (using essentially morphological criteria): two inflected (nominals and verbs), one uninflected

(particles).

4.2.1. Nominals. Nominals share the general and regular feature of a singular-plural inflection, tho a few examples are defective; e.g., 'prên 'young man' used only in the singular before nó 'that'; 'miér 'homestead' used only in the plural. Syntactically, nominals have the prime function of being the subjects and objects of predications.

An operational test covering all nominals presents certain difficulties, but since all members of this class do occur as objects, one test might be: ng __ bëndé 'look at __ also' (ng - 'look!', 'bëndé'-'also'). Nevertheless, this is not strictly adequate for one subclass, the (clitic) demonstratives, which usually require a preceding nonclitic head.

Nominals are either dependent (enclitic) or independent. Independent nominals are further classified as to presence or absence of an appertentive case inflection.

4.2.1.1. Dependent nominals. There are two classes of dependent nominals: (1) conjunctive pronouns¹ and (2) demonstratives. Both include almost exclusively monosyllabic words (there are a few exceptions among the demonstratives), and they share the feature of a prefixed plural morpheme.

Conjunctive pronouns are characterized by a dimension of person as well as number (as are the disjunctive pronouns). As the subjects of predicate verbs, they are marked by aspectual tone contours (see 6.1.2.) These pronouns are listed below, and will henceforth not be glossed in other examples.

	First Person	Second Person	Third Person
Singular	<u>á</u> 'I'	<u>í</u> 'you'	<u>ó,é</u> 'he, she, it'
Plural	<u>wá</u> 'we'	<u>ú</u> 'you'	<u>gí</u> 'they'

1/ The terms 'conjunctive' and 'disjunctive' used here, are not taken from formal logic but are employed in accordance with the traditional terminology for a similar phenomenon in modern French.

Demonstratives usually follow another nominal or nominal phrase. All demonstratives are listed below, and will henceforth not be glossed in other examples.

<u>ni</u> - <u>gi</u>	'this - these'	<u>ca</u> - <u>ka</u>	'that - those'
<u>nd</u> - <u>gd</u>	'that - those'	<u>co</u> - <u>ko</u>	'yon'
<u>ne</u> - <u>ge</u>	'which?'	<u>caandé</u> -	'that (those)
<u>nogó</u> -	'that very-	<u>kaandé</u>	spoken of'
<u>gogó</u>	those very'		

4.2.1.2. Independent nominals. Using the criterion of case inflection for the rest of the nominal class, one may set up two large divisions.

Group I includes all nominals without an appertentive case feature altogether. There are three subgroups:

(a) the disjunctive pronouns, which share many of the morphological characteristics of the conjunctive pronouns and which have the syntactic peculiarity--in sentences with nominal predicates--of not requiring the particle ni before nouns indicating place where (see 7.1). The disjunctive pronouns are listed below, and will henceforth not be glossed in other examples.

	First Person	Second Person	Third Person
Singular	<u>aan</u> 'I'	<u>iin</u> 'you'	<u>een</u> 'he, she, it'
Plural	<u>waan</u> 'we'	<u>nun</u> 'you'	<u>giin</u> 'they'

(b) the interrogatives; these never occur as the direct subject of a predication, only as the antecedent of a relative (subject-) ni-clause. The interrogatives are listed below, and will henceforth not be glossed in other examples.

<u>nd</u>	}	'who'	<u>á'nd</u>	}	'what'
<u>ndwá</u>			<u>á'nowá</u>		
<u>ndgini</u>		'who, plural'	<u>á'nogini</u>		'what, plural'

(c) the quantitatives: these include only 'duútd (Alego 'duútd) or 'duúndd 'all', and 'moro (singular), 'mako (plural) 'some'. (These forms will not be glossed in other examples.) Of these 'moro occurs exclusively in construction with a preceding noun, whereas 'duútd occurs independently as well. But see 5.3.1.

Group II includes all nominals with appertentive inflection. There are two major subclasses:

(a) numerals: those nominals that can occur in the appertentive only before conjunctive pronouns. The major numerals are listed below, and will not be glossed in other examples.

<u>a'crɛl</u>	'one'	<u>a'úcrɛl</u>	'six'
<u>a'riyɔ</u>	'two'	<u>a'biriyɔ</u>	'seven'
<u>a'dɛk</u>	'three'	<u>a'borɔ</u>	'eight'
<u>a'ruɛn</u>	'four'	<u>onga'crɛl</u>	(Alego, Uyoma) or
<u>a'bic</u>	'five'	<u>ɔ'crɛkɔ</u>	(Karaohuonyo, Gem) 'nine'
		<u>a'pár</u>	'ten'

a, pá r & a'crɛl 'eleven', etc.

pi(e)r(ɔ)a'riyɔ 'twenty'

pi(e)r(ɔ)a'dɛk 'thirty', etc.

pi(e)r(ɔ)a'pár or 'mɛd 'hundred'

pi(e)r(ɔ)a, pára'pár or 'alfú/ or 'gand 'thousand'

(b) nouns: those nominals that can occur in the appertentive before conjunctive pronouns and other nominals. This class includes the great majority of nominals.

Examples: 'pako 'girl' wɔ 'eye' ma 'this one'
'gand 'person' bɛr 'beauty'

4.2.2. Verbs. Verbs show a minimum of inflection, but all verbs in construction with a directly preceding conjunctive pronoun subject have tonal

contours indicating aspect. An operational test covering all (but defective) verbs is: 'Ó ___ bándé. 'He (she) is ___ing too.' This frame works because pronouns with tone contours (in this example, a durative-inceptive contour) occur only as subjects of verbal predicates and immediately precede the verb.

Verbs that can take a pronoun object are transitive; those that can take two pronoun objects are double transitive. All other verbs are intransitive. The further distinction between statal and nonstatal verbs is significant particularly in the labeling of the aspectual contours (see 6.1.2.).

In part crosscutting all these categories are those verbs which occur in construction with other verbs, particles plus verbs, or particle clauses. No special labels have been provided for these subclasses.

4.2.3. Particles. The final major division of words consists of the uninflected particles, in part a syntactic catch-all category for which one would be hard pressed to establish an operational test. Several subclasses are conveniently distinguished on the basis of occurrence within a clause. Particles that occur before the predicate are either (1) subordinating--a maximally differentiated predicate verb would occur in form 2 (see 6.1.1.), or (2) nonsubordinating--such a verb would not occur in form 2.

Particles that occur within the predicate as well as before it are independent. Prepositions are those independent particles that occur only in construction with a nominal or nominal phrase. Before conjunctive pronouns they are usually stressed; before other nominals, they are proclitics. All the prepositions are listed below, and will henceforth not be glossed in other examples.

<u>ɛ</u>	'in, on'	<u>kod</u>	'with, and'
<u>ɣ</u>	'with, during'	<u>kuom</u>	'among, within'
<u>ir</u>	'towards'	<u>ni</u>	'to, for'

All other particles are adverbs, by far the most numerous of the whole particle class.

4.2.4. Other analyses. It may be of interest to compare the preceding analysis of word classes with others given in former studies of Luo and of related languages.

Most writers set up a class of adjectives, usually with a ma-formant as a morphological characteristic. For Luo, such an interpretation proves to be quite superfluous because ma-constructions are best considered subordinate predications where ma is an atonic form of ma 'this one'. The adjective interpretation is implicit in the official Luo orthography, however, where ma plus verb or noun are invariably written as one word. Crazzolaro, in his studies of Accoli and Nuer--related languages with similar constructions--has also adopted the adjective analysis, but notes certain difficulties. For example, he says of the ma-construction in Accoli:

Such sentences may be taken more as relative sentences than adjectival expressions. There are many of this kind; it is quite immaterial which it is taken to be, as the attributive adjectival expression, e.g. ma-dyidk, can be explained grammatically as a relative sentence, e.g., ma dyidk "which is wet". (1938:53)

But clearly the interpretation is not immaterial. The adjective interpretation is needlessly uneconomical, if only because it doubles a good portion of the lexical stock.

As for allocation of words to a particular class, we need consider

only the word 'tie 'presence, being (in a place)'. The handbooks consider it a verb; Crazzolara calls the cognate Acooli tyéé a copulative, and glosses it as 'to exist, to be present'. In the present analysis for Luo it is considered a noun. The chief reason for this is that it occurs as the object of a preposition, and specifically follows rules for the equational ni-construction (see 6.1.).

4.3. SENTENCE TYPES

4.3.1. Introduction. Luo sentences are here classified according to the presence or absence of a predicate. Utterances without a predicate, the numerous and of high frequency, more or less stand beyond the pale of grammaticalness. They will, however, be considered minor sentences, and be dealt with in a sort of appendix at the end of the chapter. Utterances with a predicate constitute the major sentence types; these form the basis for the present discussion.

Two criteria have proved useful in analyzing the major sentence types: (1) what word classes make up the predicate; (2) whether or not a subject occurs as well. Sentences with nominal predicates are equational; such sentences have subjects of necessity (an isolated noun, for example, constitutes neither subject nor predicate and would be considered a minor sentence). Sentences with verbal predicates are narrative; those with subjects are full sentences; those without, topicless. A special kind of predicate with a prepositional phrase as the major constituent actually forms a third kind of sentence, but will be discussed as a subclass of the equational sentence. Apart from this one instance, sentences have not got particle predicates (or subjects).

4.3.2. Equational sentences. In the ordinary equational sentence, the primary immediate constituent cut distinguishes subject and predicate.

But a handy label for the construction meaning involved in the relationship between subject and predicate is somewhat elusive. The subject is variously characterized in the predicate by attribute, or is specified as the token of a type, among other things. In short, one finds all the 'meanings' usually associated with a copula.

Examples (in the following, '(-)' indicates the subject-predicate cut):

- 'od ni, en (-) 'máár a. 'This house is mine' (od - 'house', máár - 'this of': actually an anaphoric use)
- á, nángé (-) 'rudé. 'Onyango is a chief.' (á, nángé - 'Onyango' name of a man, 'rudé - 'chief')
- nái, robí (-) n 'keend. 'Nairobi is in Kenya.'
- an (-) á 'pesá. 'I have money' (lit. 'I - with - money' ['pesá].)

These verbless sentences are in fact intimately allied with and in part paralleled by narrative constructions with the copula-like verb bét or bedd, readily glossed as 'to be'. For example, certain of the sentences with prepositional phrase predicates vary stylistically with bét-bedd constructions. Thus one may say either an á 'pesá ('I have money') without a verb, or á 'bét á 'pesá; similarly for nái, robí n 'keend: nái, robí, bét ní 'keend. Forms without the verb are more usual, however. Furthermore, imperatives, wishes, nominal phrases derived from an equational sentence core, require transformation with bét-'bedd (see 6.5.1.)

The subject of an equational sentence is normally any independent nominal (except an interrogative). Conjunctive pronouns also occur as subjects, but not with prepositional predicates. Verbs with infinitive tone contour have a limited function as subjects, chiefly in aphoristic comments.

Examples:	Noun	<u>à, uná</u> à 'cíg e. 'Auma is his wife.' (cíg - 'wife of')
	Numeral	<u>a, dèk</u> 'máá a. 'Three are mine.' (máá - 'these of')
	Quantitative	'duútò n ká. 'All are here.'
	Disjunctive Pronoun	<u>, an já</u> 'luó. 'I am a Luo.' (já - 'person of')
	Conjunctive Pronoun	<u>à já</u> 'luó. 'I am a Luo.'
	Verb	'sómo ok à 'neyó. 'To read is not to know.' ('sómo - 'to read'; 'neyó - 'to know')

The predicate consists of any independent nominal--including interrogatives--or a prepositional phrase.

Examples:	Noun	<u>, nengón</u> e 'smon. 'It costs fifty cents.' (n: 'price-of' ['nengón] 'it' 'fifty-cent piece' ['smon])
	Numeral	<u>gin a'dèk</u> . 'They are three.'
	Quantitative	<u>gin 'duútò</u> . 'They are all.'
	Disjunctive Pronoun	<u>en 'cèn</u> . 'It's him.'
	Interrogative	<u>, gin 'nà</u> . 'Who are they?'
	Prepositional Phrase	<u>á, yángé nì 'pácu</u> . 'Onyango is at home.' ('pácu - 'homestead')

It should be noted that the syntactic elements discussed and exemplified here are not necessarily single words, but rather single words together with any phrase which in immediate constituent analysis would have to be considered an expansion of or analytical equivalent of a single word element. A discussion of the major phrase types is included in the sections on nominal and verb syntax.]

In 4.3.1., it was noted that sentences with prepositional phrase predicates actually constitute a class distinct from the true equational.

sentences. The differences are three.

(1) Prepositional phrase predicates, unlike true equational sentences, occur without subjects in at least two constructions: (a) an impersonal ní-phrase place-where construction; (b) a deictic E-phrase construction.

Examples: ní 'pácu. 'It's at home.' ('pácu - 'homestead')

(Cf. en 'pácu. 'He's at home.')

à òtí'end. 'It's Otieno.'

(2) Conjunctive pronouns do not occur as the subject of prepositional phrase predicates. Even in other equational sentences, a disjunctive pronoun subject seems more frequent. Furthermore, nominal place-where predicates in true equational constructions essentially derived from prepositional phrase predicates do not take a conjunctive pronoun subject. Thus, à, yàngò n 'ksudm. ('Oyango is in Kisumu.') but an 'ksudm. ('I am in Kisumu.'), the not *à 'ksudm. (where * indicates an ungrammatical sequence).

(3) In a few constructions there is a difference in word order. Almost invariably--in all sentence types (with a subject)--the subject of a sentence precedes the predicate. Thus, the basic formula for the great majority of sentences is:

SUBJECT	PREDICATE
---------	-----------

The two exceptions to this formulation occur with prepositional phrase predicates. The subject most often follows the phrase ní 'tíe 'being (in a place)', more freely 'there is/are' --the traditional opening line of folk tales, comparable to 'once upon a time'.

Example: ne ní 'tíe , òákó 'moro. 'There was once a certain woman.'

The second exceptional construction involves an E-phrase with unique

stressed allomorphs of the demonstratives. When the subject of the phrase is a pronoun--exclusively a conjunctive pronoun--, the word order is always predicate-subject. With noun subjects, usage varies, and one finds either normal or inverted word order.

Examples: é 'kí gí. 'Here they are.' (kí - stressed variant of gí, 'these')

é 'ré í. 'Where are you?' (ré - stressed variant of nc, 'which')

ò'vàngó é 'ré.
é ,ré ò'vàngó. } 'Where is Onyango?'

Use of a deictic É-phrase (as opposed, say, to an expression of place in or on) is limited to nonverbal constructions altogether. A deictic É is required: (a) before a má-clause; (b) after the noun ma 'this one', or a nominal phrase with ma as the head; (c) before an infinitive verb; (d) when the subject is a proper name and the predicate noun is modified by a conjunctive pronoun or demonstrative. When the subject is not a proper name, use of É before a noun modified by a conjunctive pronoun or demonstrative is facultative. Elsewhere, É is emphatic, so that one might translate en é 'rudé as 'he is the chief', as opposed to en 'rúó 'he is a chief'.

Examples: wan é má 'wá ,rífíngó. 'We're the ones who are running.'
(rífíngó - 'to run')

ná'saai é má n ó 'cuéyó ,piin. 'It is God who created the world.' (ná'saai - 'god', cuéyó - 'to create', piin - 'earth')

'ma cá é ,ít. 'That's the house.'

'ma é ,sá. 'This is the clock.' Also: 'Now is the time.'
(sá - 'time, hour, clock')

'sómo ok é 'neyó. 'To read is not to know.' ('sómo - 'to read', 'neyó - 'to know')

á, uná á 'ciég-e. 'Auna is his wife.' (ciég - 'wife of')

en (é) 'bug cá. 'It's that book.' (búk - 'book')

The number of elements in an equational sentence can of course surpass the number so far discussed (namely two). These elements are essentially adverbial ones, common to all sentence types: adverbs of negation, temporal adverbs, nominal and prepositional phrases of place, manner, time, and the like. A more detailed discussion follows in 4.3.3. A few examples, however, are given in the sentences analyzed below.

Examples: ók en 'adn. 'It's not me.'

Elements (in order): negative adverb, ók 'not'; subject pronoun, en 'it'; predicate pronoun (with predicative tone contour), adn 'I, me'. No variation in word order is possible. Note that the parallel construction ók en 'eén. 'It isn't him.' is considered correct but stilted; the more natural form is ók 'eén.

é óó ran'gác, ne ní 'tíe óó, óákó, moro.

'By the entrance of the compound, there was the house of a certain woman.' (óó - 'mouth of, entrance of', ran'gác - 'compound', óó - 'house of', óako - 'woman')

Elements: (1) prepositional phrase with nominal phrase head, é óó ran'gác 'in entrance-of compound'; (2) temporal particle, ne 'past'; (3) prepositional phrase predicate, ní 'tíe '(in) being (-in-a-place); (4) subject nominal phrase, óó, óákó, moro 'house-of woman certain'. Inverted word order (predicate-subject) occurs because of the predicate phrase ní 'tíe. The only alternation in word order possible is to have the first element (a prepositional phrase of place) occur last.

4.3.3. Narrative sentences. Two construction meanings are associated with narrative sentences. A topicless narrative sentence (one without a subject) invariably designates a command to the effect that the person spoken to should perform the action implied in the predicate verb.

- Examples:
- a. 'Leave!' (a - 'to leave')
- liŋ. 'Be quiet!' (liŋ - 'to be quiet')
- ne 'ŋa nɔ. 'Look at that woman!' (ŋa - variant of
'ŋako - 'woman')
- toŋ 'yien. 'Cut the wood!' (toŋ - 'to cut', 'yien -
ŋi 'tiyɔ. 'Go to work.' (ŋi - 'go', 'tiyɔ - 'to work')

A subject-verbal predicate construction, however, denotes the familiar actor-action relationship with the subject performing the action implied in the predicate verb. One could, in fact, regard imperatives as truncated narrative sentences (with the subject 'understood', to use a tabu term). In general the construction meaning is followed more closely than in the comparable English sentence type, where one finds sentences like 'The door opens', with the subject clearly not the actor. Apparent exceptions in Luo may tentatively be considered metaphoric extensions. Thus:

- ŋɔ 'ŋt 'yaɔ re. 'The door opens (itself)' (ŋɔ'ŋt - lit.
'mouth-of house', 'yaɔ - 'to open',
re - 'self')

but metaphorically:

- ŋɔŋɔ 'yaɔ nɔ 'pɔr. 'The door opens to the mat.', i.e.,
'One difficulty leads to another.'
(ŋɔŋɔ - 'door', pɔr - 'mat')
- luɔŋ n ɔ 'bifro ɔ 'pɔn wa. 'War came to our country.'
(luɔŋ - 'war', 'bifro - 'to come',
pɔn - 'country')

There is possibly a secondary construction meaning, a passive one,

involving a special use of the verbal suffix -i. But the basic construction, however,--not only structurally but also in frequency--is the active one. From the point of view of English, passive sentences must generally be transformed and idioms often recast.

Example: mi, ðusu ò 'nég e. 'He died of malaria.' (lit. 'malaria it killed him.') (mi'ðusu - 'malaria', 'nég - 'to kill')

In narrative sentences, the word order subject-predicate is inviolable. The subject of a full narrative sentence--disregarding for the moment details of apposition and cross-reference agreement (see 4.3.4.)--is either a conjunctive pronoun directly preceding the verb, or a noun, quantitative, or numeral--but never a disjunctive pronoun.

Examples: Noun , natò 'wùðè. 'Someone is walking.' ('natò - 'someone', 'wùðè - 'to walk')

Quantitative , dultò 'bifiro. 'All are coming.' ('bifiro - 'to come')

Numeral a, bió 'beyè. 'Five are good.' ('beyè - 'to be good')

Conjunctive Pronoun á 'máòó , kòné. 'I drank beer.' ('máòó - 'to drink', 'kòné - 'beer')

The predicate always has a verb as the first element. In a special use of the term, subject will be taken as everything in a clause or sentence that precedes the predicate verb. The result of this definition is to consider temporal particles and others as part of the subject. Sure enough, such items cannot modify the predicate in topicless sentences. In topicless sentences, all indication of time is relegated to nominal expressions, e.g., òr kíp. 'Go tomorrow!' (kíp - 'tomorrow'). Furthermore, there are no negative topicless sentences; i.e., a sentence such as

*ok 'cám c. 'Don't eat it!' ('cám - 'to eat')

is impossible. Negative imperatives require a subject pronoun; furthermore, a special negative adverb must be used. The correct translation of 'Don't eat it!' is therefore:

krk r 'cám c. (krk - 'not')

In two-element predicates, the second element is one of the following: a nominal object, prepositional phrase, some sort of adverbial modifier, or another verb.

Examples: Nominal Object	<u>ci</u> 'tóng yien. 'They cut the wood.' (<u>toóng</u> - 'to cut', <u>yien</u> - 'wood')
Prepositional Phrase	' <u>hul</u> n á. 'Confide in me.' (' <u>hul</u> - 'to confide')
Adverbial Modifier	<u>á</u> 'riingá piyá. 'He ran quickly.' (<u>riingá</u> - 'to run', <u>piyá</u> - 'quickly')
	' <u>wá</u> , <u>biro</u> , <u>kin</u> . 'We shall go tomorrow.' (<u>bíro</u> - 'to go', <u>kin</u> - 'tomorrow')
Verb	<u>á</u> 'témó 'sómo. 'I tried to read.' (<u>témó</u> - 'to try', <u>sómo</u> - 'to read')
	<u>á</u> 'tryá. 'Go work!' (<u>á</u> - 'go', ' <u>tryá</u> - 'to work')

Three or more element predicates involve the following: the two nominal objects associated with double transitive verbs; subordinate verb phrases with subjects; adverbs and adverbial phrases of manner, time, place, etc.; prepositional phrases; and the like.

Examples (imperative constructions are quoted to simplify matters):

Double Object mi á, yángá 'bók. 'Give Onyango the book.'
(mi - 'give!', bók - 'book')

phrase with nominal-phrase head, ni 'kueré u 'to ancestors-of you (plural)';

(5) particle phrase, káká 'misangó 'as sacrifice'.

òrì nàí, róbi má, piyó 'kín g ò, kìnì sa a'nuén, gí n'dégg.

'Go quickly to Nairobi by plane tomorrow morning at ten o'clock!'

(òrì - 'go:', 'piyó - 'quickly', 'kín - 'tomorrow', g - variant of gí 'with, during', ò'kìnì - 'morning', sa - 'time, hour', 'n'dégg - 'airplane')

Elements: (1) imperative verb, òrì 'go!'; (2) nominal expression of place to which, nàí'róbi 'Nairobi'; (3) subordinate má-clause of manner, má 'piyó 'which quickly'; (4) phrases of time in order of specificity: (a) nominal expression, kín 'tomorrow'; (b) prepositional phrase, g ò'kìnì 'during morning'; (c) nominal phrase, sa a'nuén 'hour four' [= ten o'clock]¹; (5) prepositional phrase of instrument, gí n'dégg 'with airplane'.

4.3.4. Syntactic elements.

4.3.4.1. Elements occurring in the subject.

Adverb Phrase	Temp Adv ₂	Noun	Indep Adverb	Temp Adv ₁	ok	Disj Pron	Conj Pron
		Disj Pron					
		Conj Pron					

Equational
Predicate

Narrative or
Equational
Predicate

THE SUBJECT

(The actual subject elements are linked up by dashes. Abbreviations:
Temp Adv - Temporal Adverb, Disj - Disjunctive, Conj - Conjunctive,

^{1/} The Swahili system of telling time is employed, and hours are counted from sunrise to sunset, i.e., approximately from 6 A.M. to 6 P.M.

Pron - Pronoun, Indep - Independent. The double-headed arrow indicates that an independent adverb is a necessary condition for the occurrence of a conjunctive pronoun in this position.)

One of the important features of the subject--indicated in part by the lines of dashes in the diagram--is cross-reference agreement. In this construction, no doubt best considered a variety of apposition, a noun or disjunctive pronoun stands in construction with another pronoun subject. The disjunctive pronoun can stand in such a construction only with a following conjunctive pronoun subject; the noun (or noun phrase), with either a conjunctive or disjunctive pronoun.

Examples: en ð 'kuar. 'It's red.' (''kuar - 'to be red')
 'ɥy ð, ð 'gò re, pɥɥ. 'She had a miscarriage.' ('ɥy ð -
 'her stomach', ð 'gò re, pɥɥ - 'it
 fell to earth')
 'nəŋsɔn ɛ, en ð 'tɔŋgɔ. 'It costs ten cents.' (lit.
 'price-of it, it ten-cent-piece')
 an , á nan ð, gúc á 'umá. 'I see Auma's cooking pot.' ('nanð
 - 'to see', á 'guc - 'cooking pot of',
 á 'umá - 'Auma', a woman's name)

As is evident from the diagram of the subject, the cross-reference agreement construction occurs discontinuously as well, often together with a pleonastic repetition of the conjunctive pronoun. This pleonastic construction also occurs without cross-reference agreement. The result is that one can end up a whole series of expansions; thus,

ð 'bɛr. 'He's good.' ('bɛr - 'to be good')
 en ð 'bɛr.
 ð 'bendé, ð 'bɛr. 'He too is good' ('bendé - 'too')
 en 'bendé, ð 'bɛr.

Distinction in meaning between some of these variants is occasionally elusive; presumably, the more elements in the construction the greater the emphasis. There are a few restrictions, however, on building up such strings. Pleonastic conjunctive pronouns occur only before a nonnegative independent adverb and the future particle n (in conjunction with which a pleonastic pronoun is almost the rule). Further, this construction does not occur before or after an appositive disjunctive pronoun.

A variety of synecdochy occurs which is probably a subcategory of the cross-reference agreement construction. Usually restricted to designating and attributing some trait of character to a person, the construction involves: (1) the name of the person concerned, (2) the synecdochial appositive noun (generally some term for a part of the body), (3) a conjunctive pronoun--in that order, followed by the predication. The construction also occurs without (1).

Examples: á'yángé, cup e 'lér. 'Oyango is good-hearted.' (lit., 'Oyango his liver [or spirit] is bright.)
á'rud, wiy é 'tèk. 'Arua is stubborn.' (lit., 'Arua her head is hard.')

The negative adverb ok (or ok) regularly precedes the subject pronoun directly. But when the subject contains a post-noun temporal adverb, ok may precede it. ok most frequently precedes the independent adverb dí (indicating unreal condition), the occurrence before the pronoun is also found.

Examples: ne ók 'en, á 'pésá. 'He didn't have money.' ('pésá -
ók 'n en, á 'pésá. 'money')
ká ,ok dí ne gí 'n'én é!, dí 'n ó ,éé. 'If they hadn't seen
ká dí ne ok gí 'n'én é!, dí 'n ó ,éé. her, she would have
died.' ('n'én - 'to
see', éé - 'to die')

Temporal particles consist of two distributional classes: (1) those that must follow a noun subject (ne - 'past' particle, n - 'future' particle); (2) those that either precede or follow a noun subject (ad - 'recent past' particle, ap or wap 'soon', 'nene 'completed action' particle, 'tindé 'recently', 'yandé 'formerly'). If members of both classes appear in the subject, (1) must follow (2).

Examples: á'yangó nene á 'nfen é. } 'Onyango has seen him.' ('nene -
nene á'yang á 'nfen é. } 'to see')
'tóm ap, n o 'hul ní gi. } 'Tom will soon tell them.' ('hul
'to tell, confide')

Relatively few words occur in the independent adverb slot in the subject; they include: 'beéndé ('béndé, bé) 'also, too', dak 'not', di 'unreal condition' particle, pok 'not yet'.

Examples: ,pok á 'bifro. 'He hasn't come yet.' ('bifro - 'to come')
(The following exemplifies what is probably maximal adverb occurrence in the subject; note that the future particle n must precede the subject pronoun directly)

'tóm ,béndé, ap ok n o 'húl ní gi. } 'Tom will also not tell
'tóm ,béndé, ok ap n o 'húl ní gi. } them soon.'

Adverbial phrases--essentially sentence adjuncts--occur before a noun subject. [Adverbial] is here used to indicate the function of the phrase, rather than the part of speech of the words in the phrase. Certain nominal phrases of time when are included here. They are usually mirrored in the predicate by repetition of the phrase or by use of some morphologically related word. The only members of this class are: kíp 'tomorrow', and pod 'day' in the phrases 'pod ró 'yesterday' (ró is a special allomorph of nd 'that') and 'pod cá 'day before yesterday'. With regard to the last example: either the noun occurs alone in the subject (often with an allo-

morph /n/ before vowels) or the whole noun-demonstrative construction; the predicate repetition-always occurs as the full construction.

Examples: 'ki, n a, ɔf nái'róbi g ò, kɪnɪ. 'Tomorrow morning I shall
go to Nairobi.' ('òryɔ - 'to go', g ò'kɪni-
'during morning')

 'nó rɔ ɔ 'òs, 'nòd rɔ. 'He died yesterday.' (òs - 'to die')
 'n ɔ 'òs, 'nòd rɔ.

Other expressions of time may occur before the noun subject, as well as prepositional phrases (see 4.3.4.2.). Occurrence of more than one such item has not been noted in the subject, however.

Prolepsis is common both in subject and predicate constructions. That is to say that a noun may occur either before or after the adverbs ká 'if, when', or káká 'as, like, how' even tho the noun in question is the subject of a predication (main or subordinate) that follows these adverbs.

Example: à 'nɛno, ɔrɛpɛ kák ɔ 'bɛɛr. 'I saw how beautiful the flower
is.' ('ɔrɛpɛ - 'flower', bɛɛr -
à 'nɛno káká ɔrɛpɛ ɔ 'bɛɛr. 'to be beautiful')

Occasionally the topic and the grammatical subject of a sentence are not the same. The topic becomes in fact an initial sentence adjunct--marked by a following /,/--as well as an anticipatory object with transitive verb predicates.

Examples: 'mɔɛɛ, à cáámò. 'I ate the/rice.' ('mɔɛɛ - 'rice', 'cámò
- 'to eat')

 'nwé 'nangó nɪ, ok à 'bɛɛrɔ. 'I don't like the smell of this
cloth.' ('nwé - 'smell of', 'nangó -
'cloth', 'bɛɛrɔ - 'to love, like')

Note that in the above examples, an object was not required after the predicate verb; occasionally one does occur, emphatically. A parallel construction occurs within a sentence, so that when a noun that would otherwise be the object of a verb occurs before that verb (in another construction of

the same sentence), the object is normally not repeated after the verb.

Example: 'šako mā 'n š nu, oš 'nako, 'n š wiitš 'oškš. 'The woman who gave birth to a girl threw (her) away.' ('šako - 'woman', nu'šš - 'to give birth to', 'nako - 'girl', 'wiitš - 'to throw', 'oškš - 'outside')

4.3.4.2. Elements occurring in the predicate.

TRANS VERB	<u>re</u> (+ Pron) 2	ššš	<u>ni</u> + Pron	Nearer Object	<u>šru</u>
DOUBLE TRANS VERB			<u>šru</u>	Further Object	<u>ni</u> + Pron
INTRANS VERB				Nominal, Prepositional, and Adverbial Expressions	
STATAL VERB				(generally in the following order: Place, Manner, Time, Other)	
NO VERB	Predicate Nominal				
	Predicate Prepositional Phrase				

THE PREDICATE

(Abbreviations used: Trans - Transitive, Intrans - Intransitive, Pron - Pronoun. The No Verb column indicates the predicate of an equational sentence; all the others indicate predicates of narrative sentences.)

A good deal of variation--considerably more than has been noted for the subject--occurs in the ordering of predicate elements. The verb, however, is invariably first in narrative predicates.

The 'reflexive' or 'middle' particle re occurs immediately after the verb and before pronoun objects. Note that altho object pronouns of the same person as the verb subject are obligatory in this construction for the first and second persons singular, and occur facultatively with the

second person plural, they are not used at all with the other persons.

Examples: à 'héro r à. 'I love myself' ('héro - 'to love')

í 'héro r í. 'You (singular) love yourself.'

ò 'héro r ò. 'You (plural) love yourself.'

ò 'héro r é. 'You (plural) love yourself.'

wá 'héro r é. 'We love ourselves.' Etc.

The plural particle 'uru occurs only in construction with a form-2 verb (see 6.2.). 'uru follows a pronominal object, a ni-phrase with pronoun head, the particles re 'self', ngá 'habitually, always', 'ára 'well then, all right'. 'uru precedes other predicate elements.

The particle ngá 'habitually, always' follows the particle re 'self', but precedes other elements in the predicate.

Examples of 'uru and ngá:

'kel n á rí 'uru. 'Bring them to me'--spoken to more than one person. ('keld - 'to bring')

kel 'uru kálá, táa. 'Bring the paper.' (kálá'táa - 'paper')

wa 'ngé e árá 'uru. 'Well then, let's kill him.' ('ngé - 'to kill', árá - 'well then')

en é 'm ó, toónó ngá 'yrién. 'He's the one who always cuts the wood.' ('toónó - 'to cut', 'yrién - 'wood')

The following sentence illustrates the relative/ordering of re, ngá, and 'uru. Admittedly contrived, the sentence is nonetheless perfectly grammatical.

wa lu'ók ré ngá 'uru! 'Let us always be washing ourselves!' (lú'ókó - 'to wash')

The ordering of objects and adverbial elements permits a considerable amount of variation.

When the main verb is transitive, the further ('indirect') object is

a ni-phrase; and the nearer ('direct') object, a nominal (phrase). The further object precedes the nearer object when the head of the ni-phrase is a pronoun, but follows when the head is a noun (in this instance, the ni-phrase tends to be the last element in a sentence--other things being equal).

- Examples: ǎ 'nádó, yíén ní 'mumbo. 'He cut the wood for Mumbo.'
 (ǎ 'nádó - 'to cut, chop', 'yíén - 'wood')
ǎ 'nádó n á, yíén. 'He cut the wood for me.'
wac ní 'móon, mósómòs. 'Speak slowly to the women!' ('mósómòs
wac 'mósómòs ní 'móon. - 'slowly, softly')

With double transitive verbs, the further object--simply a nominal (phrase)--usually precedes the nearer object.

- Examples: 'niy a gó. 'Give it to me.' (gó - 'it')
'ni á, yángó 'bùk. 'Give Onyango the book.' (bùk - 'book')

Certain transitive verbs take as a sort of preferential object a noun morphologically related to the verb itself. In the classical terminology, we are here dealing with 'cognate objects'.

- Examples: ,cámá-ci'emó 'to eat food'
,ggyó 'goc 'to beat (a beating)'
,kokò 'kók 'to shout (a shout)'
,léko 'lek 'to dream a dream'
,wacó 'wac 'to say (a saying, word)'
,weró 'wèr 'to sing a song'

For a single verb, I have found a 'cognate subject': ,niðó 'niðó 'it's showering, raining' (lit. 'the shower showers').

Nominal, prepositional, and adverbial expressions in the predicate normally follow the order: place, manner, time, other. But variations on this scheme abound, even the most utterances do not contain all these

elements.

In a sentence with both time and place expressions, the time phrase normally occurs at the beginning of a sentence (see 4.3.4.1.), tho it may also follow the expression of place. Reversal of this latter place-time order is emphatic for place. Schematically:

Time ... Place
 ... Place Time
 ... Time Place.

Examples:

, jumá m ó 'bíró, ó 'mf ó, yagó 'óráp 'ksuímo.

ó 'mf ó, yagó 'óráp 'ksuímo, , jumá m ó 'bíró.

ó 'mf ó, yagó 'óráp, , jumá m ó 'bíró, 'ksuímo.

'He's going to give Onyango a cow in Kisumu next week.' ('jumá - 'week',
, jumá m ó 'bíró - 'week which comes', ó 'mf - 'he will give', 'óráp - 'cow')

Expressions of place and gi- or kod-phrases are generally interchangeable in order. Both normally precede time phrases and usually manner phrases as well.

Examples: en gi 'pésá é, ód é á'diéra, 'póó ró. 'He certainly had
 money in his house yesterday.'

en é 'ód é gi, pásá. 'He's in his house with the money.'

en gi, pásá á'diéra é, ód é. 'Certainly he has the money in
 the house.' ('pésá - 'money', ód -
 'house of', á'diéra - 'truly, certainly',
 'póó ró - 'yesterday')

, or é gi, pié 'dálá ní jé 'gém. } 'Send her home with money to
, or é, dálá gi 'pié ní jé 'gém. } the people of Gen.' (or -
 'send!', 'dálá - 'homestead', pié -
 'wealth', je - 'people of', gém - 'Gen',
 a location in South Nyanza)

Post-predicate subject modifiers are nominal sentence adjuncts in a sort of discontinuous apposition with the subject. They occur at the very end of a sentence.

Examples: ne gi 'bifiro, gi 'duúto. 'They all came.' (lit., 'They came, they all.')

á 'nénó gi, 'an. 'I saw them.' (lit. 'I saw them, I')

4.3.5. Nonsimple sentences. All sentences with only one predicate are simple sentences; all others are nonsimple. Up till now, discussion has focused on simple sentences.

Nonsimple sentences consist of two major types. Those in which the predicates stand in a coördinate immediate constituent relationship to one another, are compound sentences; those where the predicates are not coördinate are complex. Word order in all sentence types does not seem to vary from that discussed previously (in 4.3.4.).

Paratactic compound sentences are those coördinate predicates not joined by a preverbal particle.

Example: wín 'fúyo, rec 'kuáD. 'Birds fly, fish swim.' (wín - 'birds', 'fúyo - 'to fly', rec - 'fish', 'kuáD - 'to swim')

Compound sentences with clauses joined by a particle have a relatively high frequency of occurrence, but involve only the particles to 'but', ni 'then, and', 'kendo' 'and, also'.

Examples: in já má'sai, to, 'an já 'luú. 'You're a Maasai, but I'm a Luo.'

á 'óf dala, t ok á yúdo 'nató. 'I went home, but found nobody.' (ó - variant of 'óryú' 'to go', 'dala' - 'homestead', 'yúdo - 'to find', 'nató - 'person')

Two varieties of complex sentence will be discussed: (1) those intro-

duced by the atonic nominal má; (2) those introduced by a particle. It would seem that most, if not all, instances of subordinate predication can be subsumed under these headings, the occasionally paratactic sentences invite a subordinate clause interpretation. Thus,

sanduk 'pík, ǎ 'hěw á. 'The heavy box is a burden to me.'
(lit. 'The-box is-heavy, it burdens me.',
'sanduk - 'box', 'hěwǎ - 'to burden'),

where the intonation (see 3.3.2.) indicates parataxis, could possibly be analyzed as having a kind of subordinate predication (sanduk 'pík) in apposition with the grammatical subject of the main verb.

In the subordinate má-construction, we find elements which are readily analyzed as subject and predicate. The general structure of such phrases requires má + nominal (less commonly, an adverb), or má + (pronoun +) verb. má functions either as subject or object in this construction--but always is the first element. Within the larger context of the complete sentence, the má construction functions as an independent nominal phrase, or else is in apposition with a foregoing noun.

má, as other nouns, has appertentive inflection. The appertentive use of má does not, however, result in a subordinate predication, but rather in an attributive nominal phrase. As a result, one can find minimum contrasts such as the following:

ká, lám mar 'ndiikó - 'a pen for writing' . (ká'lám - 'pen',
'ndiikó - 'to write')

ká, lám má 'ndiikó - 'a pen which writes'.

má-constructions are either appositive or independent. An appositive má-construction is essentially a relative clause, often best translated by an English adjective (see 4.2.4.).

Examples: (1) kí, tabú má ra'teəp, ní 'ká. 'The black book is here.' (lit. '...book which black-ones...')

- (2) en é ra'puddé má n é 'yúddé. 'He's the thin (one) I meant.'
 (ra'puddé - 'thin'/person', 'yúddé - 'to
 find'/here:'to mean'/)

In example (1), má functions as the subject of a subordinate equational predication; in (2) it is the object of the verb 'yúddé.

Relative má (and independent ma as well) cannot occur as the 'possessor' or nominative member of an appertentive phrase. Instead, we find a rather involved periphrasis where má introduces the relative phrase and is followed by an appertentive noun plus conjunctive pronoun, with the pronoun referring to the antecedent of the whole clause. Thus the sentence 'The man whose chair is broken, is here.' is literally: 'The-man who (má) chair his...etc.':

pat má, kom é ó 'keóó ré, ní 'ká. ('pató - 'man', koon -
 'chair', 'keóó ré - 'to be broken').

Nonappositive má-constructions are nominal phrases which function either as an ordinary noun or as an adverbial phrase. Examples of their noun functions include the following, which require statal verb predicates.

Examples: en má 'kuár. 'It's the red one.' ('kuár - 'to be red')
bet má 'bár. 'Be good!' (bet - 'be', bár - 'to be good')
má 'tek ní, bár. 'That hard one is good.' (tek - 'to be
 hard')

As predicate noun clauses after deictic é, a subject conjunctive pronoun is required (see p. 62).

Examples: wan é má 'wá, ríngó. 'We're the ones who are running.'
 ('ríngó - 'to run')
en é 'm ó, tóóó ngá 'yíén. 'He's the one who always cuts
 the wood.' ('tóóó - 'to cut', 'yíén -
 'wood')

The adverbial function of an independent má-construction is normally that of manner.

- Examples: ò, nãgò 'tiyò má 'tèk. 'Onyango works hard.' ('tiyò - 'to work', tèk - 'to be hard')
- í 'wúòò má 'bèr. 'Have a good journey!' (lit. 'May you walk well!' 'wúòò - 'to walk', bèr - 'to be good')
- ò 'nádò, yèrén má 'bèr m ò 'loy í. 'He cuts wood better than you do.' (lit. 'He cuts wood well which [má] he surpasses you.' This is the general pattern in the translation of English comparatives. 'nádò - 'to out', 'yèrén - 'wood', 'loyò - 'to surpass')

Subordinate predications introduced by particles are of two types:

- (1) those where the verb is in form 1, and (2) those where the verb is in form 2 (see 6.1). Particles taking (1) are nonsubordinating (with reference to the verb) and include: ká 'if, like, when, unless', 'káká 'how, as', 'kátá 'even if, whether, or', ní 'that'. Particles taking (2) are subordinating and include: 'monò 'so that, in order that', 'náká '(it is necessary) that', dí 'unreal condition, hesitation'.

Subordinate predications of type (1) can occur in apposition with a pronoun subject.

- Examples: káká } tóm n ò 'négò, jòoní, pòk ò 'fúen. 'How (Whether)
kátá } 'Tom killed John, hasn't yet been found out.' ('négò - 'to kill', pòk - 'not yet', 'fúenò - 'to find out').

Such clauses occur adverbially as well, either before or after the main predication.

- Examples: ò 'núnã k í 'sè 'sòomò. 'I shall find (you) when you've finished reading.' ('núnã - 'to find', sè - defective verb indicating completed action, 'sòomò - 'to read')

ò 'lòsò ká, gí má 'iy é 'wáñ. 'He talked as tho he were

angry.' (lit. '...as tho something inside him were burning.', 'losò - 'to talk', gí - 'thing', wáò - 'to burn')

ká ná 'nén é!, 'n-ó-se, náà 'yíán. 'When I saw him, he had cut the wood.' ('nén - 'to see', 'náà - 'to cut', 'yíán - 'wood')

Both indirect and direct discourse are usually particle clauses, introduced by the particle ní.

Example: ó 'wáò ní, 'wúor a, nendé á 'yúú 'ákó móro má 'bèr.
(He said, "My father, I have just met a certain beautiful girl". 'wáò - 'to say', 'wúor - 'father of', 'nendé - 'just', 'yúú - 'to find', 'ákó - 'girl', 'bèr - 'to be beautiful')

Subordinate clauses of type (2) normally occur after the main verb, but they are also used as independent sentences.

Examples: kel 'pí móndó wa 'mòó. 'Bring some water so that we may drink.' ('kel - 'bring', pí - 'water', 'mòó - 'to drink')

wáò n á ká d i 'hér ní, mónd a 'bí. 'Tell me if you think I should come.' ('wáò - 'tell', 'héré - 'to like', 'bíro - 'to come')

mónd i 'wúóò gí 'hawí 'Have a good trip!' (lit. 'May you walk with luck.', 'wúóó - 'to walk', 'hawí - 'luck')

4.3.6. Nonpredicate sentences. Nonpredicate sentences consist of citation forms, interjections, enumerations, general formulas of politeness--in short anything that can possibly be considered a sort of truncated sentence.

Single words quite frequently occur as independent utterances of this sort. Among them occur the all-round minimal 'sentences' such as:

é! 'What? What did you say?'

o' (lateral click) 'Oh! I forgot.'

Other examples of utterances with subsystem-phoneme content or emotive variants of 'normal' words, include the following:

t't't't' (series of dental clicks) - an expression of doubt

s's 'Shh.'

áw P (i.e., spoken on the falsetto level) - an expression of surprise or incredulity

'duuuutó! - a hunting shout made by the person who has actually killed the animal ('duutó - 'all')

'kuu 'riiii! - formula to entice edible locusts ('ku ri - 'this place').

Of nonpredicate politeness formulas may be mentioned the following:

'msáawa. 'Hello.'

'ogíma! 'How are you?' (lit. 'Health?')

'ogíma. 'I'm fine.'

Certain adverbial particles are very frequently used as nonpredicate sentences. They include the following:

ed. 'Yes.'

'obýð. 'No.'

'a'a. 'No.'

'podí. 'Not yet.'

V. NOMINALS

5.1. NOUNS

5.1.1. Paradigmatic features. In the present analysis, a two-by-two paradigmatic grid is imposed on all nouns. Despite the general efficiency of this approach, some nouns prove to be defective (e.g., 'dald 'home-stead'), overdifferentiated (e.g., 'ðrån 'cow'); or syncretic (e.g., cup 'liver, spirit'). Furthermore, a difference has had to be made between noun 'variants' (forms either contrasting or in free variation) and noun 'allologs' (forms--particularly appertentive ones--which can be predicted from various environments).

As has been implied, there are four paradigmatic features: two each of case and number. The cases are nominative and appertentive; the numbers, singular and plural. Nominative and singular are unmarked. Plural is usually a suffix (tho it may be a zero element).

Three allologs must frequently be distinguished for the appertentive singular: (1) that which occurs before a noun, (2) that which occurs before a demonstrative--if the particular noun takes the appertentive before demonstratives (see 5.5.2.), (3) that which occurs before a pronoun. For the plural appertentive we need distinguish only pre-noun and pre-pronoun allologs. A relatively pervasive characteristic is the occurrence of /n/ or /g/ after appertentive forms and before singular pronouns. Their occurrence complicates and confuses the picture somewhat. According to the 1920 Mill-Hill grammar, this intervening element (here interpreted as part of the appertentive form itself) is normally /n/, but it is noted that

The plural suffix is often "ga," "gl," "ge."
 Though this form is less common than the form
 in "na," etc., it would seem to be more correct.
 (1920:26)

(A basis for the greater correctness of forms in /g/ is not given.)

Huntingford (1959:33) maintains, and probably rightly so, that variation of /n/-/g/ in the plural is a dialect matter. My own findings indicate considerable fluctuation on this point, and not inconsiderable uncertainty among native speakers themselves. Probably a great deal of dialect mixture is involved. Generally speaking, however, my Alege informant preferred plurals with /n/; other informants generally used /g/.

Some writers, in describing related languages (e.g., Crazzolaro on Accoli and Nuer) have tried to relate such linking consonants to the pronoun rather than the preceding noun. Historically, they are probably justified in doing so. One can even find a few synchronic parallels to support this interpretation, specifically, a similar (the more clear-cut) /n/-/g/ distinction in the demonstrative prefixes (see 5.2.). But from an overall consideration of the morphology, such an interpretation complicates things: two classes of pronouns would have to be set up, one with, one without prefixes /n/-/g/, but no rules short of listing can be given to account for the very awkward distribution. Since one ultimately must list a considerable number of noun forms anyway, the inclusion of /n/-/g/ as part of the noun inflection turns out to be the most elegant procedure.

The paradigmatic model that we wind up with in the present analysis deals in terms of the following items:

- (1) the noun (in the nominative singular)
- (2) the noun root, which is generally the nominative singular form of the noun minus any final vowel.
- (3) vowel and consonant alternations, discussed in 5.1.3.
- (4) the plural-morpheme ending, discussed in 5.1.2.
- (5) the /n/-/g/ final element, already discussed.

This model can be represented schematically as follows.

SINGULAR

PLURAL

NOMINATIVE	Noun	Noun root + VA + CA ₂ + Pl
APPERTENTIVE	Noun root + CA ₁ (+ n)	Noun root + VA + CA ₃ + Pl (+ n/g)

(Abbreviations: VA - vowel alternation, CA - consonant alternation, Pl - the plural ending. Subscripts indicate distinct phonemes in maximally differentiated forms; as a rule, however, these consonant alternations generate the same phoneme. Forms in parentheses occur before singular pronouns only, but are unpredicable.)

Few nouns demonstrate all the details of inflection indicated in the diagram. An example of a productive pattern with a plural in -é is given below.

	SINGULAR	PLURAL
NOMINATIVE	<u>ki'tabu</u> (book)	<u>ki'tapé</u> (books)
APPERTENTIVE		
(before noun)	<u>ki,táp 'mumbo</u> (Mumbo's book)	<u>ki,tápé 'mumbo</u> (Mumbo's books)
(before singular pronoun)	<u>ki'táp a</u> (my book)	<u>ki'tápén a</u> (my books)
(before plural pronoun)	<u>ki'táp wa</u> (our book)	<u>ki'tápé wa</u> (our books)

5.1.2. The plural. Plural nouns are here analyzed as stem plus suffix. (The stem is the noun root plus phoneme alternations specified in 5.1.3.) Some words such as 'wuoi' 'boy, son' use a prefix to mark the plural; others, such as 'guené' use no affix at all, and even drop the final vowel of the nominative singular. Such nouns are relatively rare, however, and must be considered exceptional.

yáá 'wood, tree, medicine': 'yíen 'trees', etc.,
(variant plural)

(2) With /k/ as plural suffix: three nouns.

'díèl 'goat': 'díek 'goats'

'òràp 'cow': 'òòk 'cows'

'gí (moro) '(some)thing': 'gík (moko) 'things' /

Nouns with zero suffix include several classes of plural formation and noun inflection. Nouns with the plural marked either by prefixation or loss of affix are considered as stem variants before the (zero) plural suffix.

(1) Prefixation

mù'hiyá 'child': wá'hiyá 'children

'wuoi 'boy, son': yá'wuoi 'boys, sons'

(2) Loss of affix

'díoué 'man, husband': 'oué 'men, husband'. The appertentive singular also has no prefix: 'oué 'husband of'.

'guend 'fowl, chicken': 'guen 'chickens'

'kóné 'beer': 'kuóné 'beers' (variant plural)

'ò'múgò 'louse! (Alego dialect): 'múgò 'lice'

'wíno 'bird': wín 'birds'

(3) Vowel (and tone) change

'kuác 'leopard': 'kuac 'leopards' (variant plural)

'lírè 'elephant': 'lic 'elephants'

má 'fire': mas 'fires' (variant plural)

Two general patterns for appertentive inflection emerge for this zero-suffix plural class. Either the appertentive is identical with the nominative form and we get maximal syncretism, or else the appertentive has a separate form, usually showing regular consonant alternation (see

5.1.3.).

Examples:

(1) Maximal syncretism

	SINGULAR	PLURAL
NOMINATIVE	<u>cup</u> 'liver'	<u>cup</u> 'livers'
APPERTENTIVE	' <u>cup e</u> 'his liver'	' <u>cup-n e</u> 'his livers'

(2) Appertentive differentiation

	SINGULAR	PLURAL
NOMINATIVE	<u>ci'emò</u> 'food'	<u>ci'emò</u> 'foods'
APPERTENTIVE	<u>ci'émbe e</u> 'his food'	<u>ci'émbe-n e</u> 'his foods'

To class (1) belong the following recent loan words: 'cumbi 'salt' (Swahili chunvi), 'kitudngù 'onion' (Swahili kitungun), 'redidò 'radio'. Other nouns include: 'bandò 'maize', 'buru 'ash(es)', 'kic 'bee', 'lók 'dream', 'ná'nud, nud 'fog', 'd'dumá 'maize', 'tutu 'pus', 'Ørèpè 'flower' [the older handbooks list 'flower' as (presumably) 'Ørèw--written thièw; possibly the plural form has recently taken over a singular meaning as well].

To class (2) belong the following nouns (appertentive forms are included in parentheses): 'd'pícw 'measles' (d'pícp), 'cinò 'stomach' (cinò-g), 'fuwò 'foolishness, folly' (fúp), 'káí 'millet' (kánd, also pre-pronoun variant káí-n/g), 'kuoyò (Alego kuo'yò) 'sand' ('kúoc), 'hawí 'good luck' (háp), má or ma 'this one', relative noun (singular: máár, plural máág--with pre-pronoun variant má before wa 'we, us' and u 'you, plural), 'ò, regò'régo 'mill' (ò, regò'rék), 'remò 'blood' (rémbe), 'siri, siri 'grasshopper' (siri'sfo).

Nouns with the plural suffix -ní (occasionally also -íní, which is the form adopted in the current orthography) do not exhibit alternation of the final root consonant before this suffix. The only exception to this rule I have so far come across is ò'láp 'black ant', plural ò'legani.

Roots with final /w/ have allomorphs without the /w/ in the nominative singular before a back vowel when the root vowel is either /a/ or a back vowel.

Examples: 'laɔ 'cloth': 'lewni 'cloths' (root law-)
 'raɔ 'hippo': 'rewni 'hippos', one variant (root raw-)

Without exception, nouns with a root vowel /a/ take an umlaut with /e/ before the -ni suffix. [The Vocabulary Nilotic-English lists the word rath (presumably raɔ) 'grains fallen out of the ears either in the granary or when put out to dry', with the highly irregular plural radhini (presumably raɔni); the term was not used by my informants.]

Examples: 'daɔɔ 'swamp': 'degni 'swamps'
 'mi'ahɔ 'bride': 'mi'ehini 'brides'

This suffix is sometimes used to form the plural of recent loan words, e.g., 'susta 'sweater' (from the English), plural 'suetni (or 'sudɔ). On the whole, however, this suffix seems to be losing ground to another suffix, -ɛ.

Appertentive formation for this -ni plural class is relatively simple in the singular: the appertentive has the same segmental shape as the nominative, with the addition of /n/ before singular pronouns. Four kinds of formation occur for the appertentive plural: (1) the appertentive is the same as the nominative plural (i.e., -ni + n/g); (2) the appertentive is the same as the nominative singular (+ n/g); (3) the appertentive is the same as the noun root. But the appertentive plural of such nouns seldom occurs really, and they are difficult to elicit. In most instances, periphrasis with an appositive nɔg-phrase is the more common idiom, e.g., 'kuesni nɔg 'mumbo rather than 'kuesni 'mumbo 'Mumbo's pipes' ('kuesni - 'pipes', nɔg - 'those of'). For the fourth kind of appertentive, see p. 91.

Examples: (1) Appertentive the same as the nominative.

	SINGULAR	PLURAL
NOMINATIVE	'kuesi 'pipe'	'kuesni 'pipes'
APPERTENTIVE	'kdesi 'mumbo 'Mumbo's pipe'	'kuesni 'mumbo 'Mumbo's pipes'
	'kdesi-n a 'my pipe'	'kuesni-a 'my pipes'

(2) Appertentive plural the same as the nominative singular.

	SINGULAR	PLURAL
NOMINATIVE	'tupo 'shadow'	'tipni 'shadow'
APPERTENTIVE	'tupo 'mumbo 'Mumbo's shadow'	'tupo 'mumbo 'Mumbo's shadow'
	'tupo-n a 'my shadow'	'tupo-g a 'my shadows'

(3) Appertentive plural the same as the noun root.

	SINGULAR	PLURAL
NOMINATIVE	mi'ahá 'bride'	mi'ehini 'brides'
APPERTENTIVE	mi'áhá 'mumbo 'Mumbo's bride'	mi'eh 'mumbo 'Mumbo's brides'
	mi'áhá-n a 'my bride'	mi'áh a 'my brides'

There are three major subclasses of plural endings which are vowels. The least comprehensive group involves the suffix -ǎ, limited to one noun, nǎ'ǒf 'child': plural ni'ǒrindǎ 'children'. The second element of this compound noun, /ǒf/, is historically and possibly descriptively related to ǒin 'smallness', in turn related to a statal verb ǒin 'to be small' which uses an explicit-plural form in -ǎ (really just one form of the normal class-1 verb ending -ǎ), 'ǒrindǎ'. (For further discussion of verbs with explicit-plural forms, see 6.2.)

The plural suffix -ǎ is another unproductive way of forming the plural and is at present restricted to eleven nouns in all. The appertentive plural is usually distinct from the nominative singular and often coincides with the nominative singular. Nouns without a root consonant in the nominative, have /ǒ/ in other forms. (For details, see specific items in 5.1.3.2.). The following nouns belong to this class:

- dák 'cooking pot': 'degi 'pots'
quók 'dog': 'guogi 'dogs'
ǰáí 'person': ǰí 'persons' (the appertentive plural form ǰò occasionally occurs in nominative environments)
'kuót 'triangular shield': ''kuodi 'shields'
lè 'ax': 'leði 'axes'
mò 'oil, butter, gasoline': 'noði 'oils'
'pako 'girl, daughter': ''niri 'girls'
on'diek 'hyaena': ondi'egi 'hyaenas'
ót 'house': 'udi 'houses'
'rudé 'chief': ''ruoði 'chiefs'
'yié 'boat, canoe': ''yieði 'canoes'

The plural suffix -é would seem to be the most productive of the plural suffixes. Foreign words are readily incorporated into the native scheme of noun inflection with the use of -é. Examples include:

- ká'hawá 'coffee': ká'hepé (Swahili kahawa)
kí'tabú 'book': kí'tapé (Swahili kitabu)
msá'labá 'cross': msá'lepé (Swahili msalaba)
sá 'hour, time, clock': 'sacé (Swahili saa)
wik 'week': 'wigé (English)

Use of the -é suffix constitutes a fourth way of forming the appertentive plural of nouns with -ni in the nominative plural; in this instance, we have a 'mixed declension'. (See discussion on p. 89.)

Example:	SINGULAR	PLURAL
NOMINATIVE	' <u>ndigé</u> 'cirole, bicycle'	' <u>ndigni</u> 'bicycles'
APPERTENTIVE	<u>'ndik</u> 'mumbo 'Mumbo's bicycle'	<u>'ndiké</u> 'mumbo 'Mumbo's bicycle'
	<u>'ndik a</u> 'my bicycle'	<u>'ndiké-n a</u> 'my bicycles'

Certain nouns taking -é in the plural show root variation. Such nouns include the following.

'kuèr 'hoe': 'kuè 'hoes'

'myù 'mother': 'miné 'mothers' (there is overdifferentiation in the appertentive singular: 'mám a 'my mother'--possibly a single word--, 'mér u 'your (singular!) mother',¹ min elsewhere)

ò'miyò or ò'megò 'brother': ò'wètté 'brothers' (there is overdifferentiation in the appertentive singular: ò'mér a 'my brother', ò'mér u 'your (singular!) brother',¹ ò', min 'máar s' 'his brother',² ò'wad elsewhere)

'wudró 'father': 'wuóné 'fathers' (there is overdifferentiation in the appertentive singular: 'wúor a 'my father', 'wúor u 'your (singular!) father',¹ 'wuón elsewhere /in Roman Catholic usage, 'wuón is considered --mistakenly--to be the nominative⁷)

Nouns of this class normally show alternation of the final root consonant. A few do not, however; these include the following:

à'jujgré 'witchdoctor': à'jujgré (variant plural)

'àòré 'river': 'àòré (variant plural)

bop 'earthen shelf': 'bopé (as listed in S.Malo's manuscript dictionary; not used by my informants)

gòk 'shoulder': 'goké

ip 'tail': 'ipé

it 'ear': 'ite

'kuaré 'grandfather, ancestor': 'kuéré.

lák 'tooth': 'leké

'maré 'mother-in-law': 'meré

1/ For use of u as a singular pronoun, see 5.3.

2/ For third person singular constructions involving kinship terms, see 5.5.1.

'nult 'neck': 'nulté (variant plural)

ǰ'poké 'bark (of tree)': ǰ'poké

ǰ'siep 'friend': ǰ'siepe

pár 'mat': 'peré

rd'wérd 'youth': rd'wérd

rók 'loins': 'roké

'royé 'haifer': 'royé

wac 'word': 'wecé.

The great majority of nouns with a plural in -é and a root-vowel /a/, show an unlaut in /e/; thus, wáj 'eye, face': plural 'wageé. Some nouns do not change the vowel, however, and must be listed. The following list records the usage of my Karachuonyo informant.

bad 'board, plank': 'bapé (also 'bapé)

'kuác 'leopard': 'kuayé (also 'kueyé or 'kuec)

'muá 'foreigner': 'muácé (also 'muá)

'muandé 'impala': 'muandé (also 'muéndni)

nd'wandé 'co-parent-in-law' [Hawaiian puluna]: ni'wandé
(also ni'wendé)

sá 'hour, time, clock': 'sadóé

san 'plate': 'sandé (also 'sendé)

My Alego informant used none of the /a/-plurals, with the exception of sá. [Other items have been included by the handbooks, but they all have plurals in /e/ for my informants: ǰ'gák 'crow', mál 'scrotum, testicle', 'páé 'oar', 'ǰluá 'teak', 'sanja 'handful', si'ganá 'story', táé 'pad', tál 'pole'.]

5.1.3. Internal noun sandhi.

5.1.3.1. Vowel alternation. Vowel alternation in nouns occurs only before the plural endings and is essentially an unlaut-phenomenon where the high-

front vowel of the suffixes -i, -E, -ni effects a general raising of the root vowel--normally, however, this involves a change from an open vowel to its corresponding closed vowel; no alternations have been recorded where a closed root vowel has been altered to an adjacent and higher open vowel (e.g., /o/ → /u/ or /e/ → /i/).

Schematically, regular vowel alternation may be set up as follows.

Singular Plural

u	u
o	o
e	e
a	e

The alternation /i/ → /i/ has not been recorded. (Compare the comparable retrogressive harmony noted in noun-pronoun combinations, p. 35.)

Examples: /u/ → /u/	<u>bùk</u> 'book': <u>'bugé</u> 'books'
/o/ → /o/	<u>á'toóngá</u> 'basket': <u>á'toóngé</u> 'baskets'
	<u>'ngoró</u> 'cowards': <u>'ngocé</u> 'cowards'
/e/ → /e/	<u>'mécic</u> 'rice': <u>'mécé</u> 'rices'
	<u>rec</u> 'fish': <u>'reyé</u> (variant plural)
/a/ → /e/	<u>lák</u> 'tooth': <u>'leké</u> 'teeth'
	<u>'pald</u> 'knife': <u>'pelni</u> 'knives'

With the exception of the alternation /a/ → /e/, all these changes are relatively unproductive. Parallel alternations involve vowel chains with /i/ or /u/ as the first member; these too are generally speaking unproductive.

Examples: /ic/ → /ie/	<u>'liéc</u> 'elephant': <u>'liéc</u> 'elephants'
	<u>ti'eló</u> 'foot': <u>ti'endé</u> 'feet'
/ue/ → /ue/	<u>'luédé</u> 'hand, arm': <u>'lueté</u> 'hands'
/ua/ → /ue/	<u>'kuár</u> 'leopard': <u>'kuec</u> , <u>'kueyé</u> 'leopards'
	<u>'kuár</u> 'grandfather, ancestor': <u>'kueré</u>

From an historical point of view, we may note two things with regard to regular vowel harmony. First, nouns with zero-suffix plural showing such alternation presumably have had plurals in -i or -E; these suffixes were subsequently lost. This is demonstrated not only because of the root-vowel umlaut, but also because of tone change: before either suffix, the stem tone is usually mid.

Examples: mác 'fire': mec (variant plural)
'liéc 'elephant': 'licc 'elephants'

Secondly, we must posit a front allophone of /a/, which may be written [ä], that eventually became an allophone of /e/. This is the only reasonable way to account for the present alternation of /a/, and is supported by comparative data: in Acoli, /ä/ has become an independent phoneme and is the normal umlaut of /a/; thus äyadä 'cow' (Luo 'öriä), plural äyänä. In Luo, [ä] could not coalesce with /e/ because /e/ was unumlauted to /e/ in the same environment.

Other, unique vowel alternations occur. All examples of these occurring in my corpus are listed below.

- | | |
|-------------|-----------------------------------------------------------------------------|
| /a/ -- /i/ | 'nako 'girl, daughter': 'niri 'girls' |
| /a/ -- /ie/ | a'pär 'ten': 'piero 'tens' |
| /a/ -- /ic/ | yäc 'tree, wood, medicine': 'yien 'trees' (variant plural) |
| /ic/ -- /i/ | 'oridä 'hand': 'oridä 'hands' (the more usual singular form is <u>orä</u>) |
| 'ra/ -- /o/ | 'öridä 'cow': <u>ök</u> 'cows, cattle' |
| /uo/ -- /o/ | ä'pudäc 'rabbit': ä'podäc 'rabbits' |
| /o/ -- /uo/ | 'känd 'beer': 'kund 'beers' (variant plural) |

5.1.3.2. Consonant alternation. The basic principle involved in the consonant alternation of noun inflection and elsewhere is that of 'oppo-

sition', briefly sketched in the introduction (pp. 15-16). Generally speaking, 'opposition' implies that any root-final lenis-voiced stop changes to a homorganic fortis-voiceless stop in the appertentive and plural; and vice versa. Nasals (without a voiced-voiceless dichotomy) alternate with nasal homorganic voiced stop clusters. The root-final consonants /j, f, s, h/ do not show alternation--the /j/ participates in some alternations of /c/. Normal nasal-stop clusters also do not vary. Other clusters generally exhibit alternation of the first member(s) and loss of the second.

The overall pattern of opposition may be presented schematically as follows.

	p	θ	t	c				k
w	(b)	ð	d	y	[j]	(l)	(r)	g

m	n	l	r	ɲ	ŋ
mb	nd			ɲj	ŋg

In the stop series, either row may occur as the root consonant; but in the nasal series only the top row can. Forms in parentheses occur only as the root consonant, i.e., alternation is one-way. Forms in brackets occur only as (variant) altered forms.

Some details of this alternation pattern become clearer by using the techniques of internal reconstruction. Intervocalic /b/ has become /w/ and has tended to disappear between low-back vowels altogether. This is confirmed by comparative evidence: rad 'hippo'--Ma'di (Central Sudanic language of the Sudanic superstock) rɔbi 'hippo'. Hence, /p/ normally alternates with /w/. (The pervasiveness of the opposition scheme is

evident from the fact that recent loan words with /b/ show alternation with /p/, altho no native Luc words now have this specific change.) In a similar way, intervocalic /j/ has become /y/, and /j/ at the end of a word has been lost--except before a clitic beginning with a vowel. Hence, /o/ alternates with /y/ and in the appertentive singular with /ø/ ('zero'), except before singular pronouns where we find the occurrence of an 'exocent' (but actually retained) /y/.

The following pages are devoted to listing all the alternation patterns found in my corpus, in addition to giving examples of them. Series are classified by the root-final consonant, if there is any. They are arranged in the following order: fortis stops, lenis stops, nasals, other, clusters. For every single series, the consonants of the root (and nominative singular), appertentive singular, nominative plural, and appertentive plural are given in that order. Examples are placed beneath the respective series. Apparently unique series are marked by an asterisk (*); those found only with -i plurals are marked by 'I'; those only with zero-suffix plurals, by 'ø'; those only with -ni plurals, by 'ni'. Sporadic patterns are marked by 'S'. In general, series where the nonnominative singular forms all have the same consonant have proved to be the norm; in one sequence, however, this is not true: /r c o c/ is less frequent than /r r e c/. Other abbreviations:

- A - Alego dialect
- K - Karaohuonyo dialect
- N - allolog occurring before a noun
- P - allolog occurring before a pronoun
- D - allolog occurring before a demonstrative (sometimes the particular demonstrative is listed)
- j } - phonemes used before singular pronouns only
- n, -g } - phonemes used before singular pronouns only
- n/g } - either phoneme used in plural before singular pronouns only.

	NOMINATIVE SINGULAR	APPERTENTIVE SINGULAR	NOMINATIVE PLURAL	APPERTENTIVE PLURAL
A. Fortis stops.				
* /p w p p/	<u>ip</u> 'tail'	<u>iw</u>	' <u>ipé</u>	' <u>ipé-n/g</u>
ø /p w p w/	<u>lep</u> 'tongue'	<u>lɛw</u>	<u>lep</u>	' <u>léw</u>
* /p w w w/	<u>pap</u> 'field'	<u>páw</u>	' <u>pewé</u>	' <u>péwé-n</u>
* /θ nd (~ð) n (~ð) nd (~ð) /	<u>yð</u> 'wood, trees'	<u>yænd</u> <u>yðð</u>	' <u>yien</u> ' <u>yeðe</u>	' <u>yienáf-n</u> ' <u>yèðé-n</u>
I /θ ø ð ø (~ð) /	' <u>ruðø</u> 'chief'	' <u>ruðø</u>	' <u>ruoði</u>	' <u>rúoð</u> ' <u>ruðði-n</u>
/ø ø ð ø /	<u>kðø</u> 'rain'	<u>kðø</u>	' <u>koðé</u>	' <u>kòðé-g</u>
	<u>lðø</u> 'stick'	<u>lðø</u>	' <u>luðé</u>	' <u>lòðé-n</u>
I /t d d t (~d) /	' <u>kuðt</u> 'triangular shield'	' <u>kúoð</u>	' <u>kuodi</u>	' <u>kúot</u> ' <u>kuðði-n</u>
	<u>ðt</u> 'house'	<u>ðð</u>	' <u>udi</u>	' <u>úté-n</u>
/t d d d /	<u>gðt</u> 'mountain'	<u>gðð</u>	' <u>godé</u>	' <u>gòðé-n</u>
	<u>kùt</u> 'depth'	<u>kúð</u>	' <u>kudé</u>	' <u>kúðé-n</u>
* /o j y (~j) j /	<u>mríc</u> 'razor'	<u>mríj</u>	' <u>mríyè</u> A ' <u>mríðé</u>	' <u>mríjé-g</u>
* /c j, ð-y ø (~y) y /	' <u>kuác</u> 'leopard'	' <u>kúá-y</u> ' <u>kuáj</u> D K	' <u>kuéc</u> ' <u>kuýyè</u>	' <u>kúáyé-n/g</u>
ø /c c c j, c /	<u>kíe</u> 'bee'	<u>kíe-n</u>	<u>kíe</u>	' <u>kíjé</u> A } N <u>kíj</u> K } <u>kíe-n/g</u> P
/c ø-y, j j j /	<u>kíe</u> 'orphan'	<u>kíj</u> N K <u>kí-y</u>	' <u>kiyè</u>	' <u>kiyé-n</u>
	<u>néc</u> 'back'	<u>néj</u> N <u>né-y</u> P <u>néj</u> D	' <u>neyè</u>	' <u>néyé-n</u>

*/k ɛ k (~g) k (~g)/

á'gókò 'chest'á'gógá'gókè Ká'gókè-n/g Ká'gogèá'gogè-n/g

*/k ɛ, ɸ ɛ ɛ/

oák 'milk'oá N
oég P'cegé'cégè-n/g

I/k r r ɸ/

'nako 'girl'nár'niriní-g

I/k ɛ, k ɛ ɛ/

on'diek 'hyaena'on'diek N
on'diég
on'di'ég PDon'di'egion'di'égi-n

ɸ/k ɛ k ɛ/

'juók 'witchcraft''juók'juók'juógè-g

ɸ/k ɸ k ɛ/

òok 'mouth,
language'òòòok'òógè-n

/k ɛ ɛ ɛ/

bók 'book'bóg'buég'bógè-ná'gák 'orow'á'gáká'gogè
á'gagèá'gogè-n/g
á'gagè-n/gB. Lenis stops.

/b p p p/

ki'tabú 'book'ki'tápki'tepáki'tépè-n/gmsá'lábú 'cross'msá'lápmsá'lepémsá'lépè-n/g

/ð ɸ ɸ ɸ/

'mbíðf 'pig'mbíð'mbíðè'mbítè-n/g'puððò 'garden''puðò'puðòè'puòòè-n

/d t t t/

'kádú 'salt'kát'ketè'kétè-n/g
(also 'kádè-g P)lò'édú 'hand, arm'lò'étlù'etèlù'ètè-g

nɪ/g k ɛ k/

'hígá 'year'hík'hígní'híkè-n/g'ndígá 'bicycle'ndík'ndígní'ndíkè-n/g

/g .k k k/

'cògò 'bone'óók'còkè'còkè-n/g'mògò 'peasho'mók'mòkè'mòkè-g

C. Nasals.

ø/n mb m mb/

ci'émò 'food'ci'ém̩bci'émòci'ém̩b'húm̩ 'fame'húm̩b'húm̩húm̩b

S/m n mb' nb/

bám 'hip'bám-n'bembé'bémbé-ném 'thigh'ém'embé'ém̩bé-n/gkóm 'chair'kóm'kombé'kóm̩bé-n/gkóm̩b A

/n mb nb mb/

'buóm 'wing''buóm̩b'buóm̩bé'buóm̩bé-n/g'yam̩ 'wind,
ghost'yám̩b'yembé'yém̩bé-n/g

ø/n nd n nd/

'cínò 'stomach'cín̩d'cínò'cín̩dè-g'gúrn̩ 'fowl''gúrn̩d'gúrn̩'gúrn̩d

S/n n nd nd/

'kuóm̩ 'porridge''kuóm̩'kuóm̩dè'kuóm̩dè-g'pién 'skin''pién'piéndè'piéndè-g

/n nd nd nd/

'ciénd̩ 'apron''ciénd̩'ciénd̩dè'ciénd̩dè-n/g'θund̩ 'breast'θund̩'θund̩dè'θund̩dè-g

*/n n nj nj/

piɲɲ 'earth'piɲ'piɲjè'piɲjè-n/g

ø/n nj n nj/

'wino 'bird'wiɲjwiɲ'wiɲjè-gwiɲ A

/n nj nj nj/

boɲɲ 'ring'bɔɲɲ
(also bɔɲ)'bɔɲjè'bɔɲjè-n/g'luɲɲ 'war''luɲɲ'luɲɲjè'luɲɲjè-n/g

*/ɔ r, β ɔs' n k s/

'ðɛɲ̩ 'cow'ðɛɲ̩ðɛkðɛ-gðɛ D Aðɛɲ̩, ðɛɲ̩, or'ðɛɲ̩g beforeɔɔ

S/ɔ ɔ ɔs ɔs/

'gúɲ̩ 'town''gúɲ̩'gúɲ̩gè'gúɲ̩gè-gwáɲ̩ 'face, eye'wáɲ̩'wáɲ̩gè'wáɲ̩gè-g

/ɔ ɔɛ ɔɛ ɔɛ/

'ciɛn 'sun'
tɔɔp 'spear'

'ciɛng
tɔng

'ciɛngɛ
'tɔngɛ

'ciɛngɛ-n/g
'tɔngɛ-g

D. Other.

*/l ɔ, nɔ-g ɔ ɔ/

jɛl 'person'

jɛ
'jɛɔ }
jɛn } D

jɛ

jɛ-g

*/l nɔ (k) g (-ɔ), k)

'dɛɛl 'goat'

dɛ'ɛnd

'diɛk

dɛ'ɛɔɛ K } ND
dɛ'ɛ A }
dɛ'ɛk P }

*/l ɔ ɔ ɔ, l/

dɛ'gɔlɛ 'verandah'

dɛ'gɔɔ

dɛ'gɔɔɛ

dɛ'gɔɔɛ N
dɛ'gɔlɛ-n P

S/l ɔ ɔ ɔ/

dɛ'gɔlɛ 'pot'

dɛ'gɔɔ

dɛ'gɔɔɛ

dɛ'gɔɔɛ
dɛ'gɔlɛn D

nɪ/l nɔ l nɔ/

'pɛlɛ 'knife'

pɛnd

'pɛlnɪ

'pɛndɛ-n/g

/l nɔ nɔ nɔ/

kɛl 'kraal'

kɛnd

'kɛndɛ

'kɛndɛ-g

tɛ'ɛlɛ 'foot'

tɛ'ɛnd

tɛ'ɛndɛ

tɛ'ɛndɛ-g

*/r r, n n-g g/

'wɔɔrɛ 'father'

'wɔɔr P
(singular)
'wɔɔn

'wɔɔndɛ
'wɛgɛ

'wɛgɛ-n

*/r nɔ nɔ nɔ/

wɛr 'song'

wɛnd

'wɛndɛ

wɛnd P
'wɛndɛ N

*/r ɔ-y ɔ y/

'kɔɛr 'hoe'

'kɔɛ-y

'kɔɛ

'kɔɛɔ-n

*/r r y ɔ-y/

nɛ'kɔɔrɛ 'grand-child'

nɛ'kɔɔr

nɛ'kɔɔrɛ K
nɛ'kɔɔrɛ

nɛ'kɔɔr-y

nɪ/r ɔ r r/

dɛ'sɛrɛ 'arrow'

dɛ'sɛɔ

dɛ'sɛrɛnɪ

dɛ'sɛrɛ-n/g

S/r ɔ ɔ ɔ/

ɛm'buɔr 'horse'

ɛm'buɔɔ

ɛm'buɔɔɛ

ɛm'buɔɔɛ-n

'ɛɔrɛ 'river'

'ɛɔɔ

'ɛɔɔɛ, var.

'ɛɔɔɛ-g

/r r c c/

<u>bór</u> 'fat'	<u>bór</u>	' <u>bocé</u>	' <u>bócé-n</u>
<u>búr</u> 'hole'	<u>búr</u>	' <u>bucé</u>	' <u>búcé-n</u>
<u>búr</u> 'boil'	<u>búr</u>	' <u>bucé</u>	' <u>búcé-n</u> (or <u>búr</u>)
<u>ó'nér</u> 'monkey'	<u>ó'nér</u>	<u>ó'neocé</u>	<u>ó'neocé-g</u>
' <u>yudró</u> 'brother-in-law'	' <u>yúor</u>	' <u>yudcé</u>	' <u>yúocé-n/g</u> ' <u>yúoc</u>

*/y r y ø-y, y/

' <u>neyó</u> 'mother's brother, uncle'	<u>nér</u>	' <u>neyé</u>	<u>né-y</u> ' <u>néyé-n</u>
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*/y ø-n y y/

' <u>dayó</u> 'grandmother'	<u>dá-n</u>	' <u>deyé</u>	' <u>déyé-n</u>
-----------------------------	-------------	---------------	-----------------

*/y d y t/

' <u>wuoi</u> (root: 'wuoy-)' 'boy, son'	' <u>wúoc</u>	<u>yá'wuoi</u>	<u>yá'wúot</u>
------------------------------------------	---------------	----------------	----------------

*/y c y c/

' <u>royá</u> 'heifer'	<u>róc</u>	' <u>royé</u>	<u>róc</u>
------------------------	------------	---------------	------------

/x c c o/

<u>á'púbyó</u> 'rabbit'	<u>á'púoc</u>	<u>á'púocé</u>	<u>á'púocé-n</u>
<u>á'toyó</u> 'hyaena'	<u>á'tóc</u> (before P also <u>á'tóyó-n</u>)	<u>á'tocé</u>	<u>á'tocé-g</u>

*/w p p r, P/

' <u>rad</u> (root: 'raw-)' 'hippo'	<u>ráp</u>	' <u>repé</u>	' <u>réré</u> H ' <u>repé-g</u> P
-------------------------------------	------------	---------------	--------------------------------------

*/w w p P/

<u>nd'kewó</u> 'niece'	<u>nd'kétw</u>	<u>nd'kepé</u>	<u>nd'képté-n</u>
<u>á'kewó</u> 'nephew'	<u>á'kétw</u>	<u>á'kepé</u>	<u>á'képté-n</u>

ø, nx/w p w P/

' <u>fuwó</u> 'foolishness'	<u>fúp</u>	' <u>fuwó</u>	<u>fúp</u>
' <u>ndawá</u> 'tobacco'	<u>ndáp</u>	' <u>ndéwní</u>	' <u>ndéppé-g</u>

/w p p P/

<u>bá'rud</u> (root: 'bá'ruw-)' 'letter'	<u>bá'rúp</u>	<u>bá'rúpé</u>	<u>bá'rúppé-n</u>
<u>ká'hawá</u> 'coffee'	<u>ká'háp</u>	<u>ká'heppé</u>	<u>ká'héppé-n/g</u>
' <u>riwi</u> 'needle'	<u>ríp</u> (before P also <u>riw-n</u>)	' <u>ripé</u>	' <u>ripé-n/g</u>

*/ø ø, g g g/

<u>pí</u> 'water'	<u>pí</u> H, <u>od</u> <u>píg</u> PD	' <u>pié</u>	' <u>pié-n</u>
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*/ɔ r k k (-ɔ)/gi (moro) 'some-
thing' airgik (moko)gik
gi-g*/ɔ ɔ nɔ nɔ/nɔ'ɔf 'child, doll' nɔ'ɔf-nnɔ'ɔrɪndɔnɔ'ɔfndI/ɔ ɔ-y ɔ ɔvy, ɔ/lɛ 'ax' lɛ-y'lɛɔilɛɛ-n P (D)
'lɛɔi N (D)
'lɛyɛ DI/ɔ ɔ-y ɔ ɔ-ɔ/'yɛ 'boat''yɛ-y'yɛɔi'yɛɔ
'yɛɔi-nI/ɔ r ɔ ɔ/mɔ 'fat'mɔr'mɔi'mɔi-n*/ɔ,g r ɔ ɔ/'dɛuɔ 'man'
'dɛuɔg D'ɔɔɔr'ɔuɔ'ɔɔɔ-gS/ɔ ɔ-y y y/'duɔ 'moon, month''duɛ-y'duɔyɛ'duɔyɛ-nkɔ 'calabash'kɔ-y'kɔyɛ'kɔyɛ-g'ɔngɔ 'eagle''ɔngɔ-y'ɔngɔyɛ'ɔngɔyɛ-gS/ɔ ɔ c o/ki'buɛ 'jackal'ki'bɔɔc-nki'bɔɔcɔki'bɔɔcɔ-nsɔ 'hour, clock'sɔ-n'sɔcɔ'sɔcɔ-g

E. Clusters.

/ɔn t t t/

'kudni 'insect'kut'kutɛ'kutɛ-g

/ɔn nɔ nɔ (~n) nɔ/

'kɔnɔ 'donkey''kɔnɔ-n'kɔnɔ'kɔnɔ-n'kɔni'kɔni'kɔni-n

/ɔn k k k/

nɔ'rɔcɔ 'kidney'nɔ'rɔknɔ'rokɛnɔ'rɔkɛ-g

/ɔn rɔ c o/

ɔɔ'mɔrni 'safari
ant'ɔɔ'mɔrni-nɔɔ'mɔcɔɔɔ'mɔcɔ-n

/ɔn wɔ p p p/

'ɔrwnɔ 'obain''ɔrwnɔ-n'ɔrɔpɛ'ɔrɔpɛ-g

/ɔgl ɔgl ɔg ɔg/

li'gɔnglɛ 'sword'li'gɔnglɛ-nli'gɔngnili'gɔngni-n/g

5.1.4. Tonal inflection. Nouns (and disjunctive pronouns) have a case system marked by changes in tone contour. Getting minimal pairs to support this contention is somewhat difficult, however. There is a low 'structural' load, as it were, on the system: the tonal inflection complements and coincides with a rather inflexible word order which actually conveys most of the syntactic information of every sentence. But the following contrast clearly invites a case interpretation.

ne ná'róbí. 'Look at Nairobi!'

ǫr ná'róbí. 'Go to Nairobi!'

In the first sentence, 'Nairobi' is the object of the verb; in the second, it is a predicate-expression of place where.

This phenomenon cannot readily be subsumed under morphotonic rules. A rather general alternation is that mid-before another mid becomes high; thus 'ǫako 'woman' becomes 'ǫákó before 'moro 'a certain': ǫákó 'moro. But the expletive or anticipative subject en 'it (is a...)', does not change before a mid-toned predicate noun or pronoun; rather it is these that have a different contour.

Examples: en 'tǫǫǫ. 'It's a spear.' (tǫǫǫ-'spear')

en 'eǫǫ. 'It's him.' (eǫǫ - 'he, she, it')

(But ǫk en 'eǫǫ. 'It's not him.' where ǫk shows the expected alternation to high because of a following mid tone.)

It is necessary to set up at least two tonal cases:

- (1) citative--the citation form, which is used everywhere not specified as taking another case
- (2) predicative--the form occurring as the object of an imperative verb and as the predicate of equational sentences with the expletive subject en; it is characterized by a high-tone initial syllable. (Possibly the predicative can be tied up with an emphatic contour also involving a high tone;

see 3.3.4. The predicative form must be used in the environments listed and can occur without any special accompanying emphasis.)

For a small number of noun tone classes, a third contour plays a syntactic role; this is the following case:

(3) objective--the form used as the object of nonimperative verbs; it is characterized by a 'lowered' tone contour. (Most tone classes make no overt distinction between citative and objective.)

Example: 'mɛsa 'table'

Citative: mɛsa 'bɛr. 'The table is beautiful.'

Predicative: ɛn 'mɛssa. 'It's a table.'

nr 'mɛssa. 'Look at the table!'

Objective: á 'nɛno, mɛsá. 'I saw the table.'

Other examples are given below for representative tone classes.

CITATIVE	PREDICATIVE	OBJECTIVE	
<u>it</u>	<u>itit</u>	<u>it</u>	'ear'
<u>tɔɔɔ</u>	<u>tɔɔɔ</u>	<u>tɔɔɔ</u>	'spear'
<u>pí</u>	<u>píí</u>	<u>pí</u>	'water'
<u>'yɛn</u>	<u>'yɛn</u>	<u>'yɛn</u>	'trees'
<u>'buru</u>	<u>'buru</u>	<u>'buru</u>	'ash(es)'
<u>'ɔɔgo</u>	<u>'ɔɔgo</u>	<u>'ɔɔgo</u>	'bone'
<u>ó'pɔk</u>	<u>ó'pɔk</u>	<u>ó'pɔk</u>	'tortoise'
<u>'kituɔɔɔ</u>	<u>'kituɔɔɔ</u>	<u>'kituɔɔɔ</u>	'onion'
<u>ká'hawá</u>	<u>ká'hawá</u>	<u>ká'hawá</u>	'coffee'
<u>kí'jɛkó</u>	<u>kí'jɛkó</u>	<u>kí'jɛkó</u>	'spoon'
<u>káá'tás</u>	<u>káá'tás</u>	<u>káá'tás</u>	'paper'

The contours of predicate phrases of places, manner, time, etc., are variants of the citative form. If one of these phrases occurs alone in the predicate, its contour is identical with the citative. In a string of

such phrases, a variety of sequence intonation occurs, discussed in 3.2.1.

Examples: or à 'dald. 'Send her home.' (or - 'send!', 'dald' - 'homestead')

or à 'dálá gí 'píé. 'Send her home wealthy.' (píé - 'wealth')

or à gí 'píé 'dald.

5.1.5. Composition and derivation.

5.1.5.1. Prefixes. A frequent method of noun formation is the use of prefix plus stem. This is by far the most productive technique; others are sporadic and relatively unsystematic.

Prefixes are generally monosyllabic without primary stress. Eight prefixes are discussed in the following section: d-, Q-, ka-, kald-, ki-, ma-, mi-, si-; a discussion of color-term prefixes is included at the end.

d- and Q- will be discussed together because of similarity of use, frequent interchange in different dialects, and primarily because they are often paired off along natural sex lines so that Q- has a masculine and d- a feminine connotation, especially in proper names. In certain circumstances, girls are given names in Q-, e.g., in honor of an elder brother who has died. Occasionally, proper names in d- are used without sex distinction, e.g., d'koókó, which is given to either a boy or a girl.

In the words d'mryé 'brother' and d'kwé, the masculine Q- is used, but the corresponding feminine form (using the same stem) has the prefix nd-: nd'mryé 'sister', nd'kwé 'nieces' (see 5.1.5.4.)

The following is a list of a few proper names containing the prefixes

d-, Q-.

MASCULINE	FEMININE	MEANING OF STEM
<u>d'boóné</u>	<u>d'boóné</u>	'only son'
<u>d'cién</u>	<u>d'cién</u>	'born at noon' ('cién-'sun')
<u>d'colá</u>	<u>d'colá</u>	'first child born to a re-married widowed by her second husband' ('colá-'mourning')

<u>ò'doŋgò</u>	<u>á'doŋgò</u>	'second-born of twins'
<u>ò'í'ambò</u>	<u>á'í'ambò</u>	'born in the afternoon' (<u>ò'í'ambò</u> -'afternoon')
<u>ò'juán</u>	<u>á'juán</u>	'born after the death of the father' (<u>'juán</u> - 'to abandon')
<u>ò'kéc</u>	<u>á'kéc</u>	'born during famine' (<u>kéc</u> - 'famine')
<u>ò'keyò</u>	<u>á'keyò</u>	'born during harvest' (<u>'keyò</u> - 'harvest')
---	<u>á'kíni</u>	'born in the early morning' (<u>á'kíni</u> - 'morning')
<u>ò'kumú</u>	<u>á'kumú</u>	'born of a mother not known to have menstruated'
<u>ò'nanò</u>	<u>á'nanò</u>	'born in the forenoon' (<u>ò'nanò</u> - 'forenoon')
<u>ò'píyò</u>	<u>á'píyò</u>	'first-born of twins'
<u>ò'tí'ènd</u>	<u>á'tí'ènd</u>	'born at night' (<u>ò'tí'ènd</u> - 'night')
<u>ò'umá</u>	<u>á'umá</u>	'born looking down' (? <u>um</u> - 'nose')
<u>ò'wítí</u>	<u>á'wítí</u>	'child whose older siblings have always died in infancy' (presumably from mock ceremony of throwing the child away: <u>'wítí</u> - 'to throw away')
<u>ò'wuòr</u>	<u>á'wuòr</u>	'born after midnight' (<u>'wuòr</u> - 'night')

ò- occurs as a constituent in several words denoting periods of time.

No comparable use of á- occurs.

Examples: ò'í'ambò 'afternoon'
ò'kíni 'morning'
ò'pon 'short rainy season'
ò'rò 'dry season'
ò'tí'ènd 'night'

á- frequently denotes an agent, a use not widely paralleled by ò-.

Sometimes with a disparaging connotation, á- varies with á'- (see 5.1.5.4);

dialects differ in use of the two. The stem is usually a verb derivative.

Examples: á'nám 'chewer' (Uyoma dialect; 'nám - 'to chew')
á'yúák 'crybaby' (Uyoma dialect; 'yúák - 'to cry')

á'əúm 'person who likes to listen to music' (əúm - 'native stringed instrument')

á'gəǝǝ 'person who treats bones' ('gəǝǝ - 'to tap with knuckles')

á'juǝǝ 'physician' ('juǝǝ - 'witchcraft')

á- occurs as a constituent of nouns denoting sicknesses of various kinds—again not paralleled by ǝ-. The stems of such nouns are noun or verb derivatives or occasionally simply a bound form.

Examples: á'lǝǝ 'mange, scab' ('lǝǝ - 'to lose hair')

á'mǝw 'measles'

á'pǝ 'lymphatic rash' (pǝ - 'water')

á'pǝpǝ 'elephantiasis' ('pǝpǝ - 'barrel')

á'pǝǝ 'scabies' ('pǝǝ - 'to be covered with sores')

Both á- and ǝ- are constituents of a large number of nouns denoting plants and animals. There is some dialectal variation as to which prefix is used. The stem is usually a bound form.

Examples: (1) with á-

á'buoro 'floating papyrus'

á'edǝ 'vulture'

á'gəǝǝ 'edible flying ant'

á'ɾǝ 'nettle' ('ɾǝ - 'to itch')

á'nǝm 'vegetable resembling simsin' (nǝm - 'simsin')

á'pǝyǝ 'rabbit'

(2) with ǝ-

ǝ'bambǝ 'dried fish' ('bambǝ - 'to gut fish for drying')

ǝ'dumǝ 'maize'

ǝ'gǝlǝ 'hare'

ǝ'gǝlǝ 'frog'

ǝ'ndǝk 'hyaena' (rdǝ'ndǝk - 'hyaena-colored')

The prefix ka- has two distinct meanings: agent and place. Historically, all the agent prefixes--a, ja, ka, ra--are probably dialect variants of the same item; synchronically, however, they must be considered distinct morphemes. ka- as a prefix of place, on the other hand, is an allomorph of the noun ka 'place'. It is frequently used in specific place names, where the stem is the proper name of a founding ancestor. In the latter use, k- is the allomorph employed before a name beginning with a vowel.

Examples: (1) agent

ka'camá 'cannibal' ('camá - 'to eat')

ka'dalá 'country person'. ('dalá - 'homestead')

ka'nagá 'city person' ('nagá - 'clothes')

ka'noní 'busybody' ('nonó - 'to scrutinize') [listed in Vocabulary Nilotic-English]

(2) place

ka'ciendá 'part of house customarily reserved for sleeping'

ka'rá'cuo'nd 'Karachuonyo' (district in Central Nyanza; named from founding ancestor, rá'cuo'nd)

ka'dém 'Kadem' (a district to the south of Karachuonyo; founding ancestor d'dém)

The prefix kala-, which occurs rather infrequently, has the general meaning of 'large size'. The stem (when identifiable) would seem to be invariably a noun derivative.

Examples: kala'bugú 'big fly' (? 'bugú - 'hole') [V. Nilotic-English]

kala'guená 'monitor lizard' (? 'guená - 'fowl')

kala'úsi 'whirlwind, cyclone' (? 'úsi - 'thread=Swahili uzi')

kala'kéθ (or kéθ) 'shoulderblade, collarbone'

kala'niri (or d'niri) 'cricket'

For the prefix ki-, no specific semantic label is handy. The stem is usually a verb derivative. An initial /ki/ occurs in many loan words from Swahili, but the analysis of prefix plus stem in Luo does not seem warranted:

ki'jiikó 'spoon' (Swahili kijiiko), 'kibrit' 'match' (Swahili kibiriti),
'kitudogó' 'onion' (Swahili kitungu).

Examples: 'kidéndé' 'period of famine' ('déndé - 'to be hungry')
 'kidéera' 'large basket' ('déeré - 'granary')
 'ki'rindó' 'wedge' ('rindó - 'to tie tightly') [V. Nilotic-English]
 'ki'saká' 'headcold' ('sakó - 'to make the noise of dead leaves')
 'ki'seré' 'marriage ceremony' ('seré - 'to court')
 'kisumá' 'going for help' ('sumó - 'to go for help')

The prefix ma- is relatively rare. The stem is always a noun derivative.

Examples: ma'liŋ' 'tapeworm' (? liŋ - 'month') [V. Nilotic-English]
 ma'rowé' 'millet springing up after harvest' ('rowé - 'after-crop of millet')
 'matudogá' 'outgrowth, wen' (e.g., a sixth finger; tudó - 'horn')

The prefix mi- is usually stressed. The stem is invariably a verb derivative.

Examples: 'midúdi' 'rain cloud' ('dúdi - 'to be cloudy')
 'misiéró' 'pauper' ('siér - 'to be poor')
 'migaló' 'deception' ('galó - 'to deceive')
 'migángá' 'thief' ('gángé - 'to steal')
 'mirí'ambó' 'liar' ('rí'ambé - 'to lie')
 'misángá' 'sacrifice' ('sángé - 'to mix')

The prefix si- occurs in a few items. The stem is usually a verb derivative. See also the color-term prefix si- (discussed below).

Examples: si'buór' 'lion' (ra'buóró - 'tawny color')

si'drndi 'obstinacy, stubbornness' ('drnd - 'to close')

si'gand 'story' ('gand - 'to tell, narrate')

Various other prefixes of limited distribution and unclear meaning occur. They include: hu- in johu, bagu'bagu 'someone who groans' (the Vocabulary Nilotic-English lists another item: juh'dangla 'a person caught in the rain'); li- in li'gods 'mercy' (ni'gods - 'mercy, compassion'), li'gakla 'empty shell' (cf. ka'gakla and ma'gala with the same meaning); mbala- in mbala'kuasi ('kuasi - 'eagle').

Nouns denoting colors--especially of animals--form a class of words where prefixes follow quasi-gender agreement rules. The stems are either unanalyzable (-bd 'white'), or related to statal verbs (-kuar 'reddish': 'kuar 'to be red') or nouns denoting animals (-buor 'tawny brown': si'buor 'lion!'), occasionally some other noun (-buru 'ashen grey': 'buru 'ashes').

The color-term prefixes are as follows:

- di-: explicit feminine prefix, or prefix of affection
- ra-: masculine prefix (also used after nouns denoting female animals when sex distinction is not emphasized)
- si-: masculine prefix (rare).

The stems include the following.

(1) Stems using both di- and ra-

- di'buore, ra'buor (plural ra'buore) - 'tawny brown, khaki-colored'
- di'bond, ra'bond (plural ra'bond) - 'white head, black body'
- di'kiye (plural di'kice), ra'kie (plural ra'kiye) - 'black dots on light-colored body' (kie - 'bee')
- di'guond (plural di'guond), ra'guol (plural ra'guond) - 'purple; muggy grey' ('guond - 'to be purple')

(2) Stems using only si-

- si'luol (plural si'luend) 'brown' ('luol - 'reddish brown clay')

(3) Stems using only dí-

- dí'bò (plural dí'boýé) 'white'
dí'còl (plural dí'coúndé) 'all black'

(4) Stems using only ra-

- ra'balá 'white spot on head'
ra'brúó 'spotted white and brown.'
ra'buru 'ashen grey' ('buru - 'ashes')
ra'cár (plural ra'ceré) 'white'
ra'cic 'black and white'
ra'diár 'black and white' ('diáró - 'to be black and white')
ra'girá 'dark grey'
ra'kuár 'reddish' ('kuár - 'to be red')
ra'lúóó (plural ralú'oté) 'white tail' ('lú'odó - 'to have a white tail')
ran'diék 'hyaena-colored' ('on'diék - 'hyaena')
ra'néc 'spotted white and brown' ('néc - 'newt, salamander')
ra'palá 'striped white and brown; light pink'
ra'pénda 'dark pink'
ra'sag 'spotted black or grey and red'
ra'téó (plural ra'téóngé) 'all black'
ra'tigló 'green'
ra'óúó 'grey; spotted black and white' ('á'óúó - 'guinea')

(Plural forms are emphatic and explicit. More usually, the singular form is used in all environments.)

Presumably -bò (in dí'bò) and -cár (in ra'cár), both meaning 'white', are suppletive alternants of the same morpheme. So also -còl (in dí'còl) and -téó (in ra'téó), both meaning 'all black'.

5.1.5.2. Suffixes. Productive use of suffixes in Lao noun morphology is rare. The recurrent final syllables that often suggest a rather extensive

use of suffixation are usually in construction with bound forms, and the suffixes themselves show few common semantic features.

The most important suffix is clearly -ruðk, occurring with stems derived from nouns or verbs. In the appertentive, the allomorph of this suffix is /r/ after 'rið-; elsewhere /ruðk-n/. Allomorphs of the stem: nouns and verbs in -ð have allomorphs without (those with a /y/ preceding this vowel, occur without the /y/ as well).

Examples: (1) Noun stem (one word)

'riuruðk 'body' ('riðð - 'meat')

(2) Verb stem; general meaning of the resultant word:

(a) reciprocal action

'miruðk 'exchange' ('miyð - 'to give')

'caruðk 'mutual hate' ('cayð - 'to hate, despise')

(b) action implied by verb is substantivized

'cakuðk 'beginning, Genesis (modern Christian term)
('cakð - 'to begin')

lò'okruðk 'bathing, washing' (lò'okð - 'to wash')

'guoruðk 'scratching' ('guorð - 'to scratch')

'parruðk 'thought' ('parð - 'to think')

(c) miscellaneous

'dèmburuðk 'humility' ('dènd - 'to treat with care')

(d) 'nonruðk 'chameleon' (? 'nonð - 'to make faces')

A suffix of endearment, -i, occurs with the stem of certain proper names. Whether or not this is derived from a comparable English use of '-y' is not clear.

Examples: 'uni - pet name for Anna or Oana

'tieni - pet name for Atieno or Otieno

The following is a list of suffix-like elements of uncertain status.

- á láorá 'river' ('oró - 'to flow')
- á'camá 'anything edible; inheritance' ('camó - 'to eat')
- á'winjá 'hearsay' ('winjó - 'to hear')
- rá'borá 'tall man' (bor - 'height', or bór - 'to be tall')
- aké 'kendéke 'solitary person' ('kendé - 'being alone')
- la ó'bambá 'dried fish' ('bambó - 'to gut fish for drying')
- ká'gaklá 'scale of a fish; eggshell'
- ó'(h)iglá 'pot to cook fish in'
- 'ndaglá 'magic spell'
- lò ó'gogóló 'snailshell'
- ó'sigló 'small pot for milk'
- ní 'kudní 'insect'
- 'luanní 'fly'
- 'ó'rwání 'chain'
- nd 'dugónó '(kind of) grass'
- 'kogónó 'nail'
- ná'rogónó 'kidney' (rók - 'loins')
- rá 'bugrá 'silt' ('bugó - 'hole')

5.1.5.3. Reduplication. Several items with monosyllabic stems which are either derived from or connected with childhood show reduplication. They include: 'bába 'father', 'máma 'mother' (possibly both of these are phrases with a possessive a 'my' rather than single words), 'gugu (childish for 'gudk) 'dog, bowwow' (gu also occurs), 'titi (baby talk for ó'riti) 'good-bye', 'tamtám 'candy' (Swahili tamtamu). Other, partially reduplicated items of the same sort include: nu'nu (baby talk for on'diek) 'hyaena', 'pá'pá 'see-saw' (an English loan word 'sí'só or 'sif, sá occurs as well).

Other words with reduplicated monosyllabic stems include the following: 'dede 'grasshopper', 'gogó (Alego dialect) or 'gogó (Karachunyo dialect)

'fishing net', 'tutu 'pus', 'malmal 'white lies', 'guerguer 'a lot of talk'.

A considerable number of nouns have dissyllabic stems reduplicated in full. Several occur with a prefix.

Examples: (1) Without prefix

dege'dege 'swampy land' ('dagó - 'swamp')

donge'donge 'crumbs'

midi'midi 'topmost branch of a tree'

sure'sure 'smallpox'

wira'wira 'giddiness' ('wiró - 'to swing round')

(2) With prefix

á'luolu 'camel'

ká'bondobondó 'blister'

káporá'porá 'imitation' ('poró - 'to imitate')

nálin'lin 'dragonfly'

ó,regó'régo 'mill' ('régo - 'to grind')

What may possibly be considered 'triplification' (at least of the root vowel) occurs in a few nouns. The stems exist as bound forms only.

Examples: á'hurdrá 'waterfall'

á'erlilí '(kind of) bird'

'hurdrá 'socket of spear'

'mboróró 'bells'

ó'Galálá 'flattery'

5.1.5.4. Compound nouns. It is occasionally difficult to delimit sharply the boundaries of a nominal phrase and a compound noun. Thruout the present work, a phrase interpretation has been adopted wherever possible. The official Luo orthography goes to the other extreme of piling up compounds on the Swahili model, where prefixes expressing place, nationality, lan-

guage, among others, have generally been regarded as bound morphemes.

A comparable practise for Lúo, however, proves unwarranted because most of these and similar expressions are straightforward appertentive phrases (literally: place of so-and-so, language of so-and-so, etc.).

Contrasts do exist, however, between nominal phrases and compound nouns.

Examples: en ná'kuar ɛ. 'It's his grandchild.' (appertentive phrase)
en ná'r, kuár naar ɛ. 'It's the daughter of his grandfather.' (compound noun)

Not only do the sentences deal with different referents (child's child vs parent's father's daughter), but they contain different constructions: 'kuár' 'grandfather' belongs to a class of (kinship) nouns never followed directly by the pronoun ɛ in the same construction (see 5.5.1.); ná'kuár 'grandchild' does not belong to this class—a difference not readily accounted for except by positing two separate words.

There are two kinds of compound noun: (1) those where the first element varies in the plural (and we get a 'double-plural' noun); (2) those with invariant nonfinal elements.

Three prefixes constitute the first element of 'double-plural' nouns:

ná-, rá-, and jd-. They constitute the only productive kind of compound.

The prefix ná- (with a plural form in ná-) is obviously a derivative of the appertentive forms of 'nako' 'girl, daughter'. The meaning of the prefix, however, is somewhat broader: 'offspring or young of (animal denoted by the following element)', 'diminutive', and other less clear meanings. The second element is usually a noun derivative.

Examples: (1) With a noun derivative as second element

ná, guók 'puppy' ('guók - 'dog')

ná'bur, guók 'sty' (bur - 'boil', 'guók - 'dog')

ná'miyó 'sister' ('miyó - 'mother')

rd'pón 'mano, molar' (pón - 'metate')

rd'rómbó 'lamb' ('rómbó - 'sheep')

'paru, áó 'male calf no longer sucking' (ru, áó - 'bull')

(2) With a nonnoun or doubtful second element

rd'cira 'second wife' ('cira - 'bad luck')

rd'déndé 'young lady, miss' ('déndé - 'to be delicate')

rd'pard 'overseer, headman' ('páou - 'homestead')

rd'rógnó 'kidney' (rók - 'loins')

rd'saar 'god' ('sáyó - 'to worship, adore')

rd'óí 'child, doll' (óín - 'to be small')

The prefix rd- (with a plural form in ró-) has two important meanings, which generally are correlated with whether the second element is a noun or verb derivative. One meaning could be labeled 'infirm agent', where the noun denotes a person characterized by an abnormality connected with the body part or an illness specified by the second element, which is almost invariably a noun derivative.

The second important meaning is that of 'instrument' to perform action implicit in the second element, which is almost invariably a verb derivative.

Examples: (1) 'Agent'

rd'bám 'cripple' (bám - 'thigh')

rd'borá 'tall man' (bor - 'height')

rd'óóho 'leper' ('óóho - 'leprosy')

rd'lep 'quarrelsome person' (lep - 'tongue')

rd'guál 'knockkneed person' (ó'guald - 'leg')

rd'yuóm 'circumcized man' ('yuóm - 'foreskin')

(2) 'Instrument'

(a) Second element: verb derivative in form 2 (without -ó)

rd'guar 'rake' ('guaró - 'to scratch, claw')

rá'ni 'mirror, eyeglasses' ('niyó - 'to look at')

rá'púr '(handle of) hoe' ('puró - 'to dig, hoe')

rá'todó 'sickle' ('toónó - 'to cut')

(b) Second element: verb derivative plus final vowel

rá'beté 'machete, panga' ('betó - 'to slash')

rá'róbí 'ladder' ('róbí - 'to climb')

rá'makí 'tongs' ('makó - 'to catch, grasp')

rá'nisi 'sign' ('nisó - 'to point out, show')

The prefix já- (with a plural form in jó-) has the general meaning of 'agent' performing the action implicit in the second element, which is invariably a verb derivative. The second element is regularly not inflected in the nominative plural, e.g., já'kuáó 'herdsman', plural jó'kuáó (appertentive forms: já'kuáá singular, jó'kuáá plural). Occasionally, a third element is a constituent of words introduced by the já- prefix, and this element is the object of verbal part of the compound.

Examples: (1) Two-element nouns

já'duwar 'hunter' ('dú'ward - 'to hunt, want')

já'limbè 'spy' ('limbó - 'to spy')

já'púr 'farmer' ('puró - 'to dig, hoe')

já'yudk 'crybaby' ('yudgó - 'to cry')

(2) Three-element nouns

já'cam, jí 'cannibal' ('cámó - 'to eat', jí - 'people')

já'sua, wac 'tattletale' ('suayó - 'to spread', wac - 'word')

já'top, yíén 'woodchopper' ('toónó - 'to cut', 'yíén - 'wood')

Other types of compound are rare. The most frequent, but by no means really productive, pattern uses the prefixes á- or ó- before the other elements.

Examples: (1) Without a prefix

- ðòk'cin 'intestines' (ðòk - possibly an allomorph of ðòk
'mouth'; cin - allomorph of 'cinò 'stomach')
- 'rò,lít 'selfishness' (rò - 'stomach', lít - 'sore')
- lèlè'wàp 'forehead' (lèlè - 'bare spot', wàp - 'face')
[The appertentive phrase lénd'wàp 'forehead'
also occurs.]
- 'wàp,yò 'middle of the road' (? wàp - 'face', yò - 'road')
- 'wicbár 'headache' (wic - 'head', 'bárò - 'to split')
- wic'teko 'stubbornness' ('tekò - 'strength')

Compounds with wic are, so to speak, dissolved when any of the qualities denoted by such nouns are attributed to a personal subject. In this instance, the constituents are used as separate words, and wic appears in the appertentive.

Example: wic,tekò 'ròc. 'Stubbornness is bad.' (ròc - 'to be bad')

But wiy è 'tèk. 'He is stubborn.' (lit. 'His head is hard';
tèk - 'to be hard')

(2) With a prefix

- à'bàp, tráp 'period after harvest following long rainy season'
(bàp - 'after', 'tráp - 'stalk of millet')
- à'lak,tár '(kind of) acasia' (lak - 'tooth', tár - 'to be
white)
- à,pí'wiye 'water on top of sour milk, beesting' (pí -
'water', ? wic - 'head' [here in the appertentive: wi-y], ?_e - 'his, hers, its')
- à'wàp,mác 'swelling in the groin, plague' (? wàp - 'to
burn', mác - 'fire')
- ò'diè,cièp 'daytime' ('dièr - 'middle', 'cièp - 'sun')
- odiè'wuòr 'middle of the night' ('wuòr - 'night')

5.1.5.5. Derivation. The only significant kind of derivation in Luo is that of nouns from verb forms. Infinitives of verbs in -ò readily occur

in nominal positions, as has already been noted, but this use is really not derivation proper.

Nouns derived from non -0 verbs form two classes: (1) those that add -0 to the verb form; (2) those that do not. The second class is composed of abstract monosyllabic nouns with a mid tone derived from statal verbs with a low tone.

Examples: (1) Addition of -0

'gero 'cruelty' (gēr - 'to be ferocious, cruel')

'gikò 'end' (gik - 'to finish')

'koókò 'noise, shout' (kók - 'to shout')

(2) No additional -0

bər 'beauty' (bēr - 'to be beautiful')

bor 'height, far distance' (bòr - 'to be tall, far away')

nɛn 'multiplicity, manifoldness' (nɛn - 'to be many')

rac 'evil, badness' (rác - 'to be bad')

θin 'smallness' (θin - 'to be small')

Nouns derived from -0 verbs again form two classes: (1) those that retain the -0; (2) those that do not. Class (2) has two subdivisions depending on presence or absence of morphophonemic alternations of the final root consonant. Such alternation is generally identical with that noted for noun inflection in 5.1.3.2. Here, the noun shows a voiceless-fortis consonant whereas the verb has a voiced-lenis one. The only exceptional pattern is the alternation /y/-/θ/, which is unique.

VERB	w	d	ð	y			ɛ
NOUN	p	t	θ	θ	c	ʃ	k

(Whether or not the noun were better considered the base, and the verb a derivative--rather than the other way round--is brought up by the

alternations of verbs in /y/. I suspect, however, that at least historically, such verb forms represent the end result of phoneme coalescence.]

Examples: (1) -o retained

ci'emo 'food' ('ciémo - 'to eat')

'fukó 'mole' (''fukó - 'to dig')

'fuwó 'foolishness, folly' (''fuwó - 'to be foolish')

'tuwó 'sickness' (''tuwó - 'to be sick')

(2) -o not retained

(a) Without morphophonemic alternation

buk 'bellows' (''bukó - 'to blow bellows')

oám 'provision' (''oámó - 'to eat')

toy 'spear' (''toónó - 'to cut')

Verb Noun (b) With morphophonemic alternation

/w p/ 'drep 'diarrhoea' (''diéó [root 'diw-] - 'to have diarrhoea')

/d t/ 'cuat 'flogging' (''oú'adó - 'to flog, beat')

/ó e/ 'éieó 'cure' (''éiédó - 'to cure')

/y e/ 'kuéó 'herd' 'kuéó 'herding' (''kuayó - 'to herd')

/y c/ bac 'stroll' (''bayó - 'to take a walk')

goc 'beating' (''gayó - 'to beat')

tic 'work' (''tiyó - 'to work')

/y ø/ óI 'going' (''óIyó - 'to go')

/g k/ 'buók 'fright' (''buógó - 'to frighten')

pok 'salary, share' (''poógó - 'to divide')

5.2. DEMONSTRATIVES

The demonstratives have been listed on page 54. It is readily apparent that there are two morphological classes of demonstratives, each with characteristic prefixes and stems.

Class I

Prefixes:	<u>n-</u>	'singular'
	<u>g-</u>	'plural'
Stems:	<u>ī</u>	"this" (i.e., 'close to speaker')
	<u>đ</u>	"that" (i.e., 'close to one spoken to')
	<u>ε</u>	"which?, -what?" ('interrogative')
Suffix:	<u>-gđ</u>	"that very (one)" ('emphatic')

The prefixes have the following allomorphs.

<u>n-</u>	/n/	after the noun <u>kā</u> 'place' and in construction with the stems <u>ī</u> and <u>đ</u> (resultant forms: <u>nī, nđ</u>)
	/x/ or /n/	after the noun <u>kū</u> 'place' and in construction with the stems <u>ī</u> and <u>đ</u> (resultant forms: <u>xī</u> or <u>nī, xđ</u> or <u>nđ</u>)
	/r/	after the noun ' <u>nođ</u> 'day' (see p. 71) and in construction with the stem <u>đ</u> (resultant form: <u>rđ</u>)
	/r/ (or in some dialects /n/)	after the deictic preposition <u>Ē</u> (see pp. 61-62) and before stressed allomorphs of the stems <u>ī</u> , <u>đ</u> , <u>ε</u> (resultant forms: <u>rī, rđ, rε</u>)
	/β/	after the noun <u>đāl</u> 'person' (resultant forms: <u>đ, đ</u>)
	/n/	elsewhere.
<u>g-</u>	/k/	after the deictic preposition <u>Ē</u> and before stressed allomorphs of the stems <u>ī</u> , <u>đ</u> , <u>ε</u> (resultant forms: <u>kī, kđ, kε</u>)
	/g/	elsewhere.

The stem đ has an allomorph /β/ when the demonstrative follows the noun 'nođ 'day', and an allomorph /o/ when stressed. Otherwise, /β/. The stems ī and ε have stressed allomorphs /1/ and /6/, respectively. Otherwise, ī shows clitic variation (see 2.4.2.), and ε is invariant.

Use of the 'interrogative' demonstratives is highly restricted. The singular and plural forms occur only after the anaphoric noun nā 'this one', and the deictic preposition Ē. The singular form also follows the nouns

ka and ku 'place', and the interrogative na 'who'.

The suffix ga occurs only after the stem o (which then has an allomorph /o/).

Class II

Prefixes:	<u>o-</u>	'singular'
	<u>k-</u>	'plural'
Stems:	<u>a</u>	"that" ('far away from speaker')
	<u>o</u>	"yen" ('farther away from speaker')
Suffixes:	<u>-ndE</u>	'(that) spoken of' (i.e., 'temporal reference')
	<u>-i</u>	'emphatic'

The distinction between singular and plural is often neutralised after an explicitly marked plural noun, so that the singular form in o- occurs.

The emphatic suffix -i occurs only after the stem o.

The suffix -ndE occurs in other, nondemonstrative temporal particles:

<u>'nendE</u>	'earlier today' (<u>no</u> - 'past' particles).
<u>'tindE</u>	'today' (<u>ti</u> - 'nowadays')
<u>'yandE</u>	'formerly'.

Before this suffix, the stems a and o have the allomorphs /ad/ and /od/, respectively.

In distribution, the demonstrative ca "that" is unique in that it occurs in the following environments: (1) after itself, (2) after the noninterrogative demonstratives of class I, (3) after a class II demonstrative containing -ndE. In all these instances the specifically singular meaning of the prefix is suspended.

Huntingford, in his 1959 grammar, maintains that the demonstratives na and ga specify 'things at a distance, and out of sight'; and that the demonstratives ca and ku specify 'things at a distance, but in sight'.

(p. 11). My own data does not support this assertion of a difference in the factor of visibility. In fact when checked with both my Alego and Karachonyo informants, previous findings that both nd-gd and ca-kd refer equally correctly to visible or invisible referents were upheld. The difference between these two sets of demonstratives glossed as "that" is occasionally elusive. In most instances, they seem to be interchangeable. After the noun 'nod 'day', ca indicates a more remote time than nd: 'nod rd 'yesterday', as opposed to 'nod ca 'day before yesterday'.

5.4. PRONOUNS

The conjunctive pronouns are listed on p. 53; the disjunctive, on p. 54.

Conjunctive pronouns consist of the pronoun morpheme without a suffix. Disjunctive pronouns consist of the pronoun morpheme plus the suffix -n (which can be labeled 'disjuncture' or the like).

The pronoun morphemes are as follows.

- a - 'first person singular'; allomorphs: /aa/ before morpheme of disjuncture, /a/ elsewhere
- I - 'second person singular'; allomorphs: /I/ when subject of a verb or before a particle occurring in the subject, /u/ after certain kinship terms (see below), /ii/ before the morpheme of disjuncture, /i/ elsewhere
- E - as subject of verb with appositive noun subject, 'third person'; elsewhere, 'third person singular'; allomorphs: /0/ when subject of a verb or before a particle occurring in the subject, /ee/ before the morpheme of disjuncture, /E/ elsewhere (a form gd --an emphatic variant is 'godc--occurs as the verb object when not directly following the verb; see also 7.1.)
- wa - 'first person plural'; allomorphs: /a/ after the future particle n (actually wa ... a invariably occurs

here; see p. 69) /waa/ before the morpheme of disjuncture, /wa/ elsewhere

U - 'second person plural'; allomorphs: /U/ when subject of a verb or before a particle occurring in the subject, /uu/ before the morpheme of disjuncture, /u/ elsewhere

gI - as subject of verb with appositive noun subject, 'third person explicit plural'; elsewhere, 'third person plural'; allomorphs: /I/ after the future particle n (actually gI ... I invariably occurs here; see p. 69), /gix/ before the morpheme of disjuncture, /gI/ elsewhere.

The tone of conjunctive pronouns is mid after an appertentive nominal, and generally low elsewhere. Note, however, that as the subject of a verb, a conjunctive pronoun participates in the aspectual tone contour (see 6.4.).

Disjunctive pronouns have tonal inflection. There are only two cases: nominative (with mid tone) and predicative (mid-low). Use parallels that of nouns (see 5.1.4.).

The conjunctive pronoun I 'second person singular', has (as was noted above) an allomorph /u/ after certain kinship terms. The only phrases where this allomorph occurs are the following:

'kóar u	'your grandfather (or ancestor)'
'már u	'your mother (or mother's sister)'
'nár u	'your mother's brother'
há'kfw u	'your niece'
pá'már u	'your sister'
ð'kfw u	'your nephew'
ð'már u	'your brother'
'wáy u	'your father's sister'
'wúor u	'your father (or father's brother)'

From internal and comparative evidence, the second person plural pronoun U was earlier *wU (the actual form in modern Acoli is wu). It would seem that the loss of the initial /w/, which has brought about

the coalescence of the singular kinship pronoun and the plural pronoun, has tended to effect (1) a realignment of pronouns into those that begin with a vowel vs those that begin with a consonant (as opposed to a singular-plural opposition; for an example, see 6.4.); and (2) avoidance of the kinship phrases mentioned above--or indeed of any kinship term followed by a singular pronoun. Usage nowadays tends towards 'deferential' plurals such as 'our brother' for 'my brother', etc. (similarly for the words pin 'country' and ok in the meaning 'language' but not in the meaning 'tongue').

The pronoun morphemes listed above are probably best considered as having--like the demonstratives--a prefix (of number) and a stem (of person). The singular is unmarked (or, better, has a zero prefix). The plural prefix is g-, with the allomorphs /w/ before the stem denoting first person, /g/ before the third person; the second person plural U is a portmanteau consisting of both the plural prefix g- and the stem denoting second person. The stems may be represented as: A 'first person', I 'second person', E 'third person'. Such an analysis accounts admirably for the structure of a 'I' -- wa 'we', pretty well for I 'you, singular' -- U 'you, plural' (which are both high vowels and show clitic alternation when used as subjects, but not elsewhere), least well for E 'he, she, it' -- gi 'they'.

5.4. OTHER NOMINALS

Quantitatives are listed on p. 55. 'duḍtō 'all' is invariant. 'moḥo 'a certain' has a plural 'moḥk 'some' with the unique consonant alternation /k/ -- /k/

Interrogatives are listed on p. 54. The morpheme of interrogation is

ɔ (+ a low back vowel). The impersonal interrogative á'nd 'what' has the prefix á- which is, at least semantically, unlike the noun prefix á-. A singular variant occurs with the suffix -wá for both the items of this group. Plurals in -ɔ'nd are used rarely, tho morphologically they parallel the large group of nouns with the same plural suffix; the morphophonemic alternation before this suffix (/β/ or /w/ → /g/) is unique.

Numerals are listed (in part) on p. 55. They, together with certain other, closely related nominals, are readily analyzed as prefix plus stem. Historically and synchronically, the stems of numerals from 'one' to 'five' are unanalyzable, but stems of numerals from 'six' to 'ten' often permit a further analysis into morphemes denoting 'five' plus some other basic numeral, so that 'six' is really 'five' (+ 'one'; 'seven', 'five' (+ 'two', etc.

The numeral prefixes include the following.

a- general meaning: 'cardinal numeral'; distribution: does not occur with the plural of 'ten' (a'pár - plural 'piérò') or the usual expressions for 'nine' (d'eri'kò in the Karachuonyo and Gem dialects, ɔ'pá'ciél in Alego and Uyoma), but with all other stems

dí- or padí- general meaning: 'iterative'; allomorphs: /d/ ~ /dí/ or /pad/ ~ /padí/ before -ri'yo 'two', elsewhere /dí/ or /padí/

ku- or kon- occur only with -ciél 'one'; meaning of the resulting forms (ku'ciél, kon'ciél): 'part; (roughly) a half'

The numeral stems are presented here in the analysis suggested above. The normal forms for 'nine' seem to be verbal derivatives not susceptible of the kind of analysis attempted for other stems (there is a dialect form a'bu'pú'ɔ'n which fits into the general scheme very nicely, however). The stem for 'ten', -pár, is probably best considered unanalyzable, tho some

hocu-s-pocu minded linguists may deplore such timidity.

The numeral stems consist of the following.

<u>-crɛl</u>	'one'
<u>-riyɔ</u>	'two'; allomorphs: /riyɔ/ (unstressed) in the numeral <u>a'biriyɔ</u> 'seven', elsewhere /'riyɔ/
<u>-dɛk</u>	'three'; allomorphs: /orɔ/ in the numeral <u>a'borɔ</u> 'eight'; in the numeral <u>a'dɛk</u> 'three', an allomorph /dɛg/ occurs before the preposition <u>ɔ</u> , elsewhere /dɛk/
<u>-nuɛn</u>	'four'
<u>-biɔ</u>	'five'; allomorphs: /'ɔ/ in the numeral <u>a'ɔcrɛl</u> 'six', /'bɪ/ in the numeral <u>a'biriyɔ</u> 'seven', /b/ in the numeral <u>a'borɔ</u> , /biɔ/ elsewhere
<u>ɔngɔ'crɛl</u>	'nine'; presumably to be analyzed historically as /ɔng/ (an allomorph of the verb <u>ɔngɔ</u> - 'to be without') + /a'crɛl/ 'one', so that the whole word literally means '(ten) minus one'
<u>ɔ'crɛkɔ</u>	'nine'; possibly a verb form, at present unanalyzable; allomorphs: /crɛkɔ/ (unstressed) after (stressed) <u>di-</u> or <u>ɔadi-</u> , /ɔ'crɛkɔ/ elsewhere
<u>-pɔr</u>	'ten'; plural <u>'piɛrɔ</u> 'tens'
<u>-di</u>	'interrogative' (strictly speaking, not a numeral altho it occurs with all the numeral prefixes; the resultant forms are: <u>a'di</u> 'how much?', <u>di'di</u> or <u>ɔadi'di</u> 'how often?')

Numerals are characterized by inflection for the appertentive, the this case occurs only before conjunctive pronouns. The appertentive forms are given below. Consonant alternation parallels that discussed for nouns.

NOMINATIVE	APPERTENTIVE
<u>a'crɛl</u> 'one'	<u>a'ɔfɛnd</u>
<u>a'riyɔ</u> 'two'	<u>a'ɔfɔf</u>

1/ Malo (1952:10) maintains that the word ɔ'crɛkɔ does not occur with the prefixes di- or ɔadi-. My Karachunyo informant used only this form, however.

<u>a'dék</u> 'three'	<u>a'dék</u>
<u>a'nuén</u> 'four'	<u>a'nuén</u>
<u>a'bic</u> 'five'	<u>a'bic</u>
<u>a'úeré1</u> 'six'	<u>a'úerénd</u>
<u>a'birryd</u> 'seven'	<u>a'bfre</u> or <u>a'birryo</u>
<u>a'boró</u> 'eight'	<u>a'boó</u> or <u>a'bóro</u>
<u>onga'eré1</u> 'nine'	<u>onga'ofend</u>
<u>ó'eri'kó</u> 'nine'	<u>ó'erko</u>
<u>a'pár</u> 'ten'	<u>a'páac</u> or <u>a'par</u>

5.5. SYNTAX OF THE NOMINAL PHRASE

5.5.1. Noun-nominal phrases. Such phrases may be characterized by the first member, which is either in the nominative or appertentive (always so before a pronoun).

In a nominative phrase, the second element can only be one of the following: a color-term, a quantitative, a numeral, or an appositive noun.

- Examples:
- 'óákó, moro 'a certain woman' (quantitative)
 - ji 'duútó 'all the people' (quantitative)
 - móon a'riyd 'two women' (numeral)
 - a'wuor, ná, of 'mumbo 'Awuor, Mumbo's child' (appositive noun)
 - ó'idn di'bó 'the white cow' (color term) - more commonly:
ó'idn ma di'bó

When the appositive noun is the more specific of the two elements, an-intervening ma is required. This ma is usually necessary before color terms as well, except--as one informant puts it--'when you talk fondly of a specific cow'.

- Examples: a'wuor, ná, of 'mumbo 'Awuor, Mumbo's child' (first element more specific than second)

But ná, of 'mumbo m a'wuor 'Mumbo's child, Awuor'

(When the first element is in its own right an appertentive phrase with a conjunctive pronoun as the second element, no intervening na occurs:

jà'Gɪ ɔ, á'wuor 'their child, Awuor'.)

In a single construction, the otherwise mutually exclusive quantitatives 'moko 'some' and 'duúto 'all' occur together: gik moko 'duúto 'everything'. Possibly gi 'moro 'something' and gik'moko 'somethings' have become 'frozen' constructions (i.e., single words rather than phrases).

The meaning of the appertentive construction is variously: (1) possession (real or quasi), where the appertentive noun indicates the thing possessed; (2) part, where the appertentive numeral specifies how many of a group are involved; (3) origin, where the nominative nominal specifies place; (4) destination, purpose, or order, where the appertentive noun is invariably an anaphoric naár, and the appertentive phrase is in apposition with another (nominative) noun.

Examples: 'búg a 'my book'
òò 'mumbo 'Mumbo cows'
a'ciend u 'one of you'
jà 'keopá 'a Kenyan; a person from Kenya'
ká, lám mar 'ndiikò 'a pen for writing'
pat mar a'dék 'the third man'

For two nouns, exemplified below, an inalienable pronoun occurs in appertentive constructions with a noun as the second element.

Examples: 'ziŋr é; á'pangò 'Onyango's (his) body'
á'wad gi, á'pangò 'Onyango's (their) brother' [for the 'differential' plural pronoun, see p. 126]

Certain kinship terms do not permit an ordinary appertentive construction when the second element would otherwise be a third person singular pronoun. Instead, an appositive naár-phrase is required, in apposition with an appertentive form of the kinship term.

Example: wuón 'maar e' 'his father' ('wuóró - 'father')

The nouns that use this construction include all those that require the special u-pronoun discussed on p. 125, in addition to the term for 'wife's mother'. These nouns are: 'kuaró 'grandfather, ancestor', 'maró 'wife's mother', 'miyó 'mother', 'neyó 'mother's brother', na'kwó 'niece', na'miyó 'sister', ó'kwó 'nephew', ó'miyó 'brother', wayá 'father's sister', 'wuóró 'father'.

5.5.2. Noun-demonstrative phrases. This kind of phrase is actually a subclass of the noun-nominal phrases discussed in the preceding section. The question of the case and number of the noun before the demonstratives is a rather involved one and requires a special section.

Both nominative and appertentive forms occur before demonstratives. As a rule, only nominative forms occur before plural demonstratives, but in this environment either a singular or plural noun can occur. For example, the noun kife 'orphan' uses the appertentive singular before the singular demonstrative ní, nó, oá, and the nominative plural before gí, gó:

'kij ní 'this orphan' 'kiyó gí 'these orphans'
'kij nó 'that orphan' 'kiyó gó 'those orphans'.
'kij oá 'that orphan'

The noun 'pako 'girl' reverses this usage by employing the nominative singular before the singular demonstrative ní, nó, oá, and the appertentive plural before gí, gó (the nominative plural also occurs in this environment):

'pako ní ('paá ní) 'this girl' 'ní gí 'these girls'
'pako nó ('paá nó) 'that girl' 'ní gó 'those girls'.
'pako oá 'that girl'

Other patterns exist. Some nouns use the nominative singular before all demonstratives, e.g., tí'eló 'foot'. More combinations than those exemplified

here are used. There is considerable variation in different dialects and even within the same dialect. For example, for most nouns either the nominative or appertentive forms occur before cá 'that' (the nouns 'buóm 'wing' and 'wík 'week' use appertentive forms only, however).

The following list tries to classify noun forms before demonstratives in the most concise way. Details follow Karachuonyo usage.

1. The appertentive plural is used before gí, gò in the following nouns:

'ḡiáḡ 'cow' (elsewhere a proliferation of forms: appertentive singular before ní, nò; before cá, several variants, some unique: ḡcá, ḡcr, ḡc, 'ḡiáḡ, 'ḡiáḡḡ)

'ǰáí 'person' (elsewhere a variety of forms: 'ǰal í / ǰ is an allolog of ní / or 'ǰagó ní'; 'ǰal ó / ǰ is an allolog of nò / or 'ǰagó nò'; 'ǰal cá Karachuonyo or 'ǰagó cá Alego and Karachuonyo or 'ǰand cá)

'ǰako 'girl' (elsewhere nominative)

2. The nominative singular is used with all demonstratives in the following nouns: 'á'duáḡnò 'heart', 'kadó 'salt', 'ká'hawá 'coffee', 'modgò 'posho', 'ḡ'pókò 'bark (of tree)', ''ḡrwní 'chain', ''kudní 'insect', 'lò'cáḡ 'hand, arm', 'pòc 'sky', 'ti'elò 'foot'.

3. The nominative singular is used before cá; the appertentive singular before ní, nò; the nominative plural before gí, gò in the following nouns: ''kuér 'hoe', mò 'oil, fat, gasoline', 'ḡ'guáḡ 'cat', 'wic 'head'.

4. The appertentive singular is used before nò; the nominative singular before ní, cá; the nominative plural before gí, gò in the one noun ''oíḡ 'sun'.

5. The appertentive is used in the singular, the nominative in the plural in the following nouns: 'buóm 'wing', 'dák 'pot', 'gók 'shoulder', 'gòt 'mountain', ''guók 'dog', 'kíic 'orphan', 'kòḡ 'rain', ''kuác 'leopard', ''lunm 'grass', 'néc 'back', 'pí 'water', ''ḡuol 'snake', 'wér 'song', 'wík 'week', 'yáḡ 'tree, wood, medicine'.

6. The nominative is used (with differentiation of singular and plural) before all demonstratives in the following nouns: 'án'buór 'horse',

'adrd 'river', á'pulyó 'rabbit', bór 'fat', 'buru 'ashes', ery 'hand', 'šako 'woman', ip 'tail', 'kede 'stick', koom 'chair', 'kónó 'beer', mbda 'contemporary, age-mate', á'toyó 'hyaena', 'rad 'hippo', 'rwr 'needle (used for extracting lower front teeth in puberty rite)', 'rošmbó 'sheep', si'buór 'lion', toop 'spear', wán 'face, eye, 'wino 'bird', 'yamó 'wind'.

5.5.3. Nouns modified by prepositional phrases. Nouns may be modified by prepositional phrases.

Examples: 'pat cá gí 'pesá 'that man with money' ('pesá - 'money')
 Ūn'gújé, en, óuulé é, nám /tángá'niká. 'Zanzibar is an island off Tanganyika.' (Ūn'gújé - 'Zanzibar', 'ouulé - 'island', nám 'water-of')

Such attributive prepositional phrases vary with má-clauses with prepositional phrase predicates. Only the má-clause construction occurs if the whole nominal phrase is in turn the object of a preposition or if a nonattributive prepositional phrases follows directly.

Examples: á 'néno, nató gí 'pesá. } 'I saw the man with money'
 á 'néno, nató má n gí 'pesá. }

But only: 'or é ní, nató má n gí 'pesá. 'Send her to the man who has money'

ó 'négo, nató má n gí 'pesá, gí 'palá. 'He killed the man who had money with a knife'.

5.5.4. The maximal nominal phrase.

Nom Noun		'moro	má + Stl Verb	Dem	'duútó	má + Pron + Vb
App Noun	Noun		numeral			(má +) Prep Phrase
	Conj Pron					

THE MAXIMAL NOMINAL PHRASE

(Abbreviations used: Nom - Nominative, App - Appertentive, Conj - Con-
 junctive, Pron - Pronoun, Stl - Statal, Dem - Demonstrative, Vb - Verb,

phrase, the attribution of má-clauses is ambiguous, since they may modify either element of the appertentive phrase (but only if the second element is a noun). Thus, the sentence

á 'néno á, wad gi 'wuoi má 'duon má 'bór.

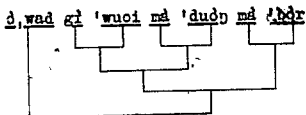
means any of the following:

1. 'I saw the brother of the tall older boy.'
2. 'I saw the tall brother of the older boy.'
3. 'I saw the older brother of the tall boy.'
4. 'I saw the tall older brother of the boy.'

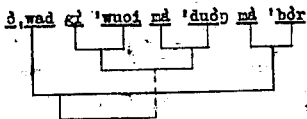
('néno - 'to see', á, wad gi - 'brother-of' / 'then': deferential inalienable plural pronoun, 'wuoi - 'boy', 'duon - 'to be old', 'bór - 'to be tall')

The immediate constituent analyses of the pertinent noun phrase may be diagrammed as follows:

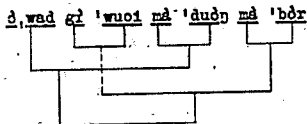
1. '...the brother of the tall older boy.'



2. '...the tall brother of the older boy.'



3. '...the older brother of the tall boy.'



{ ji má 'nén, n ó 'bifro, m ó 'bét, pín. } 'Many people came
 { ji má 'nén, n ó 'bifro, m ó 'bét, pín. } and sat down.'

In an equational sentence, any plural subject may have a complementary noun in the singular if the complement is taken collectively of the subject, or in the plural if taken individually and specifically.

Examples: jó 'nandi gín 'ngoró. 'The Nandi (in general) are cowards.'
 ('ngoró - 'coward')

jó 'nandi gín 'ngoró. 'The Nandi (these particular ones) are cowards.'

5.5.6. Pronoun sequences. A pronoun phrase is any string of appositive pronouns (these have been discussed in 4.3.4.1.), or any combination of pronouns linked by the particle kod (less frequently, by gi).

In a normal unemphatic utterance, singular pronouns (of differing persons) are joined by first using a 'collective' plural disjunctive pronoun followed by kód plus the 'lower-ranking' singular pronoun. Rank is determined by person so that in two-pronoun sequences, first person ranks above second and third, second above third. In three-pronoun sequences, third ranks above first as a rule; other orders are kept.

Examples: wan 'kód i, wan ó 'siepé. 'You and I are friends.'

un 'kód e, nend ó 'míy a gó. 'You and he gave it to me.'

un 'kód e, kód a(n), ,nó wá 'óí, 'noó ró. 'You, he, and I went (there) yesterday.'

Pronoun sequences may occur discontinuously, especially in the predicate.

Example: ó ,míy wá 'bók, 'kód i. 'He gave the book to you and me.'
 (lit., '...gave us the book and you.')

In emphatic speech, pronouns tend to be disjunctive and specify number according to how many people are actually involved.

Example: un 'kód en (or in 'kód en), un ó 'siepé. 'You and he are friends.'

VI. VERBS

6.1. GENERAL FEATURES

Verb morphology has essentially two parts: (1) segmental structure and (2) aspectual tone contour in pronoun-verb constructions (where the subject pronoun is actually the marked member; see 6.4.)

From the point of view of segmental structure, verbs belong to three classes distinguished by kind of suffix used in the citation form.

Class I: -ni suffix. The great majority of verbs in this category denote states of nervous behavior, tingling noise, shiny appearance, and the like. All are intransitive. Such verbs are relatively rare, there being no more than fifty in use at the present day.

Class II: -ø suffix. All the verbs of this category are intransitive, and frequently statal. It is a very large class, but apparently no longer productive.

Class III: -ø suffix. All transitive verbs belong to this class. Some (generally nonstatal) intransitive verbs also belong, especially the so-called intransitive-qualitative verbs closely related to transitive-applicative ones.

Of these classes, only class III is productive (it is at any rate the most extensive). Swahili verbs are regularly assimilated into this class.

SWAHILI

andika 'to write'

shona 'to sew'

soma 'to read'

LUO

'ndiikó

'sonó

{ 'sóomo (intransitive)
'sómó (transitive)

Only members of class III and the nonreduplicated verbs of class II

ending in /k/ show any regular inflection. There are two members within an inflectional set of such verbs. This differentiation is exemplified --irregularly-- by the transitive applicative verb 'nə̀nɔ̀ 'to see'.

1. 'nə̀nɔ̀ (indicative-infinitive)
- 2a. nən (imperative-subjunctive: allomorph used before singular pronoun objects)
- 2b. ne (imperative-subjunctive: allomorph used elsewhere)

Labels are suggestive rather than strictly accurate. Most verbs that show inflection have not got the allomorphic variation noted for 'nə̀nɔ̀, but make two distinctions only: a form in -ɔ̀ and one without (or with the suffix -i), or else a form in -/k/ and a form in -/g/ɔ̀ (or simply -/g/). Use of the -i suffix varies dialectally, and even within a dialect is largely a lexical matter; in any event, forms with and forms without -i never occur in contrasting environments.

Despite the presence of relatively clear class meanings for the verb categories mentioned on the preceding page, there is no productive interplay of a verb stem either among or within these classes. In only two instances does a reduplicated -ɔ̀ suffix verb contain a stem shared with another class: other than the -ɔ̀ suffix verbs: 'nə̀nɔ̀nɔ̀ (Karachuonyo dialect) 'to be well built, in the bloom of youth' -- 'nə̀nɔ̀ (Karachuonyo) 'to be very fat'; 'tiptip -- 'tipni, both meaning 'to be in a twilight zone of day'. Except for the relationship of certain verbs in -ni to those in -ɔ̀ (and even these are sporadic), such interplay is uncommon. But see 6.3.

Examples: 'jurɔ̀ 'to dribble, have diarrhoea' -- 'jurni 'to dribble (saliva)'

'nbekɔ̀ 'to tie loosely' -- 'nbekni 'to be loose, slack'

'reɔ̀ 'to singe, scorch' -- 'rewni 'to have a sore throat'

'tətɔ̀ 'to shiver' -- 'tətni 'to shiver'

'yiə̀pɔ̀ 'to shake (transitive) -- 'yiə̀pni 'to shake (statal)

6.2. THE VERB CLASSES

Verbs in -ni invariably have monosyllabic stems of the general form C_1VC_2 , where C_1 is normally any single consonant (in one verb the cluster /ndj/: 'ndjawni' 'to be in disorder'), and C_2 any single consonant or nasal-stop cluster. A prominent pattern is C_1VC_1 .

Examples of C_1VC_1 stems:

- 'hebni' 'to look like a fool'
- 'caoni' 'to miss the point'
- 'kakni' 'to be very hot, shoot up big flames' ('kakɔ
- 'to put fuel on a fire')
- 'ɲanni' 'to be shiny, reflect the light' (said of mirrors,
metal)
- 'pupni' 'to struggle uselessly'
- 'rarni' 'to make noises'
- 'wawni' 'to babble, talk aimlessly'

Other examples of this class are given according to certain broad semantic headings.

1. Denoting nervous behavior or a nervous state:

- 'capni' 'to be restless'
- 'kirni' 'to shake with fear or cold' ('kirɔ - 'to shake')
- 'mutni' 'to be restless, scratch'
- 'sakni' 'to be itchy'
- 'yukni' 'to tremble (of a leaf), hurry, bob up and down'
('yukɔ - 'to push, bob up and down')

2. Denoting a shiny, glossy, boisterous state:

- 'lanni (Alego)
 - 'ɲanni (Karachuonyo)
- } 'to be shiny, bright'
- 'ɲimbni
 - 'ɲawni
- } 'to be iridescent'

'picni	'to sparkle' (said of water, cloth, spiderwebs)
'tipni	'to be in a twilight zone of day', e.g., dusk (<u>'tipo</u> - 'shadow')
'wakni	'to rustle (of leaves), be noisy', e.g., a group of people talking

3. Miscellaneous:

'cicgn'	'to be near'
'šegni	'to be lazy'
'nepni	(Karachunyo) 'to be very fat'

There are two major subdivisions of verbs with zero (-Ø) suffix:

(1) those with reduplicated stems and (2) those without.

Verbs of this class with reduplicated stems form a very small group of probably no more than twenty-five items. Verbs of this class often have a disparaging connotation; if the stem occurs as a separate word, the reduplicated form represents an attenuation of the state designated by the stem. The stem itself is monosyllabic (except in one verb: 'mili, mili 'to be sweet, tasty'), with the general form C_1VC_2 --where C_1 is usually a single consonant (one of the following: /b, θ, t, k, r, m, n/) except in one item, 'nšennšem 'to be lukewarm'); V is either /a/ or a front vowel; C_2 is either a nasal, voiceless-fortis stop, or liquid.

Examples:	'berber	'not to be very beautiful' (<u>ber</u> - 'to be beautiful')
	'krekke	'to be somewhat bitter' (<u>kec</u> - 'to be bitter')
	'kankem	'to be somewhat bitter'
	'marmar	'to be unhealthy, pale'
	'mimij	'to be absent-minded' (<u>mij</u> - 'to be absent-minded')
	'mimij	'to be bittersweet'
	'nepnep	'to be well built'
	'ranran	'to be very light, unbecoming'
	'xeprep	'to be flimsy' (<u>xep</u> - 'to be flimsy')
	'šapšap	'to be shallow' (<u>šap</u> - 'to be shallow')
	'tiptip	'to be in twilight zone of day' (cf. <u>'tipni</u> above)

Zero-suffix nonreduplicated verbs in turn form two subclasses, depending on whether a separate form for the imperative-subjunctive occurs. Verbs that make a difference, invariably end in /k/ in form 1. In some dialects, the imperative ends in /g/ and the subjunctive in -/g/i; other dialects use one form or the other for form 2.

Examples: 'duók 'to come back': imperative 'duog, subjunctive 'dúugi.
'yuák 'to cry': imperative 'yuag, subjunctive 'yúugi.

Other verbs of this class have only one form. Note that statal verbs require periphrasis for the imperative (see 6.5.1.). The great majority of verbs of this subclass end in a consonant. Verbs that end in a vowel include: á 'to come from' (allomorph áy before the particle 'áru'), í 'to fight', í 'to flow', ké 'to be angry', pó 'to be surprised', 'cué 'to rain', 'cué 'to be fat', 'yié 'to believe', 'dagí 'to refuse'. Most (if not all) others end in a consonant, e.g., bér 'to be good, beautiful', mér 'to be drunk', wác 'to be sour', wér 'to sing'.

Six verbs of this class have (explicit) plural forms in -ó.

SINGULAR	PLURAL
<u>bér</u> 'to be good, beautiful'	' <u>beyó</u>
<u>bór</u> 'to be tall, far away'	' <u>boyó</u>
' <u>erék</u> 'to be short'	' <u>erékó</u>
<u>dít</u> 'to be adult'	' <u>ditó</u>
' <u>duóp</u> 'to be old, large'	' <u>duopó</u>
<u>rác</u> 'to be bad'	' <u>ricó</u>

Verbs with -ó suffix have nonreduplicated stems and regular differentiation of forms 1 and 2 (some verbs of this class using the suffix -i, have a separate allomorph for the imperative without the -i; this suffix is almost invariably used in passive constructions--see 6.5.2.).

The suffix -ó itself has the following allomorphs: /ó/ after the stem

'lay-urinate'; /0/ elsewhere.

A few verbs show stem alternations of various sorts. They include the following.

1. 'nenɔ 'to see' (the irregular features of this verb have been noted on p. 139)
2. Verbs in -yɔ in form 1 have no /y/ in form 2. (Before the particle re 'self, each other', form 1 occurs without the -yɔ as well.)

Examples: 'bayɔ 'to throw': form 2 ba

'ɔiyɔ 'to go': form 2 ɔi

'tiyɔ 'to work': form 2 ti

'niyɔ 'to look at': with the particle re, 'ni re
'to look at oneself, at each other'

3. Verbs with a stem ending in /w/ have allomorphs without the /w/ after open stem vowels and /ɔ/, the appropriate allomorph of -ɔ. /w/ occurs in other positions, however.

Example: 'yaw 'to open' (stem yaw-): 'yaw ɔ. 'Open it!'

6.3. TRANSITIVE-INTRANSITIVE DERIVATION

A number of verbs are groupable into pairs such that they constitute the transitive and intransitive alternants of the same verb stem. In the great majority of instances, considering the intransitive form a derivative of the transitive one is the most economical interpretation. Three techniques are involved in this derivation.

1. Use of the intransitive affix -n-, which is followed by an -ɔ suffix.

The members of this class have proved to be exceedingly rare; I know of only two examples.

Examples: 'pugɔ 'to fatten' -- 'pugnɔ 'to be fat'

'teɔɔ 'to strengthen' -- 'tegnɔ 'to be strong'

2. Change of verb suffix. The sporadic alternation -ɔ : -ni has already been noted (p. 139), where occasionally, however, both verbs are intransitive.

The alternation $-d : -\phi$ is always to be characterized as transitive-intransitive derivation. Stems ending in a stop or the cluster /ɟg/ show regular consonant alternation; other consonants do not change. One vowel alternation has been recorded. In all, there are probably fewer than fifteen pairs of verbs of this type.

TRANSITIVE (in $-d$)

INTRANSITIVE (in $-\phi$)

d	y	ɛ	ɟg	o
t	c	∅	k	uo

Examples:

Trans.-Intrans.

TRANSITIVE

INTRANSITIVE

/d/	/t/	'kəddə 'to scarify'	kət 'to have cicatrises'
/y/	/c/	'neyd 'to know'	nəc 'to know'
/y/	/∅/	'neyd 'to smell'	'nue 'to smell'
/g/	/k/	'nəgd 'to vomit'	nək 'to vomit'
		'buddə 'to frighten'	'buok 'to be frightened'
/ɟg/	/b/	'cungd 'to stop'	cub 'to stop'
/o/	/uo/	'dɔgd 'to make grow'	'duɔp 'to be big'
/r/	/z/	'merd 'to make drunk'	mɛr 'to be drunk'
/l/	/l/	nɔ'ɔld 'to bear (a child)'	'nuɔl 'to give birth'

3. Change within the $-d$ class. Fewer than fifty stems participate in this alternation. In the literature on Nilotic languages, the transitive and intransitive members of such pairs have been labeled 'applicative' and 'qualitative', respectively. It is not altogether clear whether such terminology is needed. Morphologically, transitive-applicative verbs generally have 'open' vowels and voiced-lenis consonants; intransitive-qualitative ones, 'closed vowels', voiceless-fortis consonants. These alternations may be presented schematically as follows.

APPLICATIVE

w	ð	d	y	g
p	θ	t	c	k

QUALITATIVE

a	e	o	u
ie	ea	oa	ua

Examples: (Those marked by * apparently are unique instances.)

App. - Qual:

APPLICATIVE

QUALITATIVE

/a/	/e/	' <u>baɾɔ</u> 'to split'	' <u>baɾɔ</u> 'to split'
		' <u>dɔ'waɾɔ</u> 'to want, hunt'	' <u>dɔ'waɾɔ</u> 'to want, hunt'
		' <u>gwaɾɔ</u> 'to scratch'	' <u>gwaɾɔ</u> 'to scratch'
*/a/	/ie/	' <u>caɾɛ</u> 'to eat'	' <u>caɾɛ</u> 'to eat'
*/ɛ/	/e/	' <u>naɛ</u> 'to see'	' <u>naɛ</u> 'to see (not be blind), be awake'
/o/	/o/	' <u>goɔ</u> 'to beat'	' <u>goɔ</u> 'to beat'
		' <u>boɔ</u> 'to console'	' <u>boɔ</u> 'to console'
*/u/	/u/	' <u>luɔ</u> 'to fish with a hook'	' <u>luɔ</u> 'to fish with a hook'
/w/	/p/	' <u>ciwɔ</u> 'to give'	' <u>ciwɔ</u> 'to give'
		' <u>gaw</u> (stem 'gaw-) 'to put on a necklace'	' <u>gaw</u> 'to put on a necklace'
*/θ/	/θ/	' <u>mæθ</u> 'to drink (every- thing but water)	' <u>mæθ</u> 'to drink (everything but water)
*/ð/	/t/	' <u>mɔðð</u> 'to gather fire- wood'	' <u>mɔðð</u> 'to gather firewood'
/ɣ/	/c/	' <u>kayɔ</u> 'to bite'	' <u>keɔ</u> 'to bite'
		' <u>kuayɔ</u> 'to beg, graze'	' <u>kuɛɔ</u> 'to beg, graze'
		' <u>kuɔyɔ</u> 'to sew'	' <u>kuɔɔ</u> 'to sew'
/g/	/k/	' <u>bagɔ</u> 'to brew' (beer)	' <u>bekɔ</u> (Alego) ' <u>beɔ</u> (Karachuonyo) } 'to brew'

6.4. ASPECTUAL CONTOURS

The tonal contours of verbs, or, more precisely, of (subject) pronoun-verb phrases, are associated with aspectual meaning.

In all, a nondefective verb has five contours: (1) infinitive (equivalent to the citation form); (2) durative-inceptive; (3) perfective-present; (4) imperative; (5) subjunctive.

Occasionally, double labels have been given these contours. This is due to the fact that statal and nonstatal verbs have to be glossed differently in the use of forms (2) and (3). The first term indicates the appropriate designation for nonstatal verbs (i.e., durative, perfective); the second, for statal verbs (i.e., inceptive, present).

The tonal contours for all verbs are as follows.

	Subject Pronoun	Verb
(1) Infinitive (same as the citation form)		
(2) Durative-Inceptive	'f	'v̄, v̄ (or v̄, v̄)
(3) Perfective-Present	v̄	'fv̄, v̄
(4) Imperative		v̄, v̄
(5) Subjunctive	v̄	'fv̄, v̄

The contours involving a complex tone on a single syllable are frequently reduced in connected speech (i.e., v̄v̄, v̄ becomes v̄, v̄; fv̄, v̄ becomes f, v̄). Contour number (2) has an unstressed variant v̄, v̄. Note that the verb 'bifro has an atonic form bir̄ or br̄ when used with this contour, which occurs chiefly in constructions with other verbs.

Conjunctive pronoun objects are usually low toned except in the following environments when it is mid: (a) before the particle E 'also' (possibly an adverbial use of the preposition E); after a simple high or low verb nucleus (the same holds true in part for the verb suffix -o, normally low toned, but mid after simple high verb stem).

Examples of aspectual contours:

- (1) Infinitive 'r̄ir̄nḡo 'to run', p̄ō 'to be smooth'
'm̄r̄m̄in 'to be absent-minded'
- (2) Durative-Inceptive 'A, r̄ir̄nḡo 'I'm running'
'f, p̄ō 'it's getting smoother'
'f, m̄r̄m̄in 'he's getting absent-minded'

(3) Perfective-Present

á 'rɪŋgɛ́ 'I ran'ɔ́ 'pʂoθ 'it's smooth'ɔ́ 'mɪŋmɪŋ 'he's absent-minded'

(4) Imperative

rɪŋg 'run!'

(5) Subjunctive

wa 'rɪŋg úru 'let's run!'(mond) o 'pʂoθ '(that) it may be smooth'(mond) o 'mɪŋmɪŋ '(that) he may be absent-minded'

Examples of the morphotonemics of the object pronoun:

á 'cɛám é. 'I ate it.'á 'cɛám ɛ é. 'I should eat it too.'á, á 'cɛám ɛ. 'I have just eaten it.' (á - 'to finish')á páɔ́ 'cɛám ɛ. 'I can eat it.' ('páɔ́ - 'to eat')

There is a quasi-aspectual contour which turns out to be a morpho-phonemic alternation involving the particle á 'recent completed past' plus a perfective-present phrase, i.e., á 'cɛám é is the normal (contracted) form of 'á, á 'cɛám é which occurs in deliberate speech; both mean 'I have just eaten it.'. With other singular pronouns, the segmental content of the particle is lost; thus, 'á 'cɛám é = 'á, ɔ́ 'cɛám é. These facts suggest that the durative-inceptive contour may best be considered as involving a similar particle contraction, because of the stressed pronoun. (But with the absence of a convenient particle, however, one would be forced to set one up ad hoc in this instance--and a particle with only stress and tone content at that.)

The construction discussed above is limited in adult speech to singular pronoun subjects. My seven and eight-year-old informants, however, use this alternation with the second person plural pronoun as well, thus indicating a tendency to realign pronouns on the basis of whether they begin with a

vowel or consonant (see p. 126).

When the particle ad precedes a disjunctive pronoun subject a similar alternation occurs, with this difference: the tone of the pronoun does not change, but rather the particle 'assimilates' the vowel of the following pronoun.

Examples: 'ad, in gi 'paId. (deliberate) } 'You just had a knife.'
'if, in gi 'paId. (normal)

In the plural, the particle remains unaltered (except in the speech of children, where the second person plural follows the singular pronoun pattern, as above).

Example: 'ad, gin gi 'paId. 'They just had a knife.'

In construction with temporal expressions, usually particles, the non-statal use of contours (2) and (3) involves the difference of frequentative vs punctual.

Examples: 'aD, d 'nfen d. 'He will see him.' (once)
an 'd, 'nfen d. 'He will be seeing him.' (repeatedly)
'tindd, gi 'nfen d. 'They have recently seen him.' (once)
'tindd 'gi, 'nfen d. 'They usually (frequently) see him nowadays.'

In folkstories and occasionally elsewhere, nonstatal verbs use contour (2) as a sort of narrative durative comparable to the so-called 'historical present' in many Indo-European languages. Statal verbs use contour (3) in similar environments.

Examples: e'ka, on, diek 'n d bird, d 'dd d. 'Then the hyaena goes into her house.' (e'ka - 'then', on'diek - 'hyaena', dd - 'house of')
'gi, webr, 'gi, mrdl, ..ne gi 'mbr d'hrpd. 'They sing, they dance, ...they are very happy.' (webr - 'to sing', 'mrdl - 'to dance', mbr - 'to be happy', d'hrpd - 'very')

bédò má 'm̄t̄, è má 'b̄r n̄ 'j̄. 'To be happy is to be good to others.'

bédón a 'kána, 'n ̄, n̄é r̄c. 'My being in Kenya was known.'

6.5.2. Use of form 2. In verbs that make a difference between form 1 and form 2 (see 6.1.), form 1 -- the so-called 'indicative-infinitive'-- occurs most frequently. The only discussion needed, therefore, is that of form 2 -- the 'imperative-subjunctive'-- because form 1 occurs in all the environments not listed here.

There are three major uses of form 2: (1) in commands, wishes, and hortatory expressions; (2) in construction with other words, which may be said to 'take' form 2; (3) in a passive construction of somewhat dubious status.

The first category includes many greetings and other politeness formulas.

Examples: o 'kúe 'good afternoon' (lit. '√may it be calm')
o 'riti 'goodbye' (lit. '√may it guard')

Hortatory expressions, future questions, and wishes are characterized by a conjunctive subject pronoun.

Examples: wa 'ciem. 'Let's eat.'
a 'b̄l̄ 'Shall I go?'
x̄, w̄c̄ō ḡi 'haw̄. 'Have a good trip.' (lit., '√May you walk with luck.')

Commands are commonly topicless, but a noun or disjunctive pronoun subject adjunct also occurs.

Examples: b̄i. 'Come!'
̄i'panḡo, 'duog. 'Onyango, come back.'

Indirect commands are also in form 2.

Example: '̄s̄, wac̄ō n̄i, ̄ako 'm ̄ s̄ n̄, ol̄d̄ 'wuof̄, to, kel 'p̄c̄u.
 'He says that the woman who gives birth to a son

should bring him home.' (The verb 'kelé' occurs in form 2 after the construction 'wacé ní - 'to say that'; 'ḡako - 'woman', 'nú'oló - 'to give birth to', 'wuol - 'son', 'pácu - 'homestead').

The verbs that govern a form 2 phrase are discussed in 6.5.3.

The particles that take form 2 include: dí 'unreal condition', 'mondo 'in order to; so that', 'ḡáká 'necessity'. 'mondo, the generally introducing clauses of purpose or result, also occurs (after a noun subject) in independent wish clauses.

Examples: 'wac n á, ká d r 'hér ní, mond a 'bí. 'Tell me if you don't want me to come.' (wac - 'say!' 'héré - 'to like', ní - 'that')

ḡák o 'yá. 'He must rest.'

'ruòḡ mondo o 'dóḡḡi. 'Long live the king.' (lit., 'The chief that he [may] grow.')

The negatives dák and kík (or 'kiri') take form 2. ok takes form 2 in infinitive sentences (sentences with a noun but no conjunctive pronoun subject, designating habitual or usual action) or in sentences where the positive would use a contour (2), the durative-inceptive, without a temporal particle.

Examples: jó 'luò ok, cám 'ḡuòndé. 'Luos don't get snakes.'

ok wa 'ríḡḡ. 'We're not running.'

But ok wá 'ríḡḡ. 'We weren't running.'

ok o 'wúo kod gí. 'He isn't talking with them.'

But ok 'n 6, wuòyó, 'kod gí. 'He wasn't talking with them.'

The temporal particle n 'future particle' takes form 2.

Example: a n a 'né gí. 'I shall see them.'

A rather limited use of form 2 (in -1 as a rule) involves a passive meaning. According to one of my informants, this is a recently borrowed Anglicism, and something of a barbarism at that. However that may be,

native speakers use it.

Example: mumbo n o 'négi gi 'mbuya. 'Mumbo was killed by Mbuya.'

6.5.3. Verb phrases.

Many verbs in -ó occur in construction with the particle re, which generally has a middle or reflexive meaning. With a plural subject, it often has a reciprocal meaning.

Examples: lù'okó 'to wash': lù'okó re 'to wash (oneself)'
'godd 'to bend': 'godd re 'to be stooped, crooked'
'nand 'to see': 'nand re 'to see oneself'

Occasionally such labels seem farfetched, as in the following idioms:

'naró 'to keep going': 'naró re 'to tarry, loiter'
'nadd 'to cut': 'nadd re 'to stand on tiptoes'.

A small number of verbs occur only in the re-construction.

Examples: bi'eló re (Alego dialect) 'to amble along'
'ðengó re 'to be languid'
'mend re 'to be stupid'

Several varieties of construction involving verbs and other verbs or verb phrases exist and will be discussed here. It is possible to concoct strings of verbs that are rather lengthy such as á 'tímo, heró 'sómo 'I tried to like reading' with three verbs ('tímo, 'heró, 'sómo). Even longer strings are undoubtedly possible and grammatical; but their frequency is relatively rare to say the least.

(1) Verb₁ plus Verb₂ (in form 1). The verbs that occupy the verb₁ position are relatively numerous. They include the following: á 'to have just (done)', bér 'to be good to', 'bifro 'to be going to', 'edkó 'to start to' (but not with n 'future particle'), 'oregní 'to be about to', dó'ward 'to want to', 'ðryó 'to go to', 'gend 'to hope to', 'heró 'to like --ing', 'had 'to take', 'kia 'not to know how to', 'léko 'to dream of --ing',

'luđrō 'to be afraid to', 'medđ 'to keep on --ing', 'neyō 'to know how to', 'paib 'to be able to', 'puōjō 'to teach --ing' (with re, 'to learn to'), se (defective) 'to have --ed', 'silkō 'to keep on', 'tand re 'to refuse', 'tēm 'to try to', 'tēr 'to be difficult to', 'tiškō 'to have finished --ing', 'gorō 'to do usually', 'weyō 'to stop --ing', 'wuđk 'to go out to', 'yid 'to agree to', 'yidrō 'to choose to'.

Examples: wē 'riņgō. 'Stop running.'

ne gī 'cfegni, codpō kā jō k ā puoyō. 'They were about to reach the rabbits.' ('codpō - 'to reach', jō k ā puoyō - here, 'the rabbits')

(2) Verb₁ plus (Pronoun plus) Verb₂ (in form 2). Verbs followed by a form-2 predication (i.e., subject plus verb) are relatively rare, the commonly impersonal verbs take this construction. Verbs in this class include: 'eākō 'to start to' (only with n 'future particle'), 'ōryō 'to go' (also used with verb₂ in form 1), 'ba re 'to go out of one's way to', wē (defective) 'let'; and the impersonals: 'negō, 'wacn, 'yaln - all implying necessity or obligation, 'must'; 'wiņjō re, 'ronō - both meaning '(it is) suitable' (these last two also take a verb in form 1).

Examples: a n a 'eāk a, tīm. 'I shall do (that) again.'

wē o 'riņgi. 'Let him run away.'

After 'ōryō in the imperative, the subject of verb₂ (which would normally be I), usually is not used--or is possibly assimilated by the final vowel of ōr 'go'.

Example: ōr 'ni. (Or, less commonly, ōr 'i 'ni.) 'Go look.'

(3) Verb₁ plus gī plus Verb₂ (in form 1). This construction is very rare.

Verb₂ is probably best considered a nominal object of the preposition.

Verbs of this class include: ōr 'to be tired of', wil 'to forget'.

Examples: ā 'ōr gī, riņgō. 'I'm tired of running.'

wiy a o 'wil gī 'ndilkō. 'I forgot to write!' (lit., 'My

head it forgot...')

(4) Verb plus *ni*-clause. Verbs taking a *ni*-clause include: 'dagr' 'to refuse', 'duok' 'to reply', 'herd' 'to like', 'ko' 'to say' (used mostly in folk-tales), 'kuerd' 'to refuse', 'mor' 'to be happy', 'niis' 'to show, tell', 'neyd' 'to know', 'pard' 'to think', 'penjd' 'to ask', 'ritd' 'to (a)wait', 'siingd' 'to promise', 'weyd' 'to leave, conclude', 'yi' 'to believe, agree', 'yudd' 'to find'. The verb form (if there is one) in the *ni*-clause depends on whether it represents an indirect statement or command, or contains a mondo-clause, etc.

Examples: n d 'vie n e ni, 'ed. 'She answered her, "Yes".'

n d 'kuer e ni, 'sk a 'nal, weyd. 'He refused him (by saying) that "I cannot leave".'

(5) Verb plus *mondo*-clause. Some verbs regularly take a mondo-clause, which is invariably a form 2 predication. Verbs of this class include: 'bifro' 'to go', 'ciikd' 'to tell, instruct', 'ikd re' 'to be ready', 'pard' 'to think', 'penjd' 'to ask', 'tend' 'to try'.

Examples: 'n d, tend mondo gi 'stan gi. 'He tried to defend them.'

d 'ciik e mond o 'mond i, ka 'moro. 'You (plural) told her to go somewhere.'

Certain verbs, here called the double transitive verbs, take two objects. Syntactic peculiarities have been discussed elsewhere (4.2.2., 4.3.4.2.). Verbs of this class include: 'ciikd' 'to tell, promise', 'hold' 'to borrow', 'kesd' 'to make, install as' (also uses *ni*-phrase), 'kueyd' 'to ask', 'luongd' 'to call' (also used with *ni*-phrase), 'mayd' 'to rob', 'myd' 'to give', 'niis' 'to show, explain', 'puonjd' 'to teach'.

Examples: gi 'luong e, idku. 'They called him a thief.' (also:)

...ni, idku. '...for a thief.'

d 'nis e, tend si'gand. 'I explained the meaning of the story to him.'

VII. PARTICLES

7.1. PREPOSITIONS

Prepositions have been listed on p. 57. The following section discusses syntactic details only.

In equational sentences with a predicate that is either (1) a noun indicating 'place where', or (2) a prepositional phrase with gi or é (used in reference to place only, and not in the deictic construction), noun and disjunctive pronoun subjects differ in the use of the particle ni. In all of these instances, a pronoun subject requires no additional ni, but a noun subject does--before the predicate phrase.

- Examples:
- an 'pácu. 'I am at home.'
 - ǝako ni 'pácu. 'The woman is at home.'
 - an gi 'pesá. 'I have money.'
 - ǝako ni gi 'pesá. 'The woman has money.'
 - an é 'ǝt. 'I'm inside the house.'
 - ǝako-n(i) é 'ǝt. 'The woman is in the house.'

The preposition gi varies with kod and zero in the equational construction indicating possession. When the word 'possessed' is a noun, the preposition is gi; when a third person singular pronoun, no preposition; when another pronoun, the preposition kod.

- Examples:
- an gi 'palá. 'I have a knife.'
 - an 'gǝ. 'I have it.' (gǝ - stressed objective form of third person singular pronoun)
 - an 'kod gi. 'I have them.'

The preposition é frequently occurs in construction with a number of nouns almost invariably denoting a body part (and occasionally in a clear appertentive form). The resulting idiom is directly followed by another nominal.

Examples: 'buóm 'wing'	é 'buóm 'under'
'diér 'center, middle'	é 'diér 'in the middle of'
íc 'stomach'	é 'í 'inside, within'
kór 'chest'	é 'kór 'on (the side of)'
ním 'external geni- talia' (particularly male)	é 'ním 'in front of'
néc 'back'	é 'né 'behind'
'prér 'buttocks'	é 'píer 'behind'
tí'cló 'foot'	é tí'fnd 'at the foot of, base of'
tók 'back of neck'	é 'tók 'behind'
wic 'head'	é 'wi 'on top of'

Other nouns, now almost entirely restricted to this semi-prepositional status, include: báy 'behind', bút 'near', 'maló 'above'.

These phrases with é are preceded by ní, as described on the preceding page. After a disjunctive pronoun subject, ní may also occur--or else no preposition occurs, and the noun element is used alone.

Examples:	<u>an é 'tók ,ót.</u>	} 'I'm behind the house.'
	<u>an ní é 'tók ,ót.</u>	
	<u>an 'tók ,ót.</u>	

7.2. OTHER PARTICLES

7.2.1. General discussion. Apart from the particles derived from other word classes (discussed below, 7.2.2.), most particles are irreducible or unanalyzable. There are sporadic exceptions, however. Thus, we find examples such as the following preverbal nonsubordinating particles: ká 'when, if', 'káká 'when, as', 'kátá 'whether'--all with the common base ká. Temporal particles in -ndé have been noted elsewhere (5.2.).

Many negative particles contain the phoneme /k/: ok (ok), ák, kxk (or 'kiri'), pák--but setting this up as a morpheme of negation seems tenuous.

In the Dyoma dialect (and probably in others), there is a morpheme indicating ridicule or deprecation much the same way as the 'shm-' morpheme in English: 'cop--shmop, mink--shmink, OEdipus--shmOedipus'. The form of the Lao morpheme mirrors that of the words ridiculed: a word of the general form CVCV is mirrored as nəhə, CVC as nəh, etc. The intonation of the original utterance is maintained. This morpheme apparently occurs primarily in a few set phrases, e.g., in one story a boy recites the romantic formula 'nəkó, 'bat kɪ gɔ: (presumably meaning: 'Girl, don't shake your arm.') and receives the taunting reply 'nəhó, 'nəh kɪ nɔ.

7.2.2. Derivation. There are two major techniques for particle derivation: reduplication and affixation using the circumfix a...ə (occasionally also a prefix a-).

The stem of particles showing reduplication is variously a verb or particle derivative.

Examples: (1) Stem a verb derivative

ɔmɔ́ɔmɔ́ 'a little while' ('ɔmɔ́ - 'to be few')

liŋliŋ 'quietly' (liŋ 'to be quiet').

(2) Stem a particle derivative

həgəhəgə 'very much' ('həgə - 'much')

məhməmə 'softly' (məmə 'softly, quietly')

piləpilə 'always, over and over' ('pilə - 'often')

piyəpiyə 'very quickly' ('piyə 'quickly')

putəputə 'very much' ('putə 'very')

(3) Miscellaneous

bagəbagə 'in all directions'

tətə or tatə (said to a child learning to walk)

In the following examples, one might speak of triplication (the stem syllable is repeated twice):

'tititi 'quiet'

tata'ta 'firmly' (possibly related to 'táta v. supra)

tete'te 'all, entirely' (te - 'all')

lrlr'lr 'very much' (lr - 'very')

A comparable structure characterizes certain interjections.

- Examples: héhé'hféc (stylized laugh)
óóóóó'yfc (denotes exasperation)
wúúúúú'yfc (denotes fright)

The circumfix a...á mentioned above, has two uses. One of them is associated with a stem derived only from verbs. The general meaning of the particle: 'in the manner (implied by the verbal stem)'. A few items use the prefix a- rather than the circumfix.

- Examples: á'badná 'with crooked posture, twistedly' ('band - 'to twist')
- á'badná 'dryly' ('band - 'to eat dry food')
- á'boónd 'indistinctly' ('bond - 'not to be clear')
- a'cac 'evilly' ('caco - 'to be evil')
- á'hiná 'very' ('hiná - 'to be many')
- á'nuóná 'slowly' ('nuón - 'to be slow')
- á'roóndá 'swinging this way and that' ('roónd - 'to swing', e.g., someone in a swing)

The second use of the circumfix is associated with noun, disjunctive pronoun, as well as verb-derived stems. Only the stressed syllable of the noun or verb is used to form the stem. With pronouns, the allomorph -á is used instead of the circumfix. The general meaning of the particle: (for nouns, pronouns) 'just a ...', 'simply a...'; (for verbs) 'keep on doing ...', 'simply do ...'. As a rule, the adverb follows immediately the word from which its stem is derived.

- Examples: sari á'sar 'just a spoon' ('sari - 'spoon')

ki, jik á'jilká 'just a spoon' (ki'jilkó - 'spoon')

si, buór a'buórá 'just a lion' (si'buór - 'lion')

sá, bun ábuná 'just soap' (sá'bun - 'soap')

en é, m an 'aná. 'It's just me.' (aan - 'I, me')

'ó, soómó, á'soómá. 'He's simply reading.' ('sómo - 'to read')

APPENDIX: TEXT

jà, duòp 'moro, ne n' gi 'mbon ma 'nèp. to, mbonde gá
Old man certain past with wives who many. But wives those

'n 5 nù, oló maná 'niri lrló. 'cien, moro, 'n 6 , cokó
past she is- only girls only. Day certain past he is-
bearing collecting

mbonde gá, 'm 6 , wacó n' gi ni, cakré 'cièp nó, ðako.
wives those then he is- to them that from day that woman
saying

'm 6 nù, oló 'nako, to 'wit odkó. to 'm 6 nù, oló 'wuoi, to
who she is- girl but throw away. But who she is- boy but
bearing bearing

, kel 'pácu. 'bad é, 'cien, moro, mbonde a'riyó 'n 6 , nuó.
bring home. After it day certain women two past she is-giving
birth

a'cièl kuóm gi, 'n 6 nù, oló 'nako, ma, oré lò 'n 6 nù, oló
one among them past she is- girl this other past she is-bearing
bearing

'wuoi. ðako ma 'n 6 nù, oló 'nako, 'n 6 , wittó 'odkó. ma
boy. Woman who past she is- girl past she is- away. This
bearing throwing

'n 6 nù, oló 'wuoi, 'n 6 , keló 'dalá m 6 'yáð n 6 ru'áð. ðakó
past she is- son past she is- home then he kills for him bull. Woman
bearing bringing

, moro m 6 'ti 'n 6 , nènó ná, of ma 'nako ma 'n 6 wit odkó
certain who she is- past she is- child who girl who past she is-
old seeing throwing

ni 'n 6 , kuán é kená ó 'píó é.
then past she is- her and she brings- her.
picking-up up

'cien, moro, nako nó 'n 6 òr 'kuóló é 'yáð. wúod 'wúon
Day certain girl that past she is- to-fetch- in pond. Son-of father
going water

ca béndé 'n 6 òr 'kuáð, 'm 6 , yuáð 'na nó ká, tuóm 'pí.
that also past he is- herd- then he is- girl that when to draw water.
going ing finding

saɪ n ə 'wáccə n ə ní, 'pákó, 'bat kí gə. 'pákó,
Then past he says to her that girl arm not shake. 'Girl

'bat kí gə. to ,naa nə 'n ə duók ə ní, 'nóhó, 'nóh kí nə.
arm not shake. But girl that past she is- him that (see p. 157).
answering

,wuoi nə 'n ə ɔɪ ,dáɬá, 'm ə ,waccə ní 'wuón ,mar ə ní,
Boy that past he is- home then he is- to father- that- him that
going telling of of

'wúɔr ə, nend ə 'yóɔcə ,pákó ,moro má 'bɛr, to k ə 'wáccə
father- me today I meet girl certain who is- but when I say
of beautiful

n ə ní, 'pákó, 'bat kí gə, t ə 'duók ə mánə ní, 'nóhó,
to her that girl arm not shake but she answers me only that (see p.

'nóh kí nə. saɪ 'kínn ə, ,wuón ,mar ə 'n ə ɔɪ ,kod ə, 'ɛ
157). Then morning- it father- that-him past he is- with him to
of of of going

'yaɪ, kendo ,wuoi nə ,n ə ɔkək 'waccə, 'pákó, 'bat kí gə.
pond, and boy that past he is- to-say girl arm not shake.
trying again

kendo ,naa nə 'n ə ,duók ní, 'nóhó, 'nóh kí nə. ɬá,duón ní
and girl that past she is- that (see p. 157). Old man this
answering

'n ə ,luə par ə ,páká ,ku má n ə 'ɬak ɪy ə, m ə
past he is- daughter- him up- place which past she inside-of it, then he
following of to lives

'wáccə ní ,ɬako m ə 'tí ní, móndə ə 'míy ə ,par ə.
tells to woman who she is-old that in-order- she give him daughter- him.
that of

,ɬaa nə 'n ə ,waccə ní, 'k ə ,keld ,ɬək 'm ə / ,poónə
Woman that past she is- that if he is- cows which he is-
saying bringing filling

,dáɬá, t ə 'káw ,par ə. 'kínn ə, ɬá,duón 'n ə ,keld
home- but he might- daughter- him. Morning- 'it old man past he is-bring-
stead take of of ing

,ɬək 'm ə ,kad 'par ə. ə ,yə ,naa nə 'n ə ɔkək ,wɛr.
cows then he is- daughter- him. On road girl that past she is- to-sing.
taking of starting

(Sung:) bá 'nane ;kə, bá 'nane ,kə

Father once say father once say

oaa n má n ó 'nóol ,wuoí

woman that who fut- she hear son

,ciáp n ó yáp n é ru'áó a, dolo 'yíéǵó.

day fut- he kill for him bull my Dolo Yiego.
ure

dák ne t á 'nfená, dolo 'yíéǵó.

not past but I see Dolo Yiego.

,múǵ é m ó 'yéǵó.

He-goat in that he kills.

ba 'nɪŋǵ é, ó'lewe

Father name- him Olewe
of

ó'lewe, né, bíeró dolo 'yíéǵó

Olewe (?)child-of- Dolo Yiego.
afterbirth-of

ba 'nɪŋǵ é, ó'lewe.

Father name- him Olewe
of

ba 'nɪŋǵ é, ó'lewe.

Father name- him Olewe
of

bá 'ocǵre dolo 'wɪŋǵ dó'ónd a, dolo 'yíéǵó.

(?) (?) Dolo listen voice-of me Dolo Yiego

86: 'trnda.

[traditional formula at the end of stories]

The following is a relatively free English translation of this text:

A certain old man had many wives, but these wives gave birth only to girls. One day he brought his wives together and told them that from that day on, the woman who gave birth to a girl should throw her away, but the woman who gave birth to a boy should bring him home. One day after that, two women gave birth. One of them had a girl, the other a boy. The woman who had the girl threw her away, but the one who had the boy brought him home and the man slaughtered a bull in his honor.

A certain old woman saw the abandoned girl baby, picked her up, and

brought her up. One day (many years later), that (same) girl went to fetch water in a pond. The son of her father also came there to herd cattle and found the girl drawing water. Then he said to her, 'Girl, I love you', but the girl replied, 'Love, ha!'. The boy went home and told his father, 'Oh father, I have met a beautiful girl, but when I told her, "Girl, I love you", she only answered, "Love, ha!"'. Then the next morning, his father went with him to the pond, and the boy once again said, 'Girl, I love you', and the girl answered, 'Love, ha!'. The old man followed his daughter to the place where she lived and he told the old woman to give him his daughter. The woman told the old man that if he brought her enough cows to fill her homestead, then he could take his daughter. The next day the old man brought the cows and took his daughter. On the way she started singing:

My father once said, My father once said

That woman who bears a son

(On that day) he would kill a bull in his honor, Dolo Yiego.

But I did not see Dolo Yiego.

A he-goat is what he will kill for me.

My father's name is Olewe

Olewe the child of Dolo Yiego

My father's name is Olewe

My father's name is Olewe

(?) (?) Dolo, listen to my voice.

The end.

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