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© Copyright by HENRY EDWIN ROGERS 1968 The Phonology and Morphology of Sherbro

Henry Edwin Rogers

1967

A Dissertation Presented to the Faculty of the Graduate School of Yale University in Candidacy for the Degree of Doctor of Philosophy.

Summary

The present work is a description of a part of the grammar of Sherbro, a West African language. The description is stated in terms of stratificational grammar, a linguistic theory developed by Sydney Lamb and others. The theory assumes that language is describable in terms of levels; empirical evidence suggests that many languages, including Sherbro, have six levels. The present description deals with the lower three strata, hypophonology, phonology, and morphology, with a sketch of the next higher stratum, lexology.

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VI

Introduction

1.1. Sherbro is spoken in West Africa along the coast of Sierra Leone south of Freetown (Dalby, 1962). The number of speakers is approximately 200,000. In general the language is dying out in favor of Mende or Temne. The Sherbro tribe includes many people who no longer speak Sherbro.

There are at least two dialects of Sherbro: one spoken inland and on the northern part of the coast, and another spoken on Bonthe Island, the Turtle Islands, and the adjacent mainland. The present work discusses the dialect spoken at Shenge in Kagboro chiefdom, which belongs to the first group. Most Sherbros recognised the Shenge dialect as the 'best' Sherbro; some also pointed out that the Sherbro spoken on the Turtle Islands was a more 'old fashioned' or conservative dialect.

Genetically Sherbro is a member of the Niger-Congo family of languages. Recently David Dalby (1965, 1966) has posited a 'Mel' group which includes Sherbro as a part of the Niger-Congo family. The exact place of the Mel-group in the Niger-Congo family is still uncertain. His classification of the Mel languages is:

Mel

- I. Mel 'A'
 - A. Northwest

Temne

Banta

Baga

Landuma

Tyapi

- B. Bullom
 - 1. N. Bulllom
 - 2. S. Bullom (Sherbro)
 - 3. Bom
 - 4. Krim
- C. Kissi

II. Mel 'B'

Gola

The Mel group corresponds roughly to the southern branch of the older West-Atlantic group (Westermann, 1928; Greenberg, 1966). Pichl (1964) discusses the relationship of Sherbro and Krim. All of the Mel languages are spoken in Sierra Leone or Liberia.

Modern day usage in Sierra Leone has 'Bullom' for the northern Bullom languages and 'Sherbro' for the southern ones.

The Temne term 'Mampa' is found in some works referring to Sherbro.

The principal published source of information about Sherbro has been Sumner's grammar (1921). Sumner was a native of Shenge and the pastor of the church there; he wrote similar handbooks for Temne and Mende. His book provides a great deal

of information although it is rather unsystematic, and examples from it are occasionally found to be stilted by modern speakers. Pichl's two volume vocabulary (1963) has been helpful in suggesting lexical forms, especially fish names, but it is very often inaccurate in detail. Berry's phonetic study (1959) is extremely good, although the analysis presented here differs from it in several details. Ladefoged (1964) gives a list of Sherbro consonant contrasts, along with other phonetic data. Deighton's study on botanical terms (1957) has been helpful in identifying plants.

Several other works have been consulted although not used extensively: Koelie (1854), Thomas (1916), and Westermann and Bryan (1952).

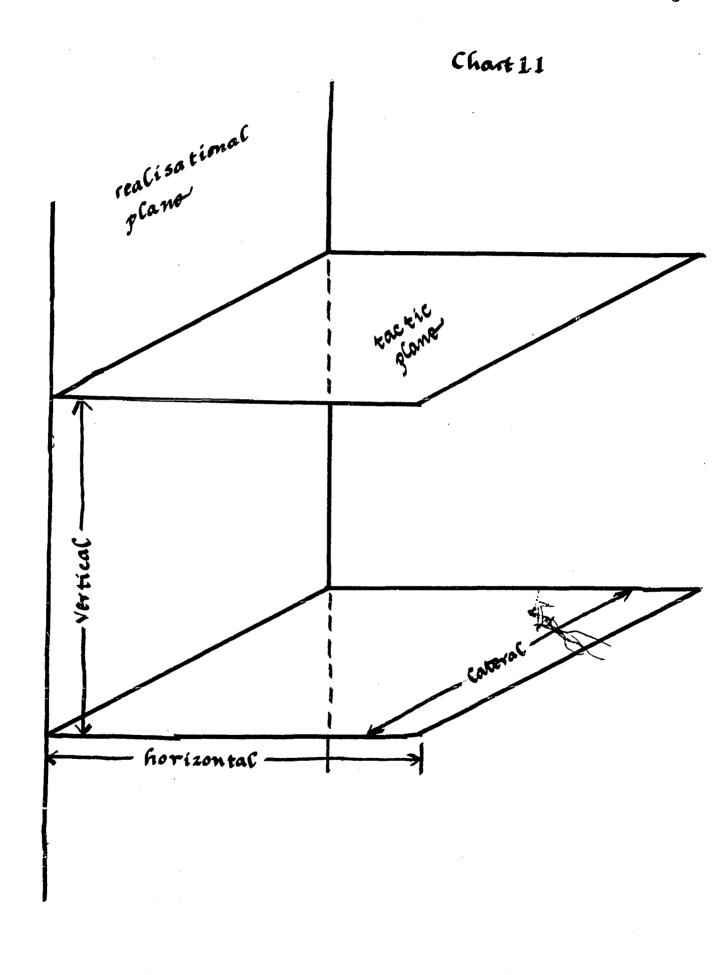
Nylander's grammar of Northern Bullom (1814) is one of the earliest printed grammars of an African language. Northern Bullom has been studied very little although there is an unpublished work by Moity (Ms), which I have not seen, of a modern dialect spoken just over the border in Guinea.

The most important ethnographic study of the Sherbros is a pamphlet by H.U. Hall (1938). McCulloch (1930) gives a short account of Sherbro culture.

The data used in this grammar were gathered during a nine-month stay in Sierra Leone in 1965-6. Four months were spent at Fourah Bay College in Freetown, and five months at Shenge.

- 1.2. The present description of Sherbro is stated in terms of stratificational grammar, a linguistic theory developed largely by Sydney M. Lamb. The Outline of Stratificational Grammar

 (Lamb 1966a; hereafter, Outline) has been taken as the primary theoretical source, with occasional reference to other works, especially 'Prolegomena to a theory of phonology' (Lamb 1966b). The following sections give a short summary of the more basic tenets of the theory together with explanations of the differences in this work from what is presented in the Outline. This summary is not an integral part of the dissertation; it is included only to give a brief orientation to the theoretical framework.
- 1.2.1. Stratificational grammar conceives of language as a very complex system relating speech (or writing) and meaning. It attempts to give an internally consistent theoretical framework in terms of which the recurring patterns of language can be stated comprehensively and as simply as possible. The theory proposes a relational network of several levels and dimensions. The dimensions are vertical, lateral, and horizontal. The vertical dimension corresponds to the relationship between meaning and speech with meaning conventionally represented at the top and speech at the bottom. The lateral dimension corresponds to time with the earlier time at the left and the later time at the right. The horizontal dimension figures in tactical analysis, which is considered below. The vertical and lateral dimensions define



a vertical plane, called the realisational plane perpendicular to the tactic plane defined by the horizontal and lateral dimensions. As will be seen below, there are in fact several parallel tactic planes, all perpendicular to the realisational plane.

1.2.2. The term encoding in connection with linguistic theory corresponds to speaking, and decoding to hearing. It is assumed here that a description of linguistic structure is by the nature of language appropriate to both; therefore, although most of the discussion of linguistic theory and of Sherbro is stated in terms of encoding, it is everywhere intended to be equally applicable to edecoding.

1.2.3. Stratificational grammar takes as fundamental the hypothesis that the complex relationship of language is analysable in terms of a small number of simple relations. Most of these simple relations are again analysable in terms of the oppositions: and-or, upward-downward, ordered-unordered.

Upward-downward refer to the vertical dimension relating meaning and speech. Ordered-unordered refer in the case of and's to the lateral dimension of time, and in the case of or's to priority (The first takes priority over the second if both are possible.). An and realises a single line as two or more lines; this corresponds in language to the fact that some linguistic elements have parts: e.g. the morpheme /cat/ has three phonological parts--/k/ and /æ/ and /t/. An or describes a linguistic set: e.g. in English /Bill/, /Omaha/, /Wilson/ are all members of

THE RESERVE OF THE PROPERTY OF

the set of proper names. It is an exclusive or. The encoding of a particular sentence is effected by allowing impulses to move downwards through the linguistic network.

Two notational forms have been used for the relations—an algebraic and a geometric. They are presented here with definitions of their consequences on impulses moving through the network. For the sake of simplicity, here and elsewhere, only downward impulses are considered. The algebraic notation consists of statements of relationship in the form:

X / Y

to be read ' \underline{X} is realised as \underline{Y} '. The left hand member is above the right hand member. Optional elements are enclosed in brackets: e.g.

X / [Y]

to be read 'X is realised optionally as Y or as zero!. The geometric notation consists of lines and nodes. The lines represent simple one-to-one relationships, and the nodes represent various discrepancies from a simple one-to-one relationship as defined below. The length of a line is not distinctive. Also the fact that some lines cross is not important; an impulse proceeds straight across an intersection as though the other line were not there.

Downward unordered and

An impulse moving down \underline{a} is realised as two impulses going down \underline{b} and \underline{c} simultaneously.



a / b·c

Downward ordered and An impulse going down \underline{d} is realised as an impulse going down \underline{e} and then an impulse going down \underline{f} .



d / e f

Downward unordered or An impulse going down $\underline{\mathbf{g}}$ is realised as an impulse going down $\underline{\mathbf{h}}$ or an impulse going down $\underline{\mathbf{i}}$.



g / h, i

Downward ordered or An impulse going down \underline{j} is realised as an impulse going down \underline{k} if possible, and if not, as an impulse going down \underline{l} .



j / k + 1

Upward unordered and

An impulse going down \underline{m} simultaneous with an impulse going down \underline{n} is realised as an impulse going down \underline{o}

 $m \bigvee_{0}^{n}$

m:n / o

Upward ordered and

An impulse going down <u>p</u> followed by an impulse going down <u>q</u> is realised as an impulse going down <u>r</u>. If no following impulse comes down <u>q</u>, the waiting impulse <u>p</u> dies.



p a / r

Upward unordered or

An impulse going down \underline{r} or an impulse going down \underline{s} is realised as an impulse going down \underline{t} .

r \s t

r,s / t

Upward ordered or

er Mayout each

An impulse going down <u>v</u> or an impulse going down <u>w</u> is realised as an impulse going down <u>x</u>. If impulses come down both <u>v</u> and <u>w</u>, the one down <u>v</u> occurs and the one down <u>w</u> dies.

V 1 W

 $\mathbf{v} + \mathbf{w} / \mathbf{x}$

These eight basic relations occur entirely within either the realisational or tactic plane.

The sideways and (not described in the Outline) joins the tactic and realisational planes. An impulse coming down y in the realisational plane followed by an impulse coming down z from the tactic plane is realised as an impulse going down a in the realisational plane.

There is a zero element which is shown as g in the algebraic notation and as a small circle in the graphic notation. An impulse reaching a zero element disappears, and an impulse may originate from a zero at any time.

There are also two other elements. The coordination element (Outline 26,30) does not occur in the present analysis of Sherbro. The reduplication element provides that an impulse make the same choice at a downward or that some other impulse makes. In the algebraic notation it is shown by an equals sign,

and in the graphic notation by a wedge lying alongside a line above a downward unordered or. The primary or controlling impulse goes down the main line, and the secondary or reduplicated impulse goes through the reduplication element and takes the same path at the or that the primary impulse did. For example, the Greek perfect prefix consists of the same consonant as the initial consonant of the perfect stem of the verb followed by /e/. The consonant of the prefix is generated by a reduplication element. (See Chart 1.2)

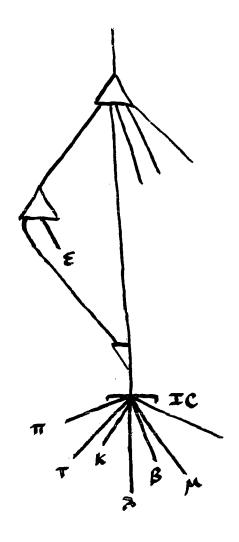
Thus, the prefix with the perfect stem /loip/ 'leave' is /le/, and with /graph/ 'write', it is /ge/, etc.

1.2.4. Stratification. The fundamental hypothesis of stratificational grammar is that linguistic structure is most simply stated as vertically recurring patterns of the basic relations, i.e. that language is stratified.

The simple relations are found in four recurring patterns--alternation, knot, sign, and tactic. A set of these four patterns constitutes a stratal system. Empirical evidence suggests that many languages have six stratal systems which are called: hypophonemic, phonemic, morphemic lexemic, sememic, and hypersememic.

The alternation pattern is at the top of the stratal system. Below it is the knot pattern which connects the tactic

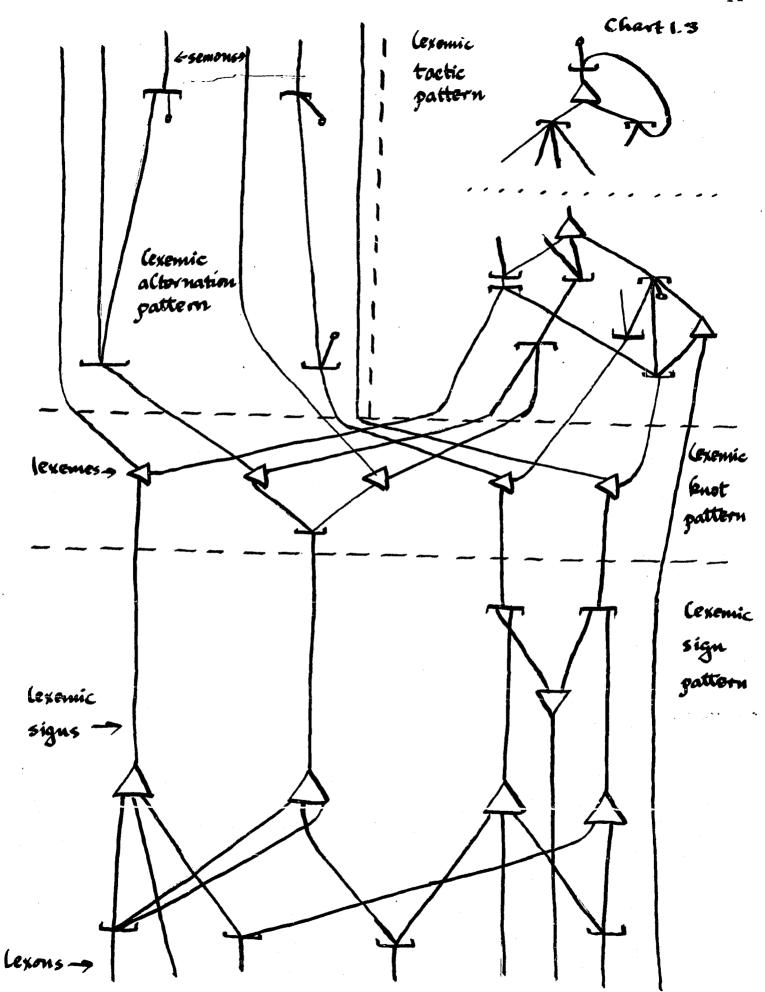
Chartl. 2



plane to the realisation plane of the stratal system. The connections are sidways and s (which replace the upward and s of the knot pattern in the <u>Outline</u>). The top and bottom connections of the sideways and is in the realisational plane whereas the middle connection leads into the tactic plane. The tactic pattern and adjacent knot pattern taken together form a stratum.

Below the knot pattern is the sign pattern, the lowest pattern of a stratal system, which has an upper and a lower part. Below the sign pattern is the alternation pattern of the next lower stratal system. Chart 1.3 shows part of a typical lexemic stratal system. The tactic pattern is conventionally shown at the right of the alternation pattern, as though it were in the same plane.

Various points in the structure are given names in a similar way for each stratum. For example, the sideways and's or knots are called -eme's; i.e. in the lexemic stratum lexemes, in the morpemic stratum morphemes, etc. The downward realisations of a sign pattern or the upward realisations of an alternation pattern are called on's: e.g. lexons, morphons, phonons. The lines in the middle of the sign pattern between the upper and the lower parts are called -emic signs: e.g. morphemic signs, hypophonemic signs. The various pattern are called emic: morphemic sign pattern, lexemic tactic pattern, etc. In addition the tactic pattern is also called -otactics:



semotactics, morphotactics; and the realisational part of any stratal system is called the -icon: lexicon, phonicon. The alternation pattern of a stratal system is called both the emic alternation pattern of that stratum or the -onic alternation pattern of the next higher stratum: morphemic alternation pattern = lexonic alternation pattern.

Structural elements are enclosed in solidi. Sometimes labels occur before the brackets identifying the level of their contents:

M morphemic

MS morphemic signs

MN morphonic

P phonemic

PS phonemic signs

PN phononic

S sememic

L lexemic

H hypophonemic

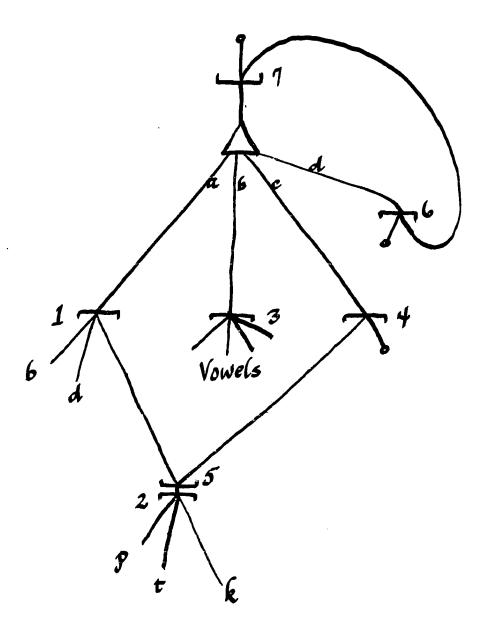
etc.

1.2.5. The tactic pattern of each stratum specifies the arrangement of the emic units of that stratum in terms of a larger unit. For example, the hyphonotactics specifies the arrangements of hypophonemes in terms of segments and clusters of segments (a segment corresponds in size to the

Lotano

Bloomfieldian phoneme.). The phonotactics specifies the arrangements of phonemes in terms of syllables; the morphotactics, words; the lexotactics, clauses; the semotactics, sentences; and the hypersemotactics, texts.

Within the tactic plane the direction towards the realisational plane is conventionally called 'down' and the direction away from it is called 'up'. At the top of every tactic pattern there is a zero element which allow a tactical unit (syllable, word, etc.) to be generated whenever necessary. Most of the relations in a tactic pattern are downward and's and downward and upward unordered or's. A downward and specifies the various tactical positions; a downward or shows the alternatives for each position; and upward or's occur when the same element is possible in two different positions. For example, the downward and in Chart 1.4 specifies the structure of the syllable in a very simplified version of Sherbro phonotactics. It shows the structure underlying an observation that at the phonemic level Sherbro consists of any number of consecutive syllables each of which begins with a consonant /p, t, k, b, d/, a vowel, and a final consonant /p, t, k/. Line a generates initial consonants (1): either b, d or one of (2) p, t, kb generates one of the possible vowels (3). Line c generates an optional (when the impulse takes the zero at 4) /p, t, k/(2). The upward or 5 shows that whatever is specified below 2 occurs equally well in initial or final position. Line d provides

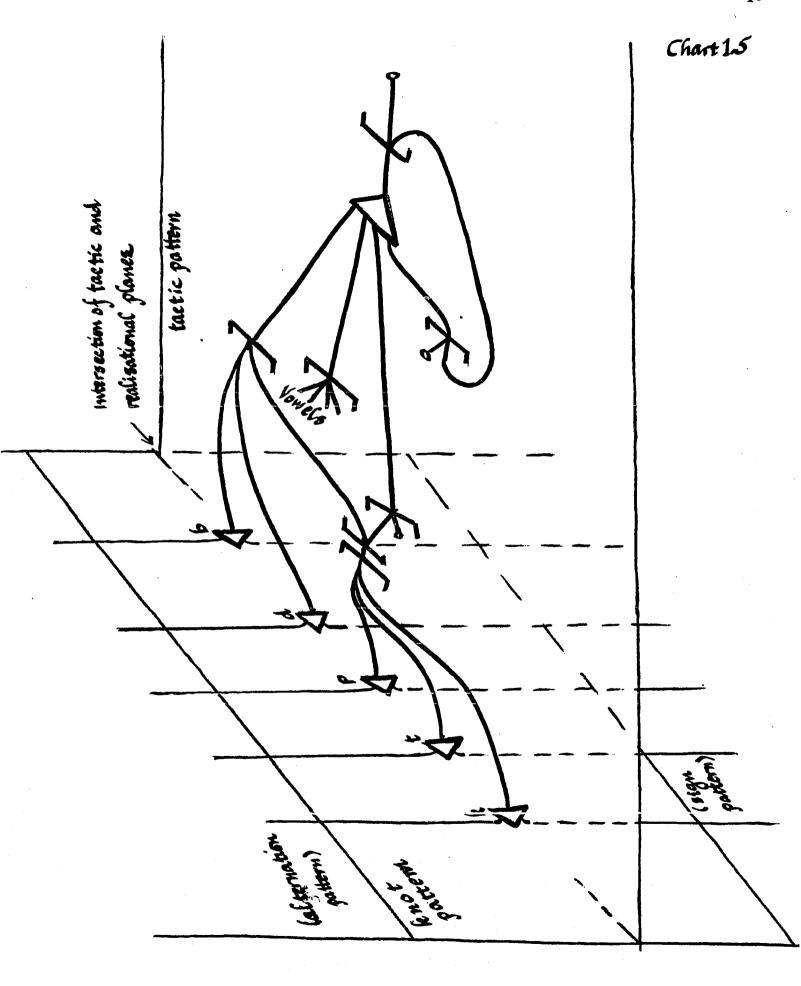


optionally (6) for another syllable by looping back to the and.

The or at the top (7) rallows for an initial syllable from the zero, or a following syllable from the loop. Unordered and's are common in the hypophonotactics, and other relations do occur occasionally in tactic patterns: see §3.4.1.1 for an upward and, §4.1.1 (end) for ordered or's, and §3.1.5 for a reduplication element.

1.2.6. The knot pattern joins the tactic plane to the realisational plane. Chart 1.5 gives a three-dimensional drawing of a simple hypothetical tactic pattern joined to a knot pattern.

The knot pattern word in the following way. A series of impulses comes down the realisation plane from the alternation pattern into the knot pattern, reach the top side of the sideways and's and wait there. Since a zero element can originate an impulse at any time, the zero element at the top of the tactic pattern sends an impulse towards the knot pattern. With the simplified tactic pattern above, consider an example /kit/. Three impulses arrive from the phonemic alternation pattern in sequence at the top side of the three sideways and's /k, i, t/. The zero at the top of the tactic pattern sends an impulse towards the knot pattern. The and in the tactic pattern realises this impulse as four ordered impulses. The first impulse arrives at or 1 and choses one among the three available paths. It chooses the path leading to 5 because the other paths are



blocked since there is no impulse waiting at the phonemes /b, d/. At the or 2 the impulse continues along the path to /k/
since there is an impulse waiting at the sideways and /k/.

(The system is so defined that the tactic impulse arrives at /k/ shortly after the realisation impulse arrives there; that is, before the realisational impulse arrives at /t/ so that there is no confusion between the two.) The sideways and is completed when the tactic impulse reaches it, and an impulse is sent downward from /k/ to the phonemic sign pattern. Sometime after the first impulse on path a leaves the and, the second impulse leaves on path and arrives at /i/, which is then completed and an impulse is sent downwards; similarly the third impulse leaves on path c still later. From the data given, it is not possible to tell whether the fourth impulse goes to zero or loops back to generate another syllable.

Whe tactic pattern thus governs the order of the emes with regard to the parts of the stratal system below it. If the impulses from the alternation pattern had arrived in the order /ikt/, the tactic pattern would still have completed the sideways and s in the order /kit/. The phenomenon whereby a tactic pattern reorders impulses in the realisational plane is known as anataxis.

Occasionally a line from a higher part in the realisation plane will go directly from the alternation pattern

into the middle of the tactic pattern (cf. §2.1.2.3.).

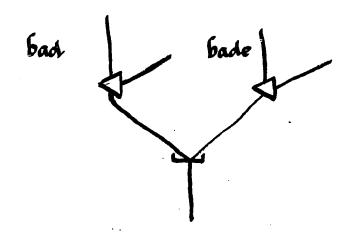
Occasionally two emic units merge in the knot pattern:
e.g. Eng. M/bad/ and M/bade/ merge in the morphemic knot pattern
below the knots and thus have the same realisation at the lower
strata. (See Chart 1.6.)

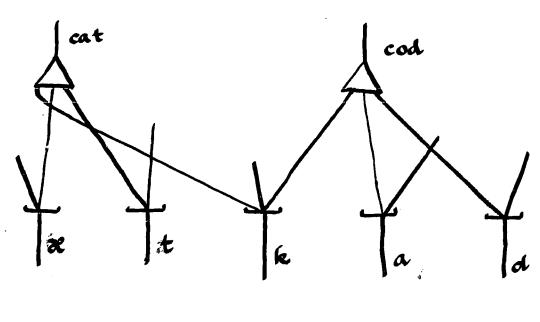
1.2.7. Each relation in the realisational part of the structure represents a discrepancy in a simple vertical one-to-one relationship. Various types of relations characterise each of the realisation patterns.

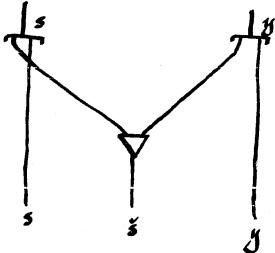
In the lower part of the sign pattern downward and's are found above upward or's. The and's generate two or more impulses below where there was only one above; this discrepancy is called composite realisation. For example the morphemic sign /cat/ might be described as realised as three morphons /k æ t/ as specified in the graph shown on Chart 1.6. Likewise /cod/ might be described as realised by the morphons /k a d/. The initial impulse coming down from either /cat/ or /cod/ would go to the same morphon; this discrepancy is called neutralisation and is generated by an upward or.

The upper part of the sign pattern realises emes as emic signs. Most of these realisations are simple (one-to-one), but some involve a discrepancy known as portmanteau realisation. In certain dialects of English the sequence of phonemes /s y/ is realised as /s/. This phenomenon is generated in the upper part of the phonemic sign pattern by downward ordered or's





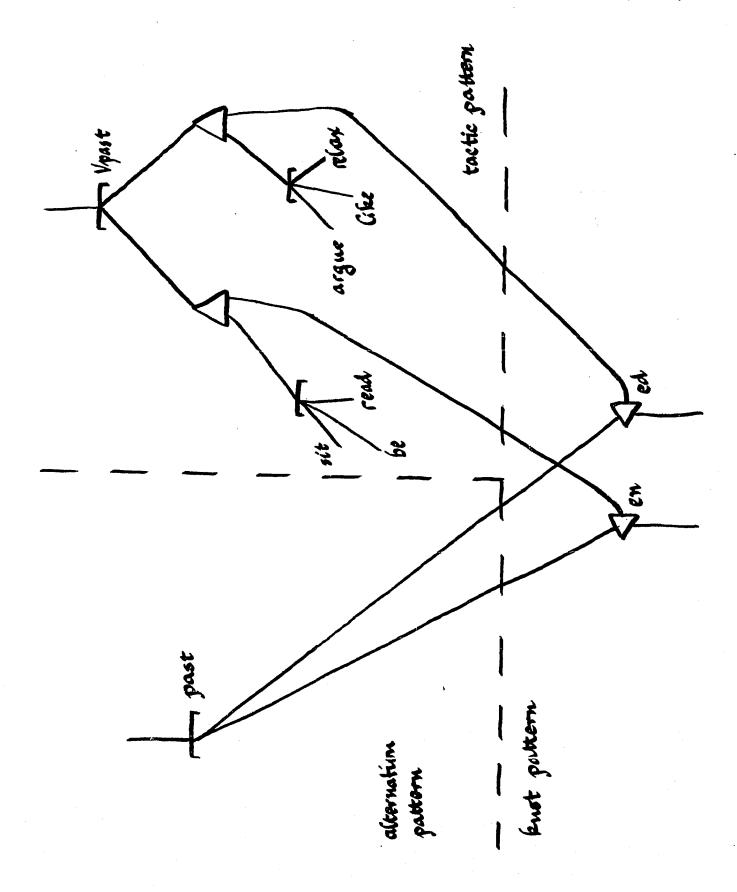




and an upward and (Chart 1.6). An impulse coming down P/s/
takes the left branch of the or if it can (i.e. if a P/y/ follows);
otherwise, it takes the right branch. An impulse coming down
P/y/ takes the left branch if it can (i.e. if an P/s/ precedes);
otherwise, it takes the right branch. Thus if the sequence
P/sy/ occurs, the impulse from /s/ goes to the upward and and
waits; when the impulse from /y/ arrives, the and is completed,
and an impulse goes downwards to PS/s/.

1.2.8. Most of the realisations in the alternation pattern are simple, but some involve discrepancies. These discrepancies are characteristically generated by downward or's at the top and upward or's at the bottom. A downward or accounts for diversification; i.e. a choice between two or more paths. The upward or's account for neutralisation. An alternation pattern generates alternatives whose choice is determined by the tactics below. For example, in a simplified view of part of English verb morphology, the verb stems may be divided into two classes: those which take the regular past tense suffix /edf and those which do not (these later may be said to take a suffix /en/ which has various lower realisations.). At the top of the alternation pattern the lexon /past/ goes to a downward or which goes to the different morphemes /ed/ and /en/; the choice at this point is determined by the morphotactics (see Chart 1.7). If the impulse tries the /en/ path in connection with a verb such as /like/, it reaches the sidways and labelled

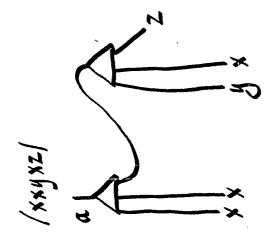
Chart 1.7

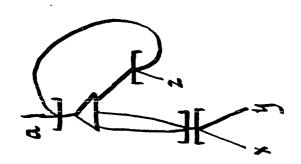


/en/; but it dies there since no impulse from the tactics arrives and completes the sideways and. If, however, the impulse from /past/ tries the /ed/ path, it does succeed because an impulse from the tactic pattern does complete the sideways and /ed/. In this fashion a tactic pattern controls the choices provided by the alternation pattern above.

- 1.2.9. The phonemic realisation of a particular morpheme is called a morph. Thus, the phonemes P/k æ t/are a morph which is the realisation of a morpheme M/cat/. In the same way a lex is the morphemic realisation of a particular lexeme, or a phone is the hypophonemic realisation of a particular phoneme.
- 1.2.10. Diagrams of examples are given at several points.

 These trace the path of the examples through the structural patterns, omitting all or's and turning loops into repetitions. The structure on the left of Chart 1.8 shows part of a hypothetical tactic pattern; the structure on the right shows the tracing of an example.
- 1.2.11. Sherbro seems to have six strata. The present grammar attempts to provide a fairly complete analysis of the structures of the lower three stratal systems: hypophonology, phonology, and morphology. Certain parts of the lexology have been presented to give greater clarity to the





morphology, but the lexological description is in no way intended to be complete.

1.3. Orthography. I have not included any section dealing with graphology since Sherbro is rarely written and the spelling systems which are used vary somewhat. However, for the purposes of this work, some sort of orthography is convenient. I have employed the following symbols:

th k p b d j gb h y r m n Ŋ 1 i u ວ

The arrangement of the symbols is such as to provice a practical correlation with the phonemes with the help of the following notes.

- 1. th and gb are digraphs corresponding to $/\theta$ / and /gb/. No occurrences of /t, g/ followed by /h, b/ are known to me.
- 2. The phoneme /N/ is written m before b, p, f, v; n before th, t, d, l, c, j, s, y; n before k, g, h, r, gb, w. With vowels it is written _.

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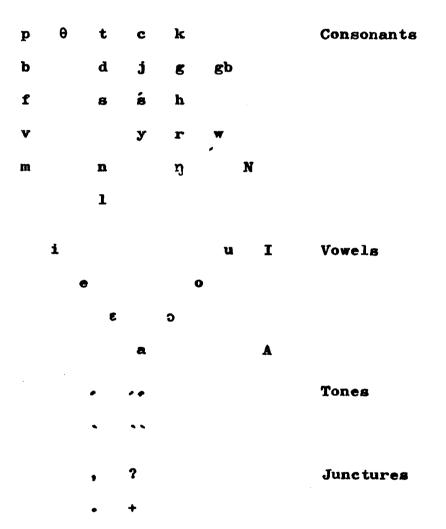
 London, Oxford University Press for the International African Institute.

II

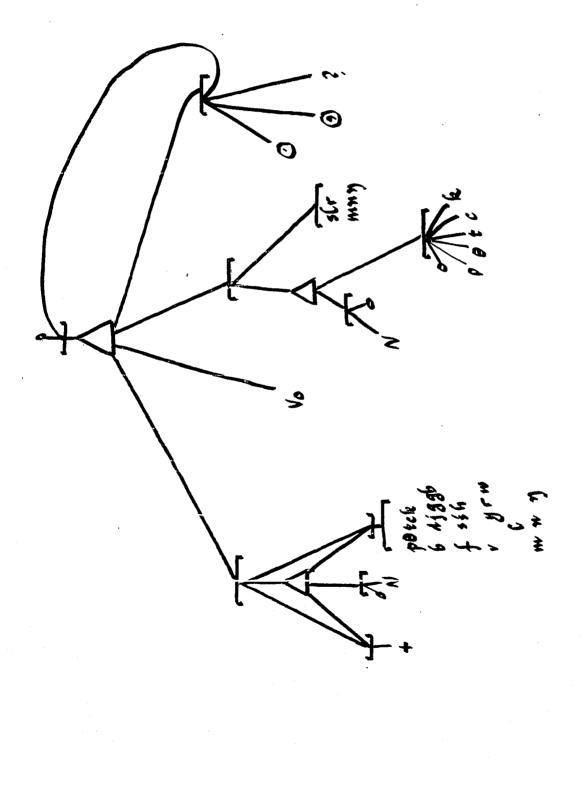
Phonology

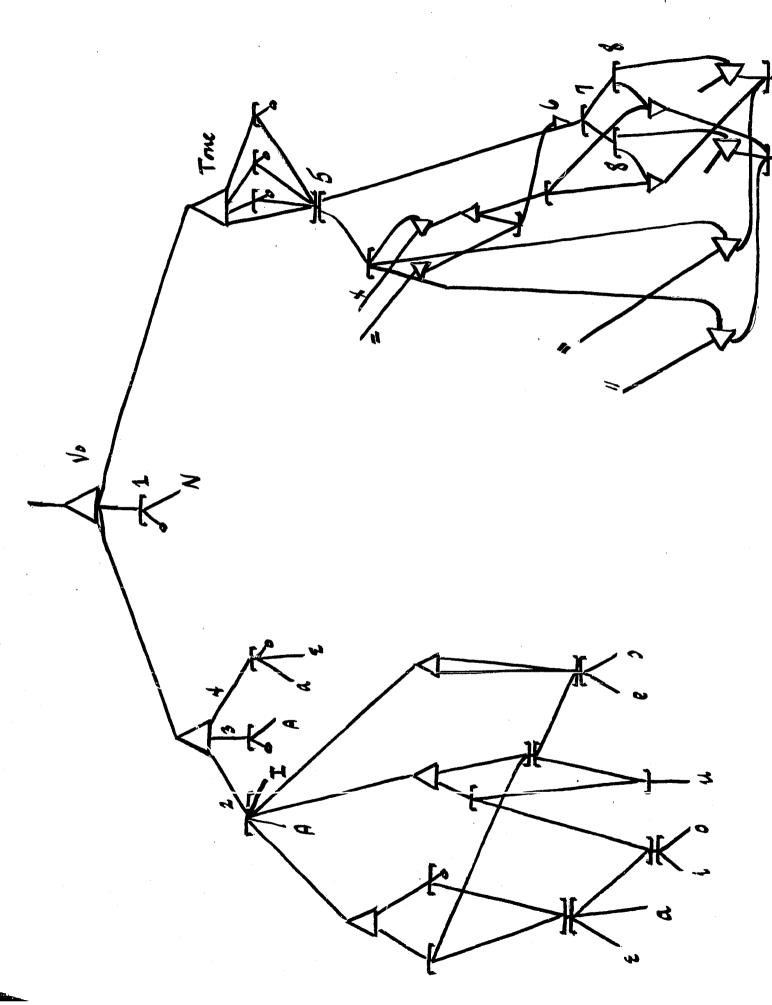
2.1. Phonology

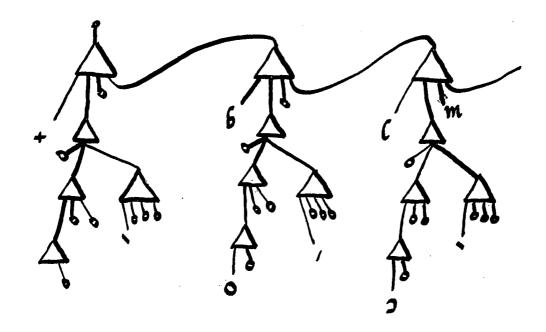
2.1.1. The phonemic inventory is:

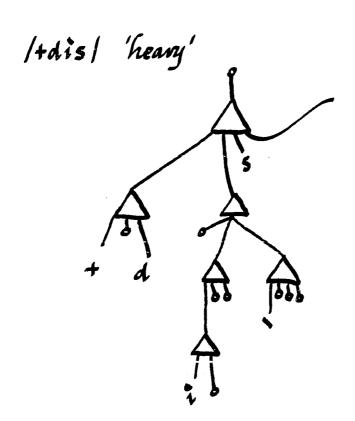


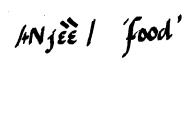
2.1.2. Phonotactics. (See Charts 2.1-2.) The phonotactics generates syllables, which in Sherbro consist of four parts,



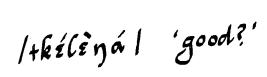


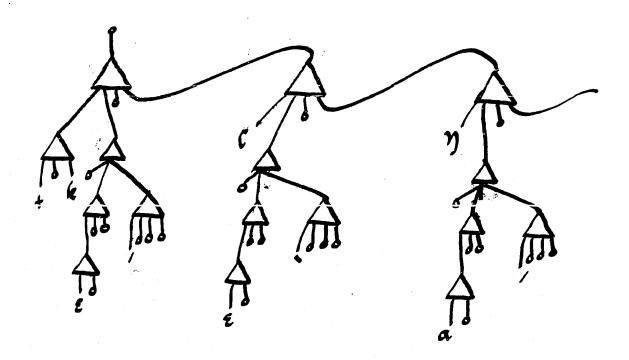












optionally preceded by /+/:

- 1. An initial consonant sequence
- 2. A vowel sequence accompanied by tone
- 3. An optional final consonant sequence
- 4. A juncture or syllable repetition
- 2.1.2.1. The initial consonant sequence consists of any consonant phoneme except /N/, alone or preceded by /+N/. After /+/ the initial consonant sequence is optional. (See Charts 2.3-4.)

/+abólam/ 'Sherbros' /ba/ 'father' /Nbank/ 'ropes' /pi/ 'stone' /Npane/ 'labor' /θúrà/ 'bull' /N0é/ 'cheeks' /dis/ heavy /Ndik/ 'hungry' /támá/ 'boy' /Ntiè/ 'mortar' /jém/ 'fire' /N.ièè/ 'food' /ci/ 'bring' /Ncú/ 'stab!' /gàri/ 'farina' /Ngafò/ 'fans' /koe/ 'molar' /Nkéfè/ 'peppers' /gbee/ 'dirt' /Ngbi/ 'fog' /vil/ 'long' /Nvis/ 'cattle' /fé/ 'money' /Nfos/ 'hit!' /séké/ 'thank you' /Nsáka/ 'good morning!' /yú/ 'fish' /Nyfi/ 'ask!' /sa/ 'red' /Nsá/ 'red' (inflected form)

/wóm/	'boat'	/Nwú/ 'die!'
/m5/	'you' (sg)	/Nmén/ 'water'
/ca/	'you' (pl)	/Nné/ 'tread on!'
/lá/	'wife'	/Nlá9an/ 'legs'

Although /ŋ/ does not occur after /+/, it does occur word medial at the beginning of a syllable: e.g.

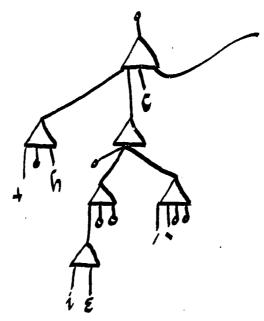
ké-lè-ná 'good?' kổ-ná 'finished?'

2.1.2.2. The vowel sequence consists of one or more vowels, each accompanied by a high or low tone. The entire sequence occurs optionally with /N/ in the case of unpredictable nasal vowels (1). Chart 2.2 shows the possible vowel sequences.

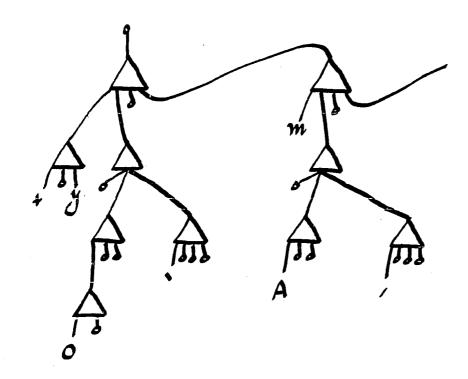
Path 2 is always taken: it results in any vowel or in certain diphthongs which are shown in the following diagram (See also Chart 2.5.):

Second Vowel

		i	· e	ε	a	၁	G	u
	i	x	x	×	x	×	x	x
First	•	x	x	x	x		x	
Vowel	ε	x		×	x		x	
		×		×	x		*	
	၁	x		×	x	x	x	
	•	x	x	x	x	x	x	x
	u	x	x	x	x	x	ж	x



/4 you Al 'answered'



/ki/ 'alligator', /din/ 'hair', /rikè/ 'fifth son'. /lèli/ 'look for'; /θé/ 'hear', /rék/ 'build', /pénέ/ 'kind of grain', /bɔlkek/ 'kind of fish'; /gbɛɛ/ 'walk', /pɛl/ 'fishing net', /meni/ 'clay', /hine/ 'be lying down'; /ná/ 'cow', /bàNk/ 'rope', /bákí/ 'fourth son', /kùNbá/ 'shirt'; /tú/ 'pot', /sún/ 'pestle', /núkú/ 'crawl', /sɔkul/ 'scratch'; /bò/ 'kitchen', /bòm/ 'big', /tóma/ 'chameleon', /kêkó/ 'squirrel'; /lô/ 'there', /Nkôn/ 'blood', /kóka/ 'shoe', /gbaθó/ 'cutlass: /hó/ 'say', /hố/ 'it', /tī/ 'noise', /hēī/ 'fan'; /yiī/ 'ask', /hiêl/ 'salt', /bia/ 'Bia (man's name)', /pió/ 'pig',/hiɔl/ 'four', /véi/ 'along time', /véé/ 'well', /wéini/ 'reluctant', /θέε/ 'cataract', /rái/ 'book', /náε/ 'the cow', /wáá/ 'palm tree', /súi/ 'hand', /Nsúé/ 'soap', /yúè/ 'the fish', /wulan/ 'not die', /boe/ 'dig', /hoe/ 'day', /koa/ 'to?', /sốimá/ 'mix', /gumòć/ 'dog', /bốô/ 'eutside', /pú0I1/ 'rot', /yômA/ 'answered'.

Path 3 is taken if /A/ follows another vowel or diphthong. (See Chart 2.6.)

/wuan/ 'not die' /yiia/ 'asked'

Path 4 results in /a/ or / ε / after all other vowel phonemes. It allows for the realisation of the question morpheme $^{M}/a$ / or the morpheme $^{M}/L\varepsilon$ /. (See Chart 2.7.)

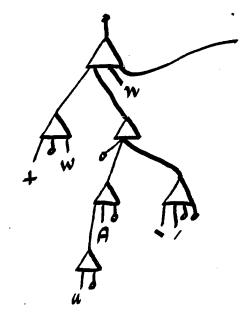
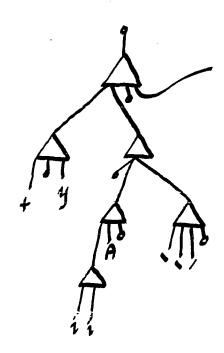


Chart 2.4

/+yii Á/



/+yáie*/ 'the cat' Chart 2.7 (Dotted Cine shows reduglication) /+(देरे A a | greeted?'

/yáié/ 'the cat' /lééá/ 'the star?'
/lɛ̃i̇́áa/ 'greeted?'

2.1.2.3. Tone. The phonotactics requires every vowel to have one tone. Tones are said to be inherent or determined. Most morphemes have a high or low tone associated with each of their vowels in the downward realisation in the morphemic sign pattern; such tones are said to be inherent. The tone of a morpheme, however, is sometimes determined by the tactical constructions in the lexology and morphology, which override any inherent tone: the realised tone of such a morph is said to be determined.

A determined tone is high, low, the same as or the opposite of the preceding tone. The morphology or lexology generates a marker for a determined tone which follows: the syllable of the affected tone: /''/ 'high', /''/ 'low', /*/ 'different', /=/ 'same'. The lines relating /'', ''/ go to sideways and's in the knot pattern, but the lines for /*, =/ go directly into the tactic pattern. The ordered or at the top of the tone pattern (5) allows any of the determined tone markers to override any inherent tone. The phonemic alternation pattern has the rules:

which provide for an imherent tone to go to zero when overridden

by a determined tone.

A determined tone is generated by means of a reduplication element (6) which takes the same choice at the next lower or (7) that the previous syllable did. The left hand branch is taken at either or (8) if /x/ has occurred, or the right hand branch if /=/ has occurred. (Chart 2.8)

An inherent tone is realised by taking the right hand branch at either ordered or (5, 8).

/ná/ 'cow', /nà/ 'spider'; /mɛ́n/ 'water', /mɛ̃n/
'five'; /bɔ̃ɔ́/ 'cap', /bɔ̃ɔ́/ 'outside'; /Lɛ̃X/ 'the definite
article', /a=/ nominal prefix, /mi``/ 'me' after /kõŋ/,
/yà´´/ 'I' immediately before an infinitive phrase.

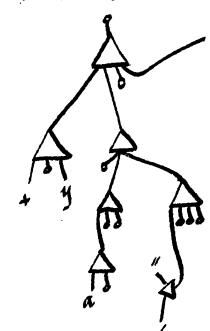
2.1.2.4. The optional final consonant sequence consists of /p, θ , t, c, k/ preceded optionally by /N/, or /s, 1, r, m, n, η /. (See Chart 2.9)

/Ndáp/ 'be ashamed', /kiáNp/ 'Freetown', /kó9/
'cut', /pàNθ/ 'small package', /pôt/ 'bamboo', /tôNt/ 'creek',
/bàc/ 'small oil palm tree', /pák/ 'bone', /méNk/ 'time',
/nés/ 'pineapple', /kúl/ 'drink', /kér/ 'tired', /sûm/ 'mouth',
/hún/ 'come', /sún/ 'pestle'.

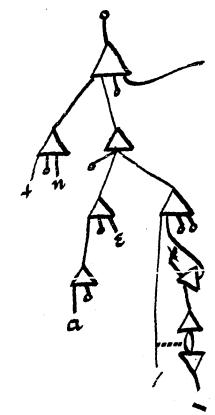
2.1.2.5. One syllable after another is generated until a

14 ya" 1 'I' immediately before infinitive phrase

Chart 2.8

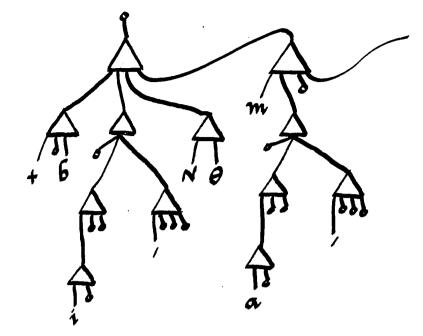


/na Ex / The cow'

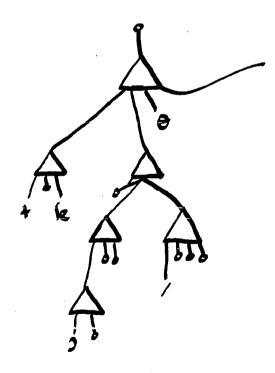


146ENOmál 'tie'

Chart 2.



/+k50/



juncture / 6, 6, ? / occurs.

2.1.2.6. Syllabification. The phonotactics provides that every syllable, except one beginning with /+/, have an initial consonant and that a syllable initial homorganic nasal occur only after /+/. Thus any single intervocalic consonant is the initial consonant of a syllable. Also in any intervocalic sequence of /N/ plus consonant, the syllable division is after the /N/. Using a hyphen to indicate syllable divisions, a few examples will illustrate the syllabification. (See Chart 2.10.)

/θό-kὲ/ 'the tree'

/kén/ 'knife'

/kén-lὲ/ 'the knife'

/kúNp/ 'hired help'

/kúN-pὲ/ 'the hired help'

/gbόk-sa/ 'scrub'

/bíNθ-má/ 'tie'

/kå-bà-ló/ 'horse'

2.1.3. The phonemic sign pattern consists of 37 phonemic signs leading down to 17 phonons. All phonemic signs are simple realisations of phonemes: i.e., there are no portmanteau realisations.

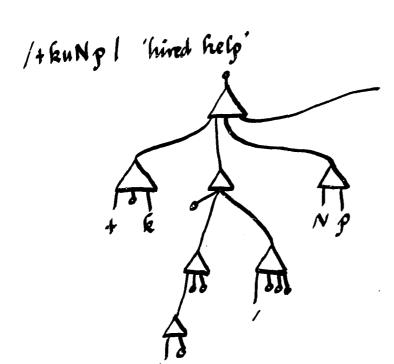
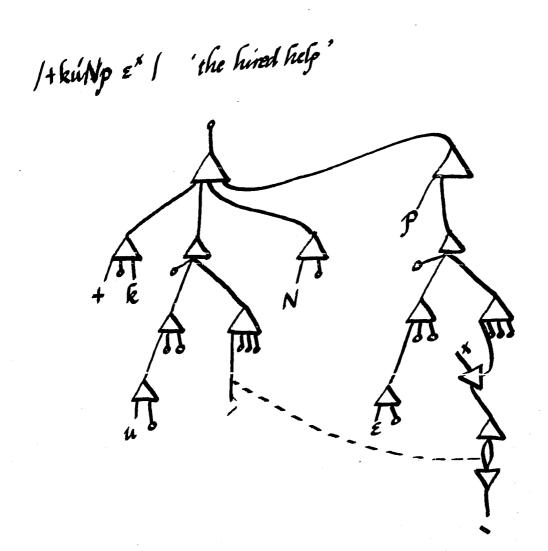


Chart 2.10



		Lb	Dn	Al	Pa	Ve	₽₽	ø
۷s	Cl	p	θ,	t	c	k		
	Cl	b		d	j	g .	gb	
	٧s	f		8	à	h	•	
	ø	v			y	r	₩	
	Na	m		n		ŋ		N
	La			1				
		Pa	g {		₽₽	Rd		
	Hi	i.			u	I		
	ø	e			o			
	Lo	ε	а	,	၁	A		

. / .

, / ,

? / ?

' / Tr

` / Bs

Voiceless /Vs/ rather than voiced hasbeen chosen as a hypophoneme since most phonemes are voiced.

/r/ has been assigned to the /Ve/ column since the phonetic realisation of a preceding homorganic nasal is velar in quality. Phonetically /r/ is quite retroflex, sounding

very much like an American /r/ in red. A preceding tautosyllabic vowel is decidely retroflex and centralised.

/tir/ 'town'
/kér/ 'tired'
/vér/ 'left over food'

It is possible to describe /l/ as realised by the phonon /Al/ alone. This solution would simplify the phonemic sign pattern by one phonon (/La/). It would, however, also complicate the hypophonotactics to such a degree that the absence of those complications is felt to more than offset the loss in simplicity which /La/ causes.

/I, A/ have the point of articulation of the preceding vowel and either the phonon /Hi/ or /Lo/. No occurrence of /I/ after /a/ has been found.

2.2. Hypophonology

2.2.1. The phonomic alternation pattern has the following rules:

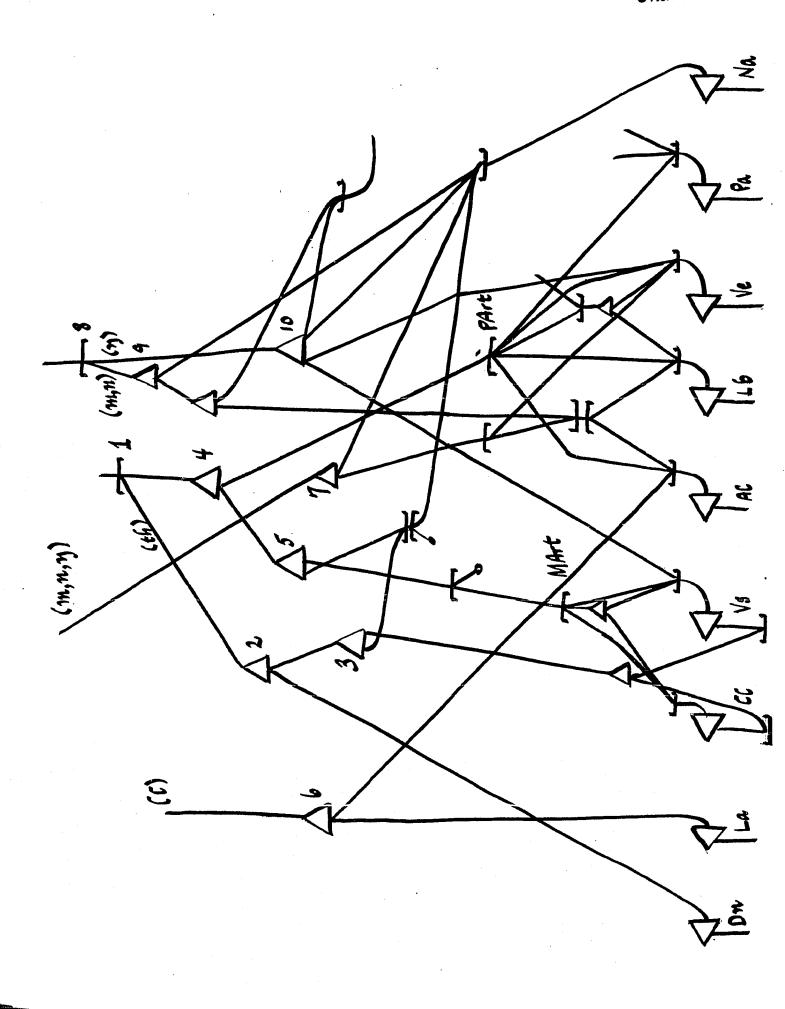
Cl, La / Cl

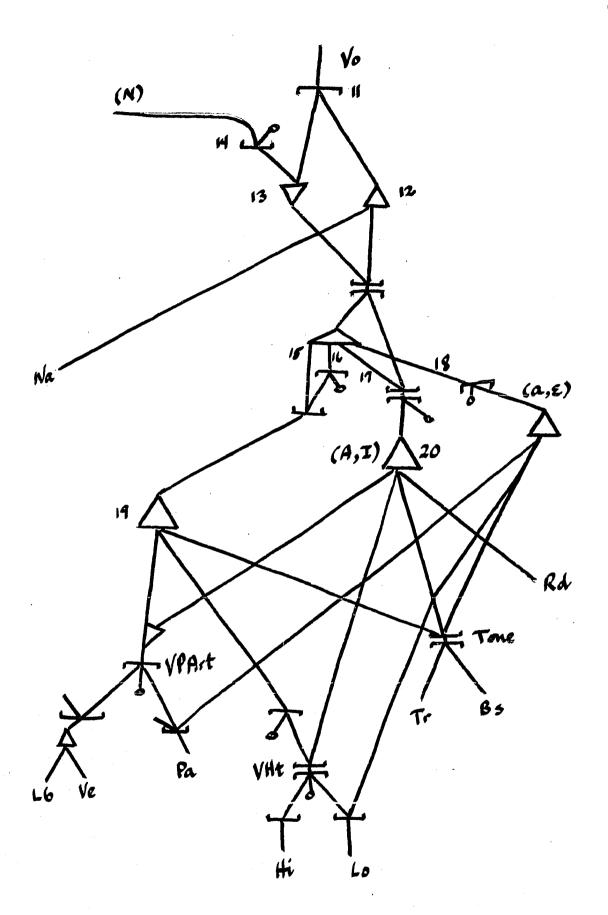
The phonological sequence P/Nléè/ 'stars' is realised as

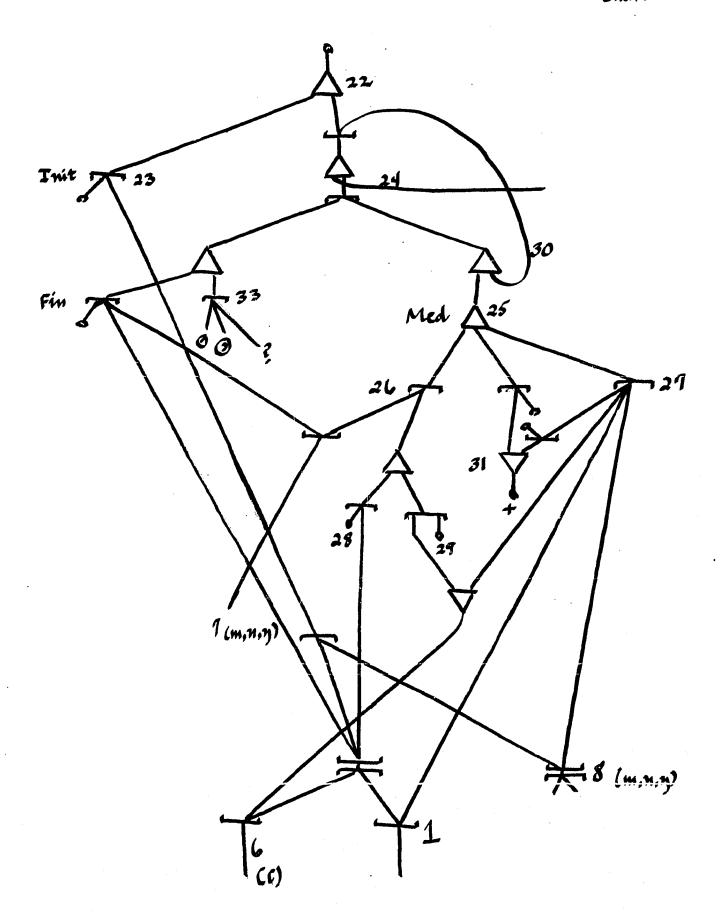
PN/Na Al Pa Pa/, but the sequence PN/Na Al/ is prohibited
La Tr Lo
Bs

by the the hypophonotactics. In such a case /Cl/ is the realisation of /La/ with the result H/Na Cl Pa Pa/.

-Al-- Tr Lo
Bs







2. Vs, Ø / Vs

P/η/ before a vowel nasalises the vowel, and is realised as
//ve·vs/. That is, P/η/ is realised as PN/ve·Na/, but the
hypophonotactics delays the /Na/ to cooccur with the vowel,
and the alternation pattern provides for the empty realisation
of /Vs/ to cooccur with /Ve/.

3. Na / Na + \emptyset

The hypophonotactics does not permit /Na/ followed by any consonant containing /Na/; in such a case the first /Na/ goes to zero.

- 4. All other realisations in the phononic alternation pattern pass through without encountering any nodes.
- 2.2.2. Hypophonotactics. The tactical patterns for the individual segments are discussed first, and then the patterns for the larger clusters. (See Charts 2.11-3)

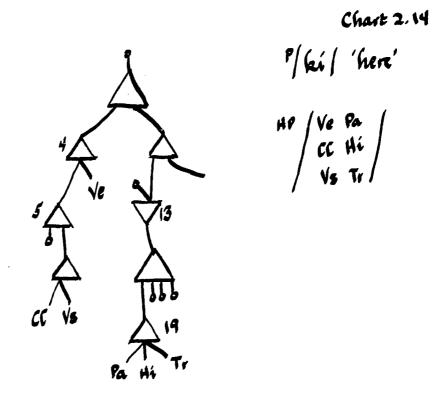
All individual consonant segments except those involving

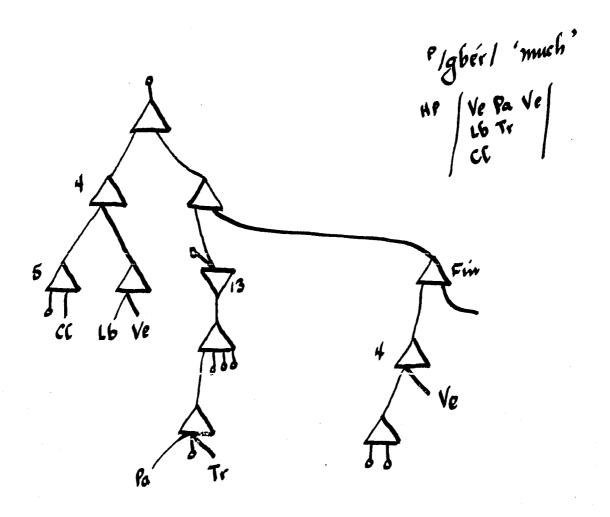
/La/ or /Na/ are generated below the or labelled 1. One line at 1 goes off to generate /Dn·Vs·Cl/, the realisation of P/0/. Since the ordered and 2 is below the unordered and 3, the /Dn/ generated by 2 is coextensive with both parts of 3. In this way the hypophonotactics provides that the homorganic nasal have the same point of articulation as the following consonant. (See Chart 2.14.)

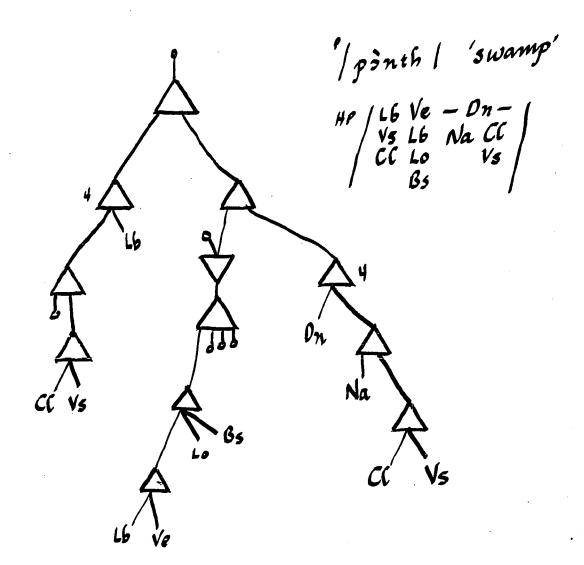
The other line at 1 goes to an unordered and (4) which generates an ordered and (3) and the point of articulation (PArt) for the other consonants. The ordered and (5) is similar to 3 in that it generates the optional homorganic nasal followed by the manner of articulation (MArt). As with the dental clusters, the point of articulation generated at 4 is coextensive with the entire consonant cluster. (See Charts 2.14-5.)

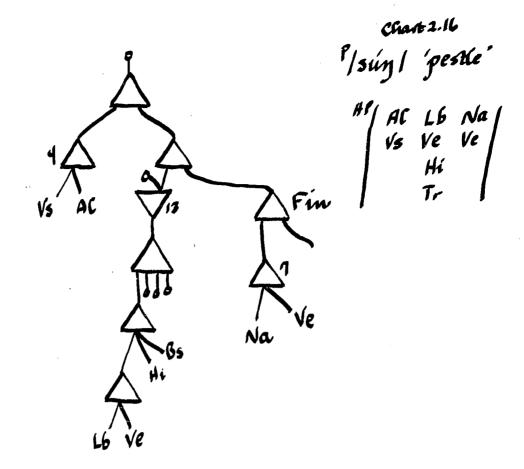
/Al·La/ is generated at 6. This segment has no homorganic nasal.

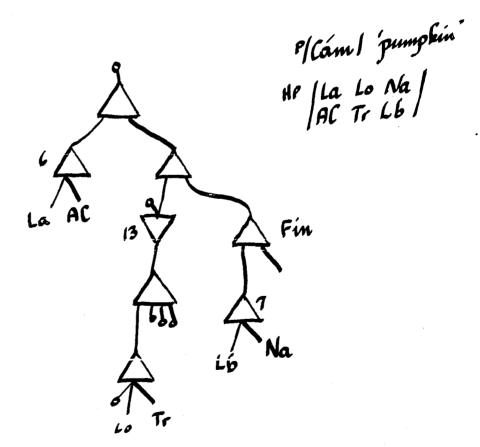
The nasal consonants are generated at two separate places. The and at 7 generates three segments /Na·(Lb·Al·Ve)/, the realisations of P/m, n, n/. The hypophonotactics does not allow a homorganic nasal before any nasal segment. (See Chart 2.16.) The other nasals are generated below 8. The or at 8 leads to two and s which nasalise a vowel following a nasal consonant. The and at 9 generates /Na/ coextensive with /Al/ or /Lb/ and with a later vowel cluster. An P/n/ before a vowel nasalises the vowel and is realised as H/Ve·Vs/; that is, the nasalisation











of the $/\eta$ / is delayed to the vowel, and there is an empty realisation of /Vs/. This relationship is generated by the and at 10. (See Chart 2.17.)

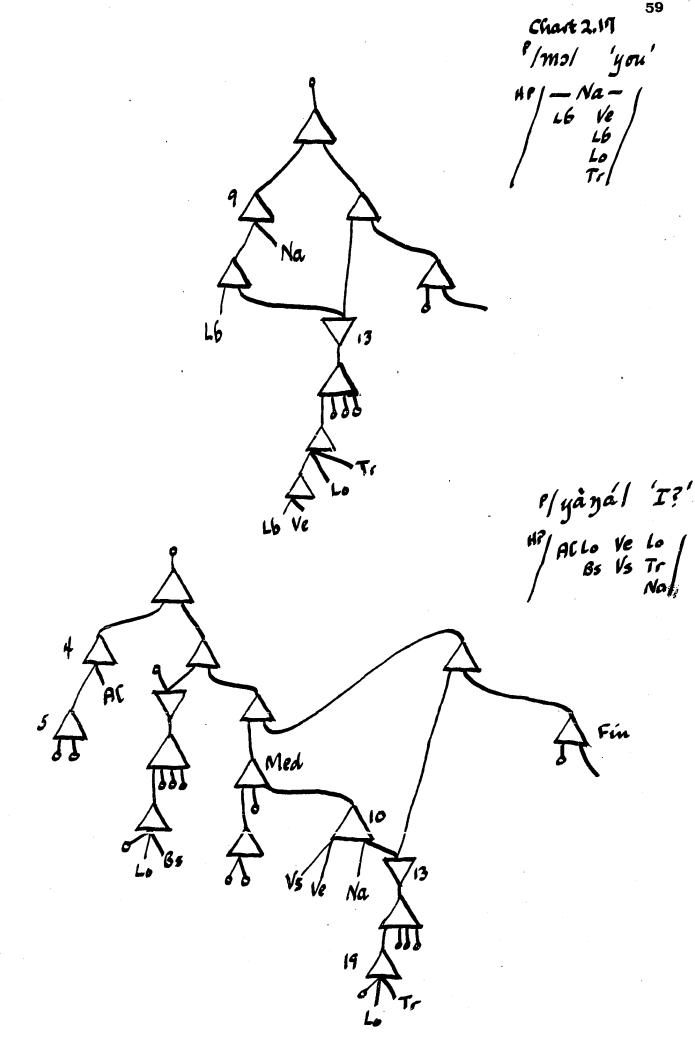
The vowel clusters are generated below 11. An unpredictably nasal vowel cluster is generated by the and at 12. A vowel cluster which is nonnasal or which occurs after a nasal consonant is generated by the sideways and at 13. If the vowel cluster is not nasal, the zero at 14 activates the and at 13. (See Chart 2.18.)

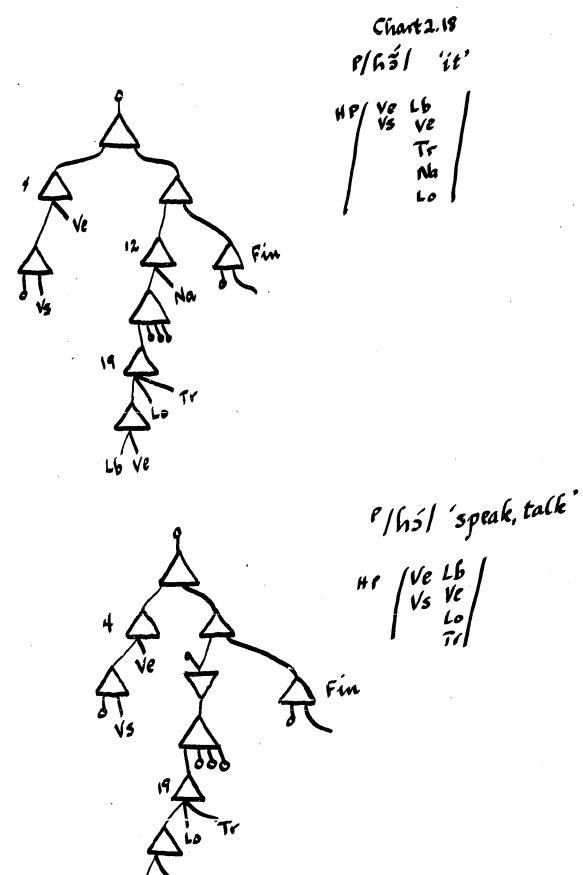
The realisation of P/A, I/ as the only vowel is generated by line 14; the realisation of any other single vowel by line 15; the realisation of a diphthong by lines 15 and 16; the realisation of /A/ following other vowel segments by line 17; and the realisation of a final /a, ɛ/ by line 18. (See Charts 2. 19-20)

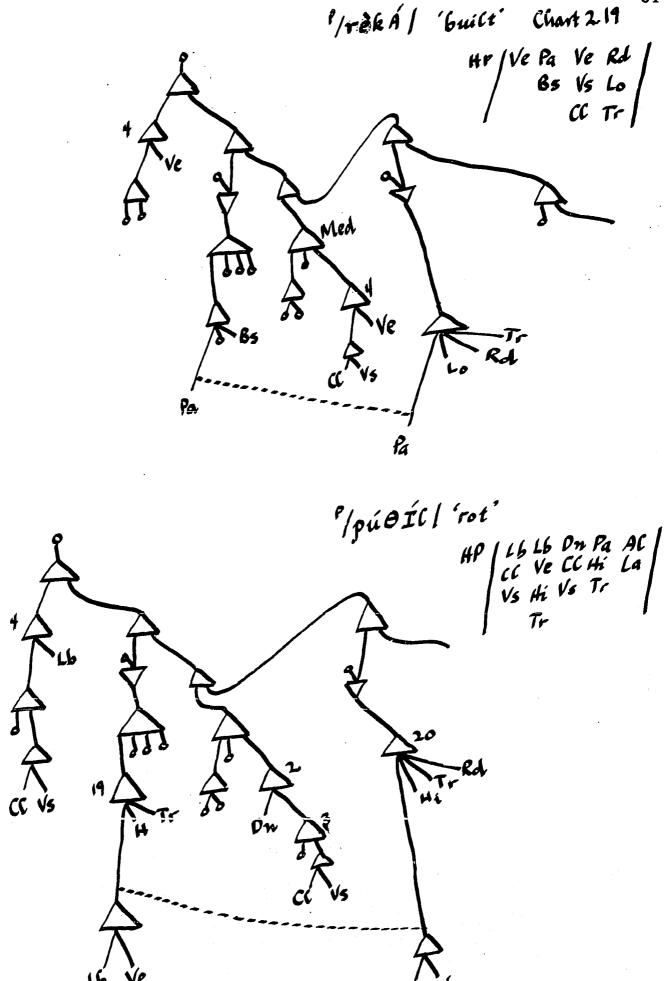
For most vowel segments the and at 19 generates the occurring hypophonemes. Each one consists of a point of articulation (VPart), a vowel height (VHt), and a tone (Tn). Line 18 generates /[Pa]·Lo/ for P/a, s/. The and at 20 accounts for /I, A/: it generates a reduplication marker /Rd/ which goes to zero in the knot pattern, a tone, /Ri/ or /Lo/, and by means of the reduplication element (21) the same point of articulation that the preceding vowel had.

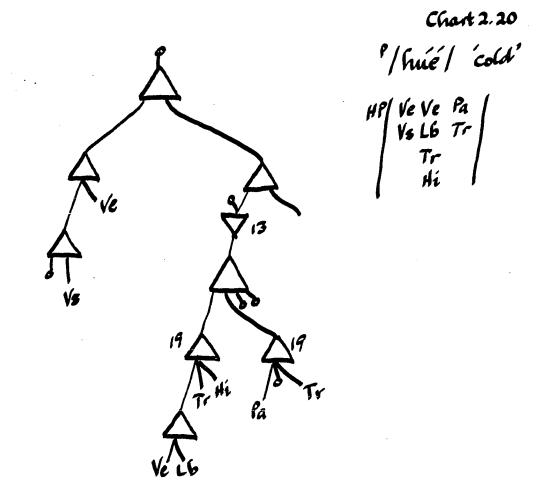
The clusters of consonantal segments are divided into three environments: clause initial, medial, and final.

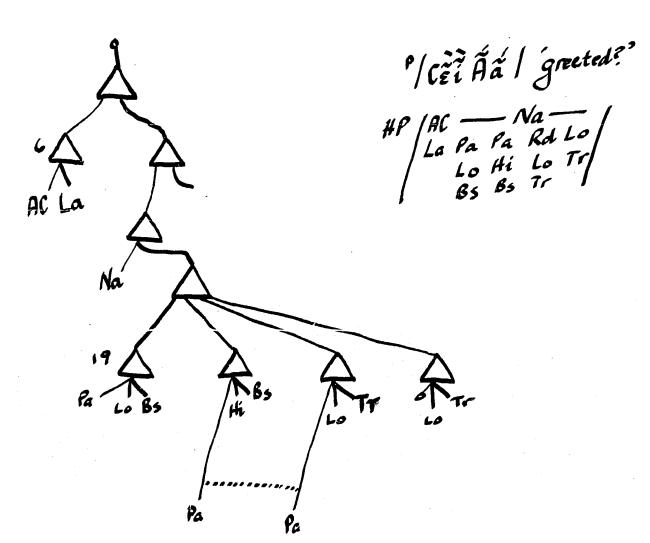
Vowel clusters occur after initial and medial consonant clusters











(24).

The optional clause initial consonant cluster (Init)23) is /Al·La/ (6), any cluster generated by 1, or a nasal generated by (7). (See Charts 2.21)(1.)

The clause medial cluster (Med, 25) consists of two parts. The first part is optional (the zeros at 28 and 29 taken together), the second (27) is obligatory unless /+/immediately precedes. The first part consists of either /La·Al/, any cluster generated by 1, or a nasal generated by 7. The second part consists of either /La·Al/ if the first part was not a nasal, any cluster generated by 1, or a nasal generated by 8. A preceding /+/ allows the second part to so be optional since /+/ (31) goes to zero in the knot pattern. (See Charts 2.22-3.)

A clause final consonant cluster (Fin, 32) is followed by a juncture (33) / O, O, ?/. The optional final cluster consists of either /Al·La/, any cluster generated by 1, or a nasal generated by 8. (See Chart: 2.24.)

2.2.3. Like other tactic patterns, the hypophonotactics generates a number of nonsense items. Nonsense segments (e.g. /Lb·Ve·Vs/) are precluded by the phonemic sign pattern, and the phonotactics rules out nonsense clusters, such as final /Lb·Cl/.

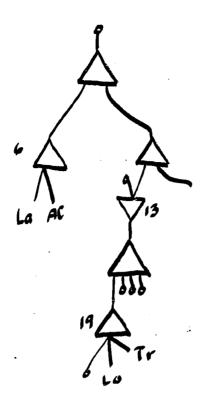
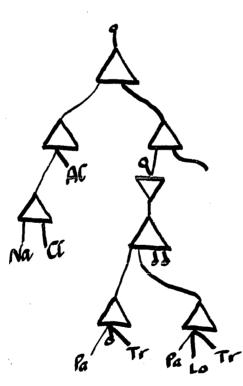


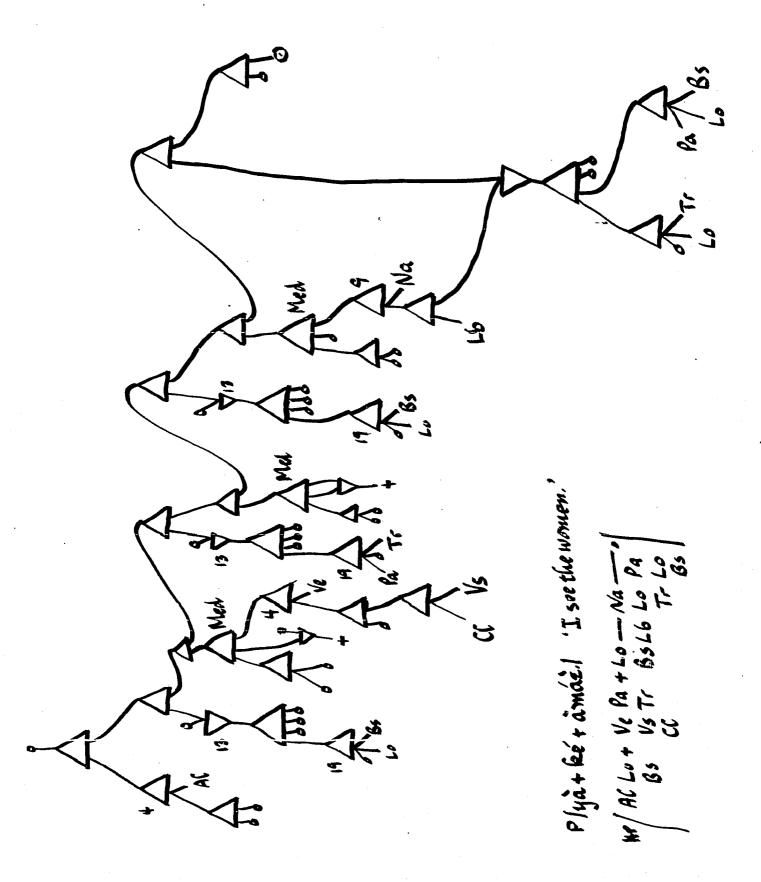
Chart 2.21
P/Cá | 'Lrife, Couse'
HP/Al Lo |
La Tr

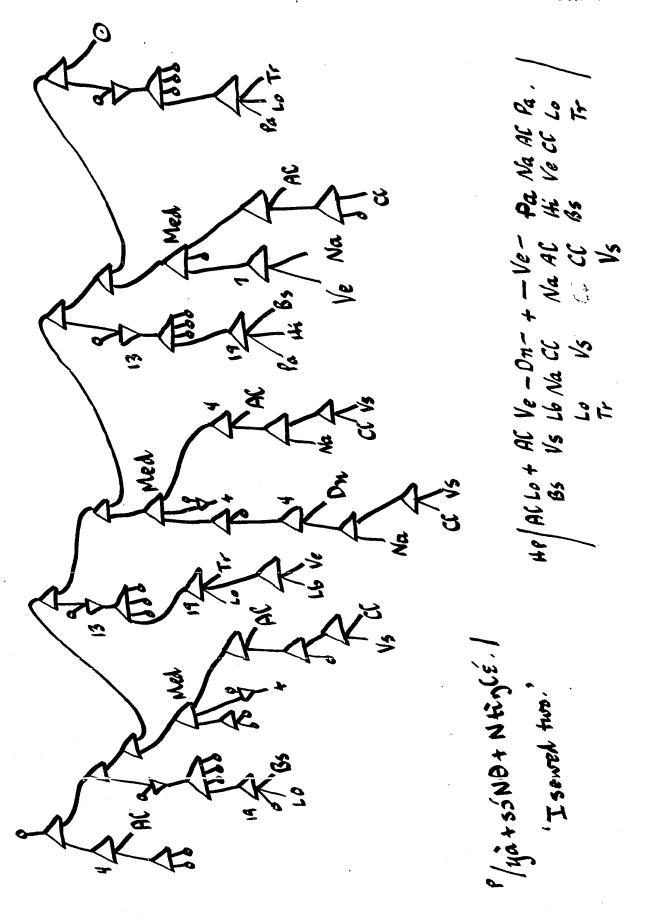


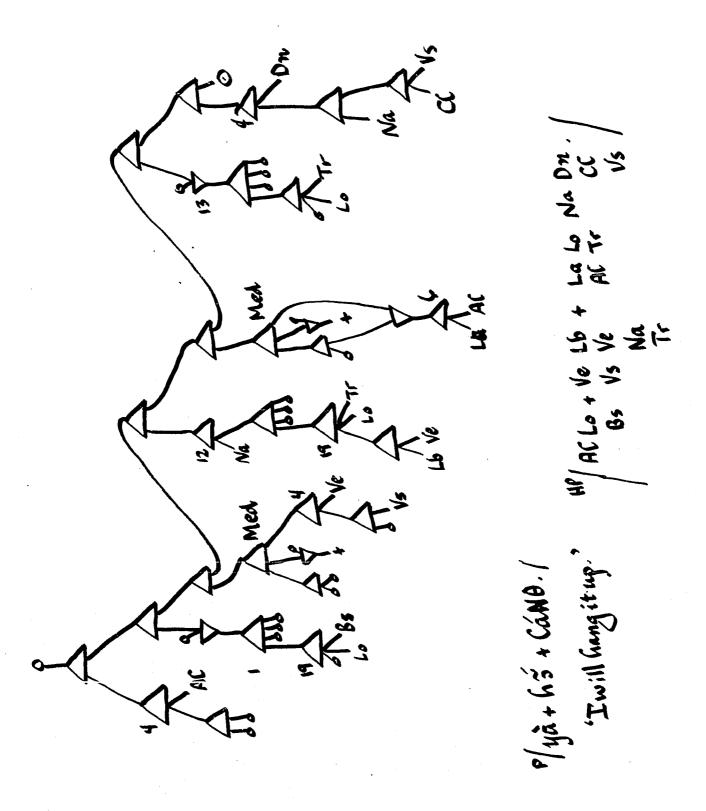
P/NCéil stars'

HP/-AC- Pa Pa/
Na CC Tr Lo

Bs/







III

Nominal Formations

3.1. Lexology. The lexotactics presented here is not intended to be complete, but only to give a rough idea of some of the more basic structures of that stratum as a help in understanding the morphology. In the examples of this section the top line line is in the orthography described in Chapter 1 with boundaries between consecutive lexemes (but not between simultaneous lexemes) shown by hyphens; the spaces correspond to morphemic word boundaries. The middle line contains an English translation of each individual lexeme; the bottom line is an English translation of the entire datum.

3.1.1. Typical clause types include:

Subject + Verb

làngbán--dè wò kí.
man -the he here.

The man is here.

má 15?

you there?

Are you there (at home)?

Subject + Adjective

yú--è wò pèth.

fish-the it sweet .

The fish tastes good.

yèncék--è hà à-pèth.

fish(pl)-the they prf-sweet.

The fish taste good.

thók--è vè hồ vil.

tree-the there it tall.

That tree is tall.

yà bèn.

I old.

I am old.

Note that the subject includes both the noun and the agreeing pronoun. The pronoun is always present, although the noun is often absent. There are also pronominal nouns which occur in the subject noun position, e.g. /wôn/ 'he'.

won wo hún kékéo.

he he come immediately.

He is coming himself right away.

Other clause types have transitive or intransitive verbs:

làngbán--dè wò cí mén--dè.

man -the he bring water-the.

The man brought water.

sái--έ lò thúkúl pέlè--έ.

dry season-the it dry rice-the.

The dry season will dry out the rice.

wê yê bốm nômá bên bùl. he then meet woman old one He met an old woman.

yà sákil.

I sal swim.

I swim.

kón wò ká cẻ gbếế: náè--é--iból,

Kong he past be walk road-the-along,

Kong was walking along the road,

hã bí hã yil.

they have to get-drunk

They will get drunk.

In a copulative clause with a second noun, the subject pronoun is followed by $^{L}/L\epsilon^{x}/$ (written in the orthography as $\underline{1\epsilon}$, $\underline{d\epsilon}$, or $\underline{\epsilon}$).

làngbán--dè wè--é báá mí.

man -the he-La father my.

The man is my father.

lá--m--dè wè--é.

wife-my-the she-Lε.

She is my wife.

wè--é lá--m--dè.

she-Le wife-my-the.

That is my wife.

Certain kinds of dependent clauses, such as relative clauses, end in $/L\epsilon/$:

làngbán--dè wò ki, wò rék kil--ló ki--è.

man -the he here, he build house-this here-Le.

This is the man who built this house.

nó--è bùl--lé wò ki, wò hún céncá ká--è.

man-the one-the he here, he come yesterday here-Le.

The same man is here who came yesterday.

làn dà--é là ŋ--hòmó--m--dè.

it it-Le it you-tell-me --Le.

That is what you told me.

Various other types of dependent clauses occur.

yè wò gbò hún--dè, η--hóm mi là.

When he already come-Lε, you-tell me that.

When he comes, tell me.

yà si là wò kốn hã--è.

I know it he already do--Le.

I know what he did.

yê wô hún--dê, yà wế yè ké. When he come--Le, I he then see. As soon as he came, I caw him.

Yes-no questions end in /?/, which is realised phonetically as an upward shift in pitch register.

wà kání tîr-kò.He go town-to.He is going to town.

wò kóní tír-kò?
he go town-to?
Is he going to town?

Wh-questions are introduced by an interrogative pronoun and end in /a/; since the pitch register for these questions is the same as for statements, the final juncture is /./.

yè mố jó--á.

what you eat-?

What are you eating?

híná wè--é nó pòkán-dè vè--á.

who he-Le human male-the there-?

Who is that man there?

à--híná hã--é hãn--á
pl-who they-Le they-?
Who are they?

kó híná ló wò gbikèní nè kó--á
to who there he run and go-?
Who did he run to?

là mó ha--á
what you do-?
What are you doing?

yè mó ké--á what you see-? What do you see?

pélè-- ndó kô n--yêmá--á
rice what? it you-want-?
How much rice do you want?

3.1.2. Nominal lexotactics. Nominal phrases and other formations occurs as subjects of a clause and as objects of verbs, postpositions, and prepositions. The subject construction will serve as an example of these uses.

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The noun phrase of the subject (Chart 3.1) consists of /gbo/ 'only' optionally, the noun, and optional possessive and modifying formations, which are sometimes themselves noun phrases. The subject ends optionally with the definite article /Le/ and deictics. Other subject formations, such as interrogative pronouns, pronominal nouns, etc., also occur as clause subjects.

i--wáá i-tiŋ
pl-palm prf-two

Two palm trees

ná mố--è

cow you-the

Your cow

ná má

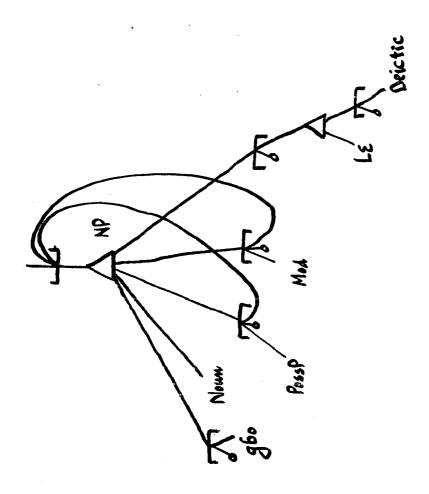
cow you

A cowoof yours

gbò rái--έ

only book-the

Only the book



véé sà--hil--lè
bird pl-prf-fly-the
The flying birds

wam--dó

boat-this

This boat

A possessive noun follows the noun possessed. The possessive noun is generated by the recursive loop leading from PossP to NP:

bík thi--báá mí thi--hālέ vὲ
mat pl-father me prf-other there
My father's other mats (there)

rái thi--bia--é
book prf-Bia-the
Bia's books

m--pél má--ànyá à--rà--é n--sànà--é
pl-net prf-people prf-three prf-new-the
The three men's new mats

Another possessive structure is also possible whereby $\underline{A's}$ \underline{B} is expressed as \underline{A} , his \underline{B} :

tá mí--è yèncék à-wè-é son me-the fish(pl) prf-he-the My son's fish

àmá à-bèn-dé kil thi-hà thi-tòn-dé women prf-old-the house prf-they prf-small-the The old women's small houses

A noun is sometimes modified by a nonpossessive noun phrase, generated by the recursive loop: leading from Mod back to NP:

kil mi póth sànà--é
house me mud new-the
My new mud house

3.1.3. The following lexemes are assumed as downward realisations from the semology:

Noun stems with or without plural:

rái 'book' rái pl 'books'

yú ¹fish'

yú·pl 'fish (pl)'

Adjective stems:

bom 'big'

kith 'short'

Person markers of personal pronouns with or without plural (for third person pronouns the class marker):

1 'I

1.pl 'we'

W 'it, he, she'

AS 'they'

An emphatic marker /n/ indicating that the pronominal reference is to be the nominal subject of the clause:

1 n 'I myself'

An object marker with the object of a transitive verb:

W.Obj 'him, her, it'

3.1.4. Class system. From the semology it is known what noun stem occurs and whether plural occurs or not. The lexotactics assigns each noun to its proper class.

In Sherbro a noun usually belongs unpredictable to two noun classes, one for the singular and another for the plural; the class membership is determined by the agreeing pronoun and noun affix. The eleven third person noun classes with the corresponding pronouns and affixes are:

	class	pronoun	affix
1.	W	₩Ĵ	Ø
2.	L	131	li
3.	K	kò	ø
4.	Н	hð	ø
5.	AS	ha	a, si
6.	AI	ha	a, i
7.	AN	ha	a, N

bảŋk	KN	rope	kůśú	K N c	ashew
bêlmà	H N	sling	lá	W AI 1	ouse
bîk	н тн	mat	làŋgbáŋ	W AN y	oung man
bêếŋ	к тн	bench	láthàn	к тн	leg
bó	H I	bread	lél	L	ground
bò	н тн	kitchen	min	к тн	spirit
bòm	L	largemess	ná	W AS	cow
bố	н тн	сар	nà	W AS	spider
cá	н тн	feather	nés	H I	pineapple
fè	H	money	nåŋkbᡛ	W AS	sheep
gbim	K	dust	pán	H	evening
hál	к тн	river	pàn	r .	moon
j é	N .	food	p é	н тн	stone
jém	L	fire	p él	K N	net
j ó	H	cooked rice	p ènté	W AN	brother
kàbàló	W AN	horse	pi	W AN	fly
kèfè	K N	pepper	pimpi	H N	black tumbler (tree)
kén	L NL	knife .	pòlòŋ	K N	cotton tree
kér	W AS	snake	póth	К	dirt
kélèŋ	L	goodness/	p ùlà	IA W	kind of ant
kiámp(kď)	L	Freetown	róntúma	K M	(iron) nail
kil	н тн	house	séŋ	W AI	kind of ant
kòTòŋ	W AN	cockroach	sònthò	H N	(human) nail
kòthà	н тн	cloth	silò	W AI	bee
kùmbà	н тн	shirt	sõk	W AS	chicken

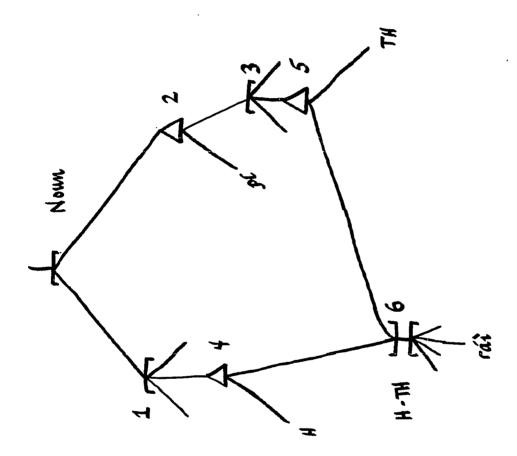
súŋ	X MAK TH	pestle
śś	I	morning
t î r	н тн	town
tò	W AI	oil palm grub
tú	H N	
tú	I	iron
tùl	L NL	raffi a
véé	W AS	bird
wòm	н тн	canoe, boat
wòm	I	wood
wú	L	death
vîk	K N	kav

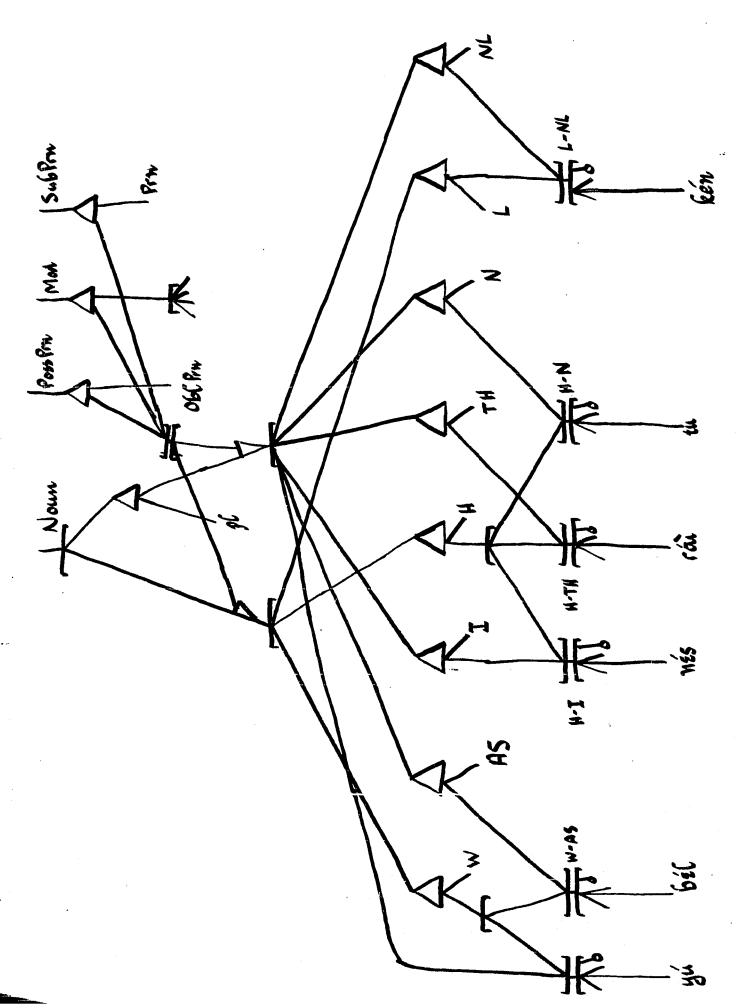
8.	TH	thà	thi
9.	N	mà	N
10.	NL	mà	N li
11.	I	~hồ	i

Classes 1-4 are generally singular and 5-11 generally plural. Classes AS, AI, AN all have the same pronoun and modifier affix, but different affixes with the noun. The NL class has two affixes: /N/ as prefix and /li/ as suffix.

There is no definitely predictable relationship correlating the classes for the singular and plural, but in general certain pairings are more common than others: L-NL, H-TH, K-N, H-I. The W class pairs with the AS, AI, and AN classes to include almost all animate nouns. The L-NL group has a very few common nouns, a large number of abstract nouns, all place names. The N-class forms a group of collective and mass nouns, especially liquids. Chart 3.2 gives a list of some common nouns with their classes.

Chart 3.3 shows how the proper class markers are attached to the noun /rái/ 'book'. From structures higher in the lexotactics the point Noun is reached; the path to 2 is chosen if /pl/ occurs, the path to 1 if not. The other lines at 1 and 3 go to other noun classes. The and at 4 associates the class marker /H/ with the noun (i.e. if singular), and the and at 5 associates the class marker /TH/ with the noun (i.e. if plural). From either 4 or 5 the path leads back to 6, and the

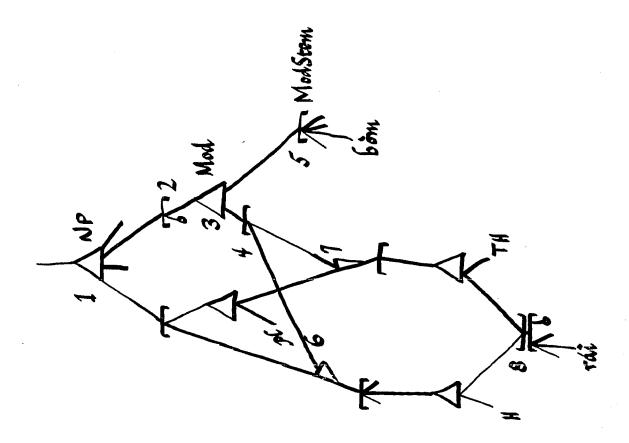




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downward or leads to /rái/ and the other nouns of the H-TH group. Chart 3.4 gives a larger part of the tactics showing examples from several groups.

- Agreement. Possessive pronouns and the adjectives have prefixes which agree with the nouns they modify, and subject pronouns agree with subject nouns. These agreements are handled by reduplication elements which duplicate the class marker of the noun. Chart 3.5 extends Chart 3.3 to include the modifier. After the noun has been assigned to the proper class (with the result /rai.H/ or /rai.pl.TH/), the noun phrase (1) optionally (2) generates a modifier (3) consisting of a prefix (4) and a stem (5): e.g. and adjective /bom/ 'big'. The prefix consists of the same class marker that the preceding noun had: if the noun had /H/, path 6 is taken; if it had /TH/, path 7 is taken. The nature of the reduplication element requires that the choice at the next downward or below be the same as the choice made by the controlling element (in this case /rái/). At 8 the zero of the ordered or is taken. possessive pronouns and subject pronouns agree with the subject noun in the same way; they are shown on Chart 3.4.
- 3.1.6. Personal pronouns. Subject pronouns agree with the subject noun. Subject pronouns in subjects without nouns, possessive pronouns, and object pronouns are controlled by the semology. /po/ occurs as an indefinite animate subject pronoun;

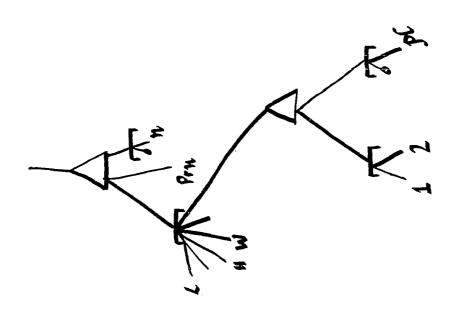


it has no corresponding pronominal noun. /la/ occurs as an indefinite inanimate subject and object pronoun; it is also the agreeing subject pronoun if the subject is an infinitive phrase. The possessive and object pronouns always have the same form which may be referred to as the oblique pronoun. The third person pronouns are always the same for subject and object. The locative pronoun $/l_{2}$ / is discussed with the verbs. The third person pronouns have been listed in §3.1.4.; the first and second person pronouns are:

		Subject	Oblique
sg	1	yà	mi
	2	^m ɔ́ 1	^m 2
pl	1	yi	hĩ
	2	hã	no

Note that the pronouns for the second plural and the H-class differ only by tone: 2d pl /ha/, H /ha/.

3.1.7. There are pronominal nouns corresponding to each noun class, and to the first and second person pronouns, and to the indefinite pronoun /la/; these occur as emphatic subject nouns. They consist of the pronoun marker followed by an emphatic lexeme /n/. The choice of class membership is determined by the semology in such cases. The structure is shown on Chart 3.6. (Cf. also §3.4.5.)



3.1.8. k-Nouns. Four nouns have special forms as possessed nouns: /wanta/ 'daughter', /ta/ 'son', /po/ 'husband', /la/ 'wife'. The lexotactics generates a final /k/ when they are possessed. In the lexemic sign pattern /wanta k/ is realised as /wank/. (See also §3.2.1.)

wank pinté--m--di
wanta-k pinté mi-Li
daughter brother me-the
My brother's daughter

tá±-k lá mó--è son wife you-the Your wife's son

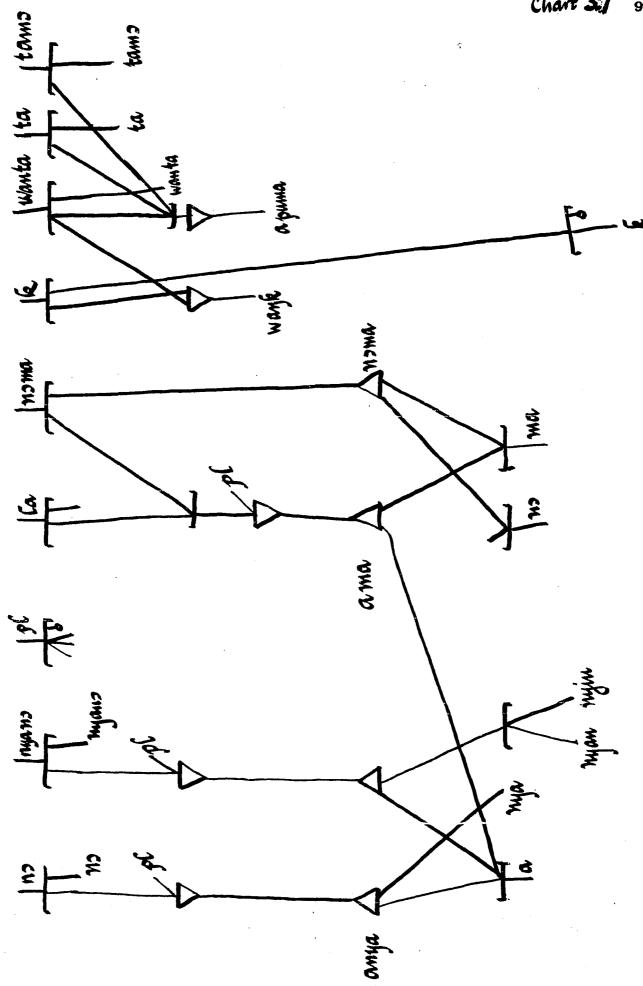
à--lá≥-k tá mó-è
wife son you-the
Your son's wife

- 3.2. Lexemic sign pattern. Many lines go through the lexemic sign pattern without encountering any nodes. Only those which do encounter nodes are considered below.
- 3.2.1. Nouns. A number of irregular noun plurals are generated as portmanteau realisations (Chart 3.7):
 - 1. no / a nya + no 'human being'
 no pl / a nya
 - 2. nyano / a nya n + nya no 'stranger' nyano pl / a nya n
 - yu / yencεk + yu 'fish'
 yu'pl / yencεk
 - 4. yen / n yek + yen 'thing'
 yen pl / n yen
 - 5. wono / a wok + wo no 'slave'
 wono pl / a wok
 - 6. la / a ma + la 'wife'

 noma / a ma + no ma 'woman'

 (la, noma)pl/ a ma
- 7. /wanta/ 'daughter' with /k/ (See §3.1.8) is realised as /wank/, but with /pl/ as /apuma/ 'children; /apuma/ is also the plural of /tamp/ 'boy' and /ta/ 'son'.

 wanta / (apuma, wank) + wanta



k / wank + k

tamo / apuma + tamo

ta / apuma + ta

wanta k / wank

(wanta, tamo, ta) pl / apuma

/pl/ is realised as zero if no portmanteau with it

3.2.2. Pronouns. If the pronoun marker /prn/ occurs with one of the third person class markers, a portmanteau realisation occurs and leads to a pronoun; otherwise the prefix of the

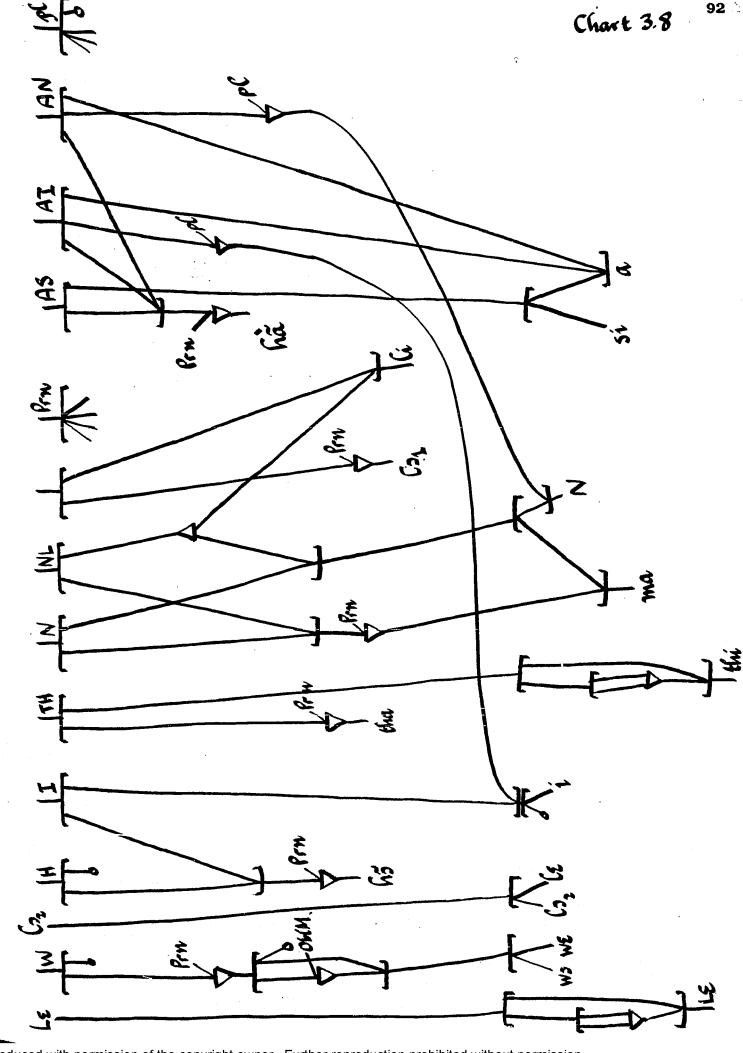
(Chart 3.8)

occurs.

class results.

hõ H•Prn hõ K.Prn kο 101 li L.Prn 101 hã AS (si, a) AS · Prn hã hã AI AI Prn AI • pl i hã AN hã AN.Prn AN·pl tha thi TH · Prn tha N N·Prn ma NL (N li) NL · Prn

/wo/ is optional as a subject pronoun but obligatory as an oblique pronoun.



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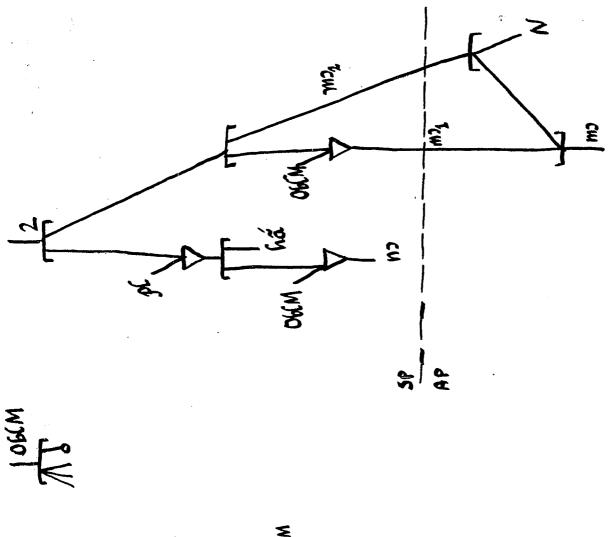
$$W / w_1 + Ø W \cdot Prn / w_2$$
 $w_2 + (w_2, Ø) w_2 \cdot OblM / w_3$

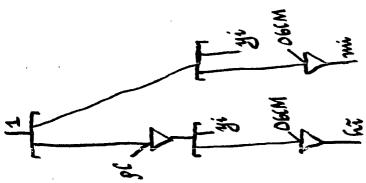
The first and second person pronouns are generated as occurring as subject pronouns unless the object marker /ObjM/ is present. The lexemic sign pattern also generates the plural pronouns as portmanteaus (like /yencek, anya/ etc.). (Chart 3.9)

Other pronouns are:

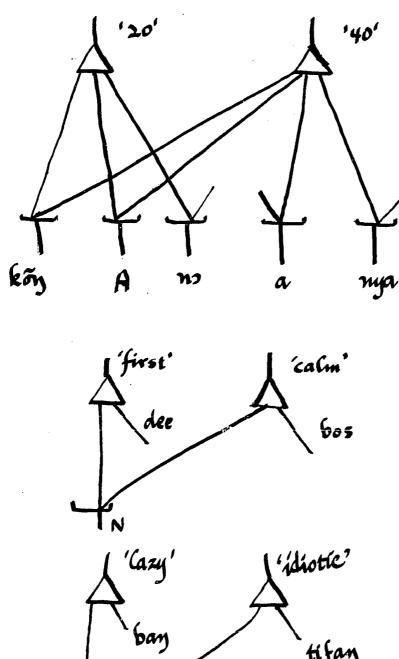
3.2.3. Some adjectives have an unchanging prefix which does not agree with the modified noun (Chart 3.10; see also §3.4.1.3.):

The <u>li</u>-adjectives have /li/ plus root:









The i-adjectives have i/ and root:

i-gbeth 'dirty'

i-bol 'cold'

The N-adjectives consist of N and the adjective root:

m-bos 'calm' n-dap 'ashamed'

n-dee 'first' n-dolan 'last'

n-ten 'clever' m-baban 'deaf'

Also:

kõhõnõ / kõŋ A no '20'

kõhanya / kõŋ A a nya '40'

3.3. Morphemic alternation pattern.

 $k / k + \emptyset$ (Chart 3.7; see also §3.1.8.)

The prefix LN/i/ is optional: (Chart 3.8)

i / i, Ø

i-wáá i-tín 'two oil palm trees'

i-wáá tiŋ

wáá i-tín

wáá tìŋ

The prefix LN /si/ is realised as M /si/ with nouns and as M /a/ with adjectives and possessive pronouns. (Chart 3.8)

ná--sí à--bòm--dέ

ná·AS AS-bòm-Le

cow(pl) prf-big-the

The big cows

Two adjacent occurrences of LN/thi/ or LN/LE/ in the lexology are reduced to: one in the morphology. (Chart 3.8)

rái thi--tòntòn-dé
rái-thi thi-tòntòn-Le
book-pl prf-small-the
The small books

The prefix $^{LN}/N/$ occurs as $^{M}/ma/$ before possessive pronouns and as $^{M}/N/$ elsewhere. (Chart 3.8)

n--thók má--mi n--víl--dê
N--thok ma--mi N--vil--Lε
pl--tree prf-me prf-tall-the
My tall trees

The subject pronoun $^{LN}/m_2/$ occurs as $^{M}/N/$ in the imperative, as $^{M}/h_2/$ before $^{LN}/n/$, and optionally as $^{M}/m_2/$ or $^{M}/N/$ elsewhere. The subject pronoun $/m_2/$ and the oblique pronoun $/m_1/$ merge in the alternation pattern.

ŋ-ká mí fè mô-é. 'Give me your money.'
hô-m mô là si. 'You yourself know that.'
mô bi fè-é. 'You have money.'
m-bi fè-é. 'You have money.'

The pronouns $^{LN}/w_0$, $1_{0_2}/$ are realised as $^{M}/w_{\epsilon}$, $1\epsilon/$ before $^{M}/L\epsilon$, ye/ and as $^{M}/w_0$, $1_{0_2}/$ elsewhere. (Chart 3.8; see also §3.4.2.4.)

In the alternation pattern three lexons /nya/ occur: one from LS/nyano/ 'stranger', one from LS/anya/ 'people', and one from LS/anyan/ 'strangers'; these all merge into one morpheme /nya/.

3.4. The morphotactics generates morphemic words. It is convenient to divide the word into four categories: nominal, verbal, adverb, and particle. (Chart 3.11). Every word is marked by an initial /+/; any word occurs with clause markers /Le, a, ye/ and with final clause junctures. Where otherwise not apparent, a second line showing the morphemes is added in the examples.

3.4.1. The nominal words are again divisible into one group which occurs with the definite article /Le/ and another group which does not. The first group optionally ends in /Le/, sometimes followed by the deictic suffix /o/. Postpositions sometimes also occur.

kil--16

kil--Lε^x--ό

house--the-this

This house

kil--mi--ái

house me-in

In my house

kil--ló--ái

kil--Lex--ó--ái

house-the-this-in

In this house

mésá bòm-dó

mésá bòm-LeX--ó

table big-the-this

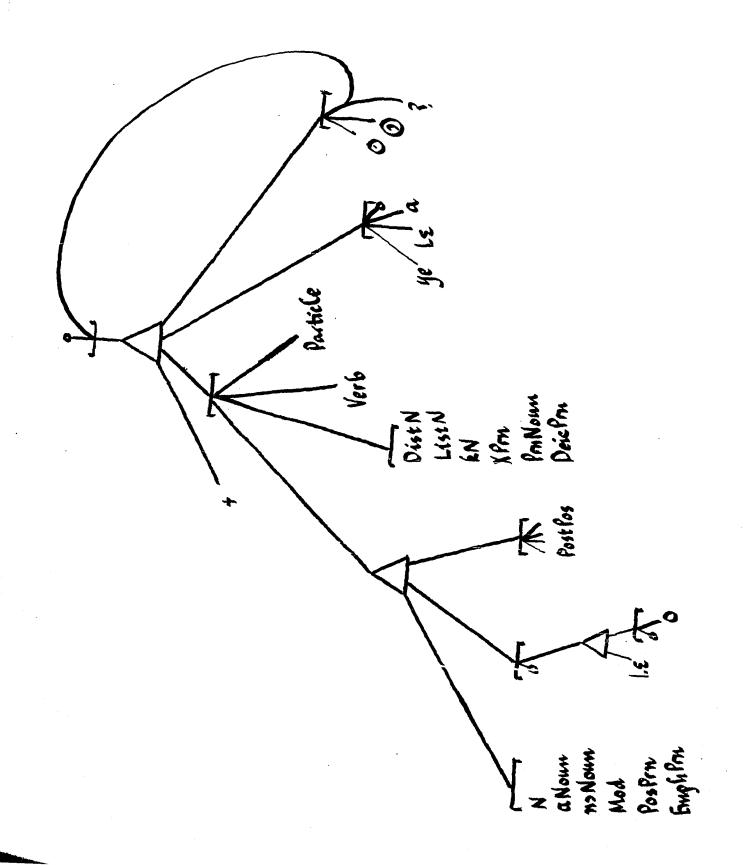
This table

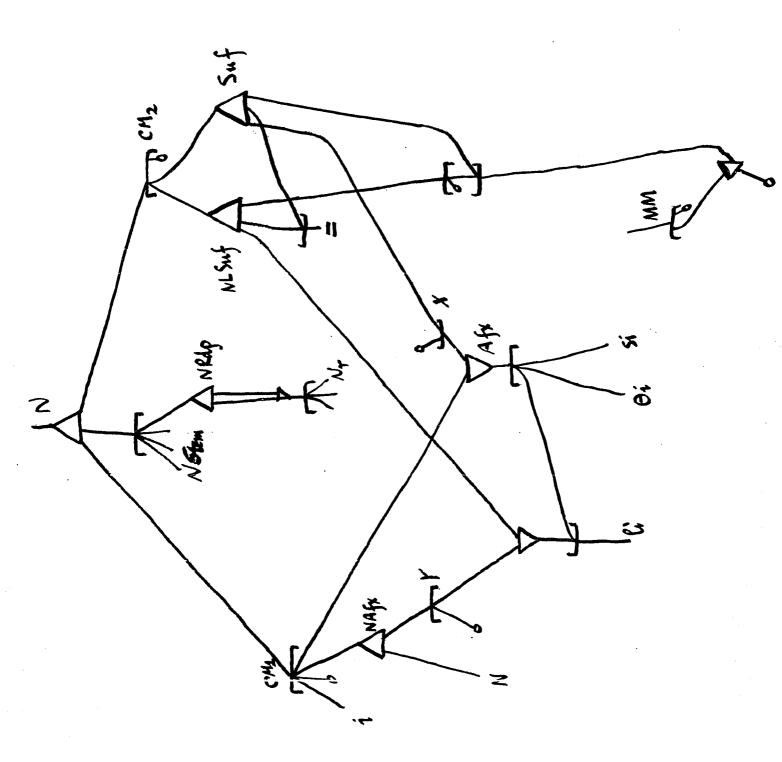
kil--lé--ái

house-the-in

In the house

9100





3.4.1.1. The morphotactics describes the order of noun stem and affix (§3.1.4).

A modification marker (MM) is supplied by the lexotactics when any <u>PossP</u> or <u>Mod</u> occurs with a noun. It is optional when the noun occurs with <u>/Le/</u> alone. Its function is to delay the nominal affixes (Afx) until after the noun stem. In the morphemic alternation pattern it goes to zero if it is prohibited by the morphotactics.

MM / MM + Ø

Chart 3.12 shows the structure for nouns of all classes; the following charts show parts of the structure relevant to the individual classes.

Most noun stems in the singular occur without affix.

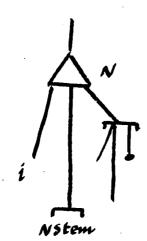
The modification marker is irrelevant to these nouns, and it goes to zero in the morphemic alternation pattern. (Chart 3.12)

rái 'book' bànk 'rope'
bèlmà 'cow' nés 'pineapple'
kàbàló 'horse' lá 'louse'
ná 'cow'

/i/ always precedes the noun stem Chart 3.13):

î-nés 'pineapples' î-lá 'lice'

The position of the affixes /li, thi, si/ depends on whether





i nés

the modification marker (MM) occurs. Chart 3.14 shows the structure for a noun such as /rái/'book'. LN/rái·thi/ results in M/thi rái/ (Chart 3.14). The numbers on the chart refer to the relative timing of the morphemes. The ordered and N provides that line CM₁ occur first and then NStem and then CM₂; this is shown as times 1, 2, and 3. Since there is no /MM/ occurring, line CM₂ goes to zero; therefore, the upward and Afx is completed by CM₂ at any time, say time 1.1, and by the zero at X at any time shortly thereafter, say time 1.2: thus, the morpheme thi occurs at time 1.2. At time 2 /rái/ occurs, and at time 3 CM₂ goes to zero. The final result is M/thi rái/in that order.

If LN/rái·thi·MM/ occurs, the order is reversed.

As before CM₁ is at time 1, /rái/ at time 2, and CM₂ at time 3.

The impulse from CM₁ arrives at Afx at waits. M/rái/ occurs at time 2: CM₂ allows the/first path to occur at time 3.1; this completes Afx at time 3.1, and M/thi/ occurs at time 3.1.

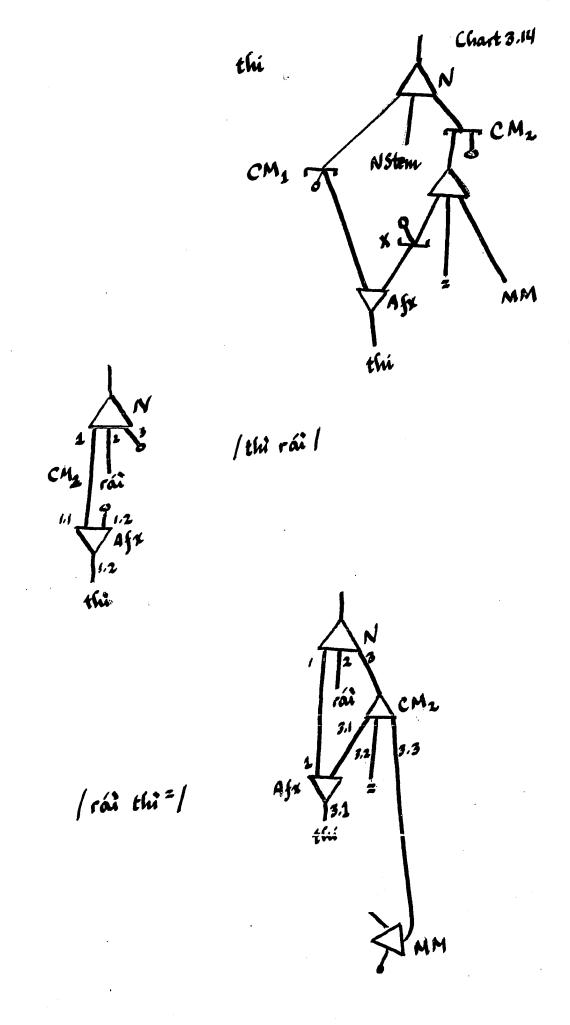
M/=/ occurs at time 3.2, and M/MM/ goes to zero at time 3.3.

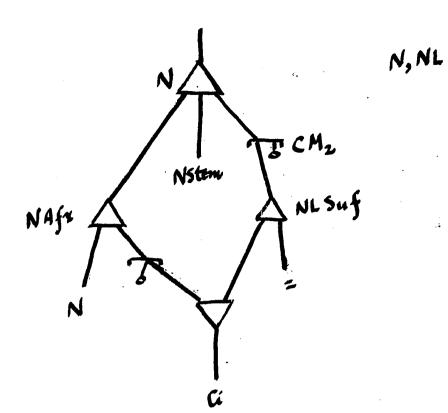
The result is M/rái thi=/. The /=/ will override the high tone of /thi/ in the phonology.

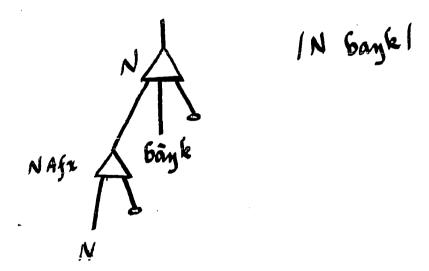
/li, si/ work in the same way:

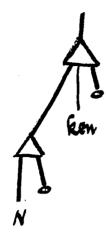
ken·li / li kén 'knife''
ken·li MM / kén li=

na·si / si ná 'cows'
na·si MM / ná si⁼

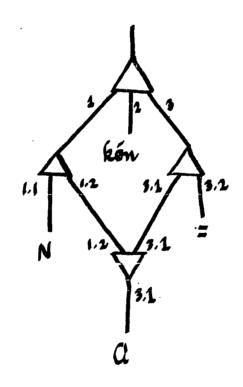








/N Rén |



/N Kén Ci=/

Nouns of the /N/ and /NL/ classes are somewhat different (Chart 3.15). The possibilities from the lexology are:

bank'N 'ropes' ken'(N li) knives'
bank'N MM ken'(N li) MM

The modification marker does not affect these nouns; if it occurs in the lexology, it goes to zero in the morphemic alternation pattern. With $\frac{LN}{ken} \cdot (N \text{ li}) / \frac{CM_2}{2}$ goes to zero since \underline{MM} does not occur, and therefore the zero at \underline{Y} is also taken so that the result is \underline{M}/N ken/ (Chart 3.16).

If, however, \underline{MM} does occur, as in \underline{LN} /ken (N li) MM/, the upward and delays /li/ until after the noun stem with the result \underline{M} /N ken li[±]/. (Chart 3.16)

Most noun stems are single roots, but some are reduplicated. The reduplicated roots do not occur unreduplicated.

NStem / N₁, N₂, N₃, ...NRdp NRdp / N_r =N_r

malanmalan 'lightening'

jenjen 'rubber'

bòébòé 'daughter of Bòé'

gbágbá 'hook'

ghógbó 'hammer'

nî ênî ê 'chicken pox'

Two reduplications are not perfect; I have not accounted for them formally:

kónikón

'daughter of Koni'

gbògbòth

'sour orange'

3.4.1.2. Several nouns denoting human beings have the prefix /a/ (Chart 3.17):

aNoun / a (nya, nyan, nyin, ma, puma, wok)

anya 'people, men'

ama 'women'

anyan 'strangers'

apuma 'children'

anyin 'strangers'

awok 'slaves'

Several have /no/ in the singular:

 n_0 Noun / $(n_0 [ma]), ((nya, wo) n_0)$

noma 'woman'

nyano 'stranger'

wono 'slave'

A number of nouns are formed with /hol/ 'entrance' as the second element; often the other morpheme of the word does not occur independently.

niphol 'mouth' kilhol 'door'

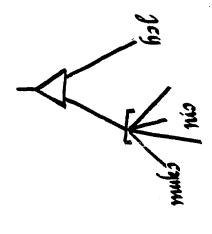
mukohol 'eyebrows' sokahol 'towards daybreak'

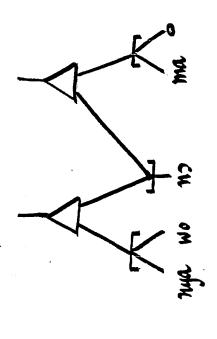
benkhol 'entrance to road'

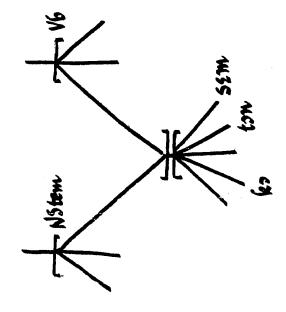
pothohol 'spring'

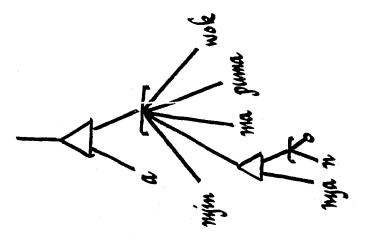
saihol 'approach of dry

season*









3.4.1.3. A number of noun stems are the same as verb stems (Chart 3.17). The following chart gives the stem with the meaning as a verb and its meaning and class membership as a noun:

ko	'go'	Ħ	'journey'
ton	'sing'	TH	'song'
sem	'stand'	TH	'place to stand'
gbee	'walk'	тн	'journey'
gbikeni	'run'	TH	'race'
co	'fight'	L	'fighting'
		TH	'a fight'
mith	'hate'	TH	'hatred'
thukul	'become hot'	H	'sweat'
gbem	'bear'	N	'fruit'
		I	'barrenness'
hinth	'lie down'	TH	'bed'
hok	'talk'	H	'word'
lol	'sleep	I	'insomnia'
wu	'die'	L	'death'
celi	'sit'	н	'place to sit'
dum	take care of	I	'ward'

3.4.1.4. Modifiers. In the lexology a prefix governed by the modified noun is associated with each adjective. Some adjectives are always preceded by certain prefix, and no other prefix occurs.

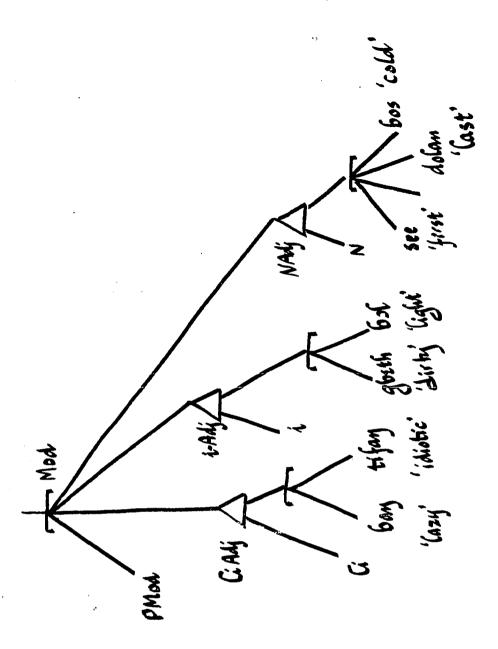
Mod/ PMod, NAdj, liAdj, iAdj

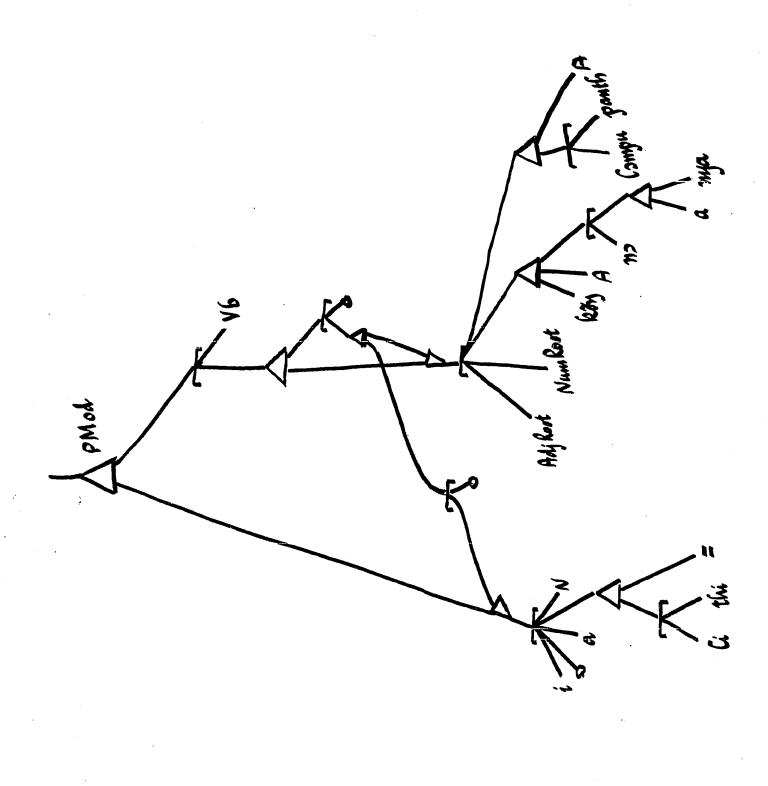
(See Chart 3.18)

Other modifiers (PMod) alway occur with the lexologically determined prefix or 9. Both adjective and verbal stems occur.

wòm ci-- $\hat{\epsilon}$ boat carry--the Car (lit. 'the boat that carries')

Chart 3.20 gives further examples of adjectives agreeing with nouns. The adjective stem occurs singly and reduplicated; in itself it consists of an adjective or numeral root or the numeral stem for '20' or '40'





X

My X is/are big.

rái 'book'

rái mi-é hồ bòm.

rái thi-mi-é thà thi-bòm.

bèlmà 'sling'

bèlmà mi hố bòm.

m-belma ma-mi-e ma m-bom.

ná 'xow'

ná mi wò bòm.

ná sá-mí-è hầ à-bòm.

lá 'louse'

lá mi-è wò bòm.

i-lá á-mi-è hã à-bòm.

kabaló 'horse'

kàbàló mi-è wò bòm.

ŋ-kabaló á-mi-è ha a-bom.

bank 'rope'

bàŋk mi-έ kò bòm.

m-bàŋk mi-έ mà m-bòm.

nés

'pineapple' nés mi-è ho bom.

î-nés î-mî-è hố î-bòm.

kén 'knife'

kén-dî mi-è lò li-bòm.

ŋ-kén-di má-mi-è mà m-bòm.

n--dângbán-- à-kélèn à--hiòl--lé
N+-làngbán à-kélèn à--hiòl--Le^X
pl-men prf-good prf-four-the

búsèl li-köhöñó nè wàŋ
bushel prf-twenty and ten
Thirty bushels

The four good men

2.

In the reduplicated adjective the reduplication contains either the adjective stem alone or together with the prefix (Chart 3.19):

AdjRdp / =Prf =AdjStem

tòn 'small', tòntòn, àtòntòn, àtònàtòn

hã hún à--tiŋ--à--tiŋ

they come prf-two-prf-two

They come two-by-two

The 20-40- number is literally the expression for 'whole man' or 'whole men' referring to the ten fingers and ten toes of one man.

 $20-40-Num / k\tilde{o}\eta A (n_0, (a nya))$

/kon/ 'complete', /A/ inflectional suffix, /no/ 'man', /anya/ 'men'.

Two verbs have derived forms which function as adjectives having a meaning of a condition already attained (like an English

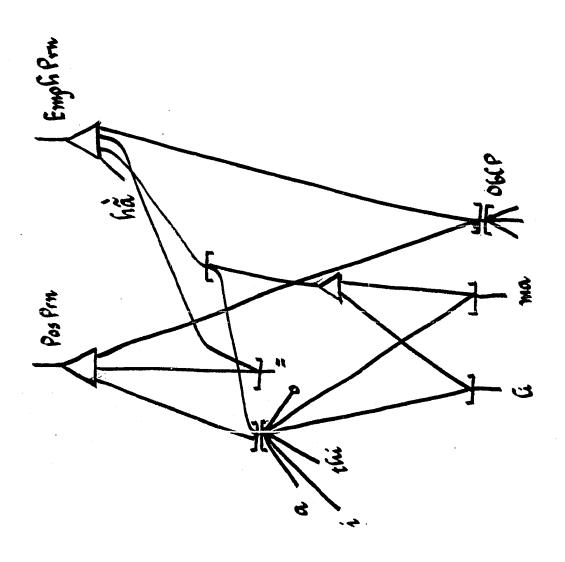
past participle). The suffix is /A/. (See Chart 3.19)

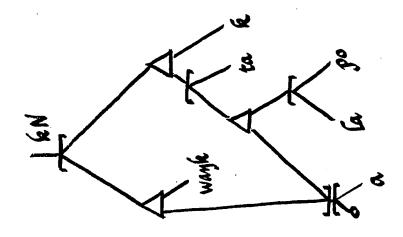
3.4.1.5. The possessive pronouns consist of a prefix determined by the lexology and an oblique (object or possessive) pronoun.

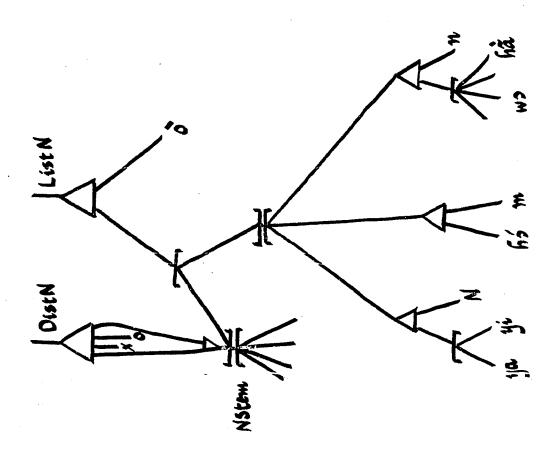
Their tone is that of the preceding syllable.

Chart 3.20 gives futher examples of possessive pronouns agreeing with nouns.

3.4.1.6. The emphatic possessive pronoun is like the possessive pronoun with /hā/ as the possessed noun except that with NL-nouns both prefixes /li ma/ occur; it precedes the possessed noun (Chart 3.21):







ha-li--ma--ma n-kén-dè
emph-prf-prf-you prf-knife-the
Your own knives

- 3.4.2. The second group never occurs with /Le/.
- 3.4.2.1. The distributive noun (NDist) occurs without any modifiers; it is formed by the reduplication of the noun stem with an intervening $/o^X/$. No occurrence of the distributive of a reduplicated noun occurred in my material. (Chart 3.21)

DistN / NStem o^X =NStem

rái--ó--rái 'every book' or 'each book'

nó--ò--nó 'everyone' or 'each one'

yèŋ--ó--yèŋ 'everything' or 'each thing'

ná--ò--ná 'ëvery cow' or 'each cow'

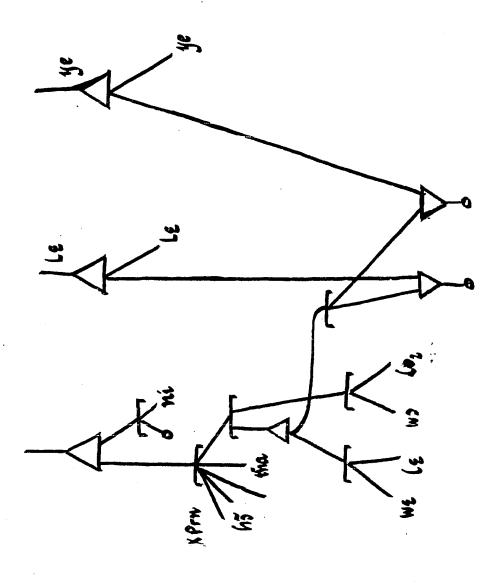
3.4.2.2. A type of listing used most often with proper nouns and pronominal nouns is generated as (Chart 3.22):

ListN / N o =

wòn--ò, hóm--ó, yàh--ò 'He, you, and I'

có--ó, hárí--ò, kônilyàs--ò 'Co, Harry, and Cornelius'

3.4.2.3. The k-nouns /wank, lak, pok/ have an optional prefix /a/ which does not seem to alter the meaning. (Chart 3.22)



kN / (a wank), (((a (la, po)), ta) k)

3.4.2.4. The subject and object pronouns (XPrn) are all single morpemes: (Chart 3.23)

XPrn / ya, mi, mo, mo, wo, hō, lo, ko, la, lo₂, yi, hī, hā, no, hā, tha, ma, po

/le, we/ occur before /Le, ye/; /lo2, wo/ elsewhere. (Chart 3.23).

bià wè--é nó--è, wò bi hã ké wè--é.

Bia he-Le man-the, he have to see he-Le

Bis is the man who will see him.

bià \hat{w} è-- $\hat{\epsilon}$ \hat{n} ó-- $\hat{\epsilon}$, \hat{w} ò bi \hat{h} à \hat{k} ó \hat{l} è-- $\hat{\epsilon}$. Bia he-L ϵ man-the, he have to go there-L ϵ

Bia is the man who will go there.

nè yà wè--yè ké.

and I he-then see.

And then I saw him.

nè yà lè--yè kó.

And I there-then go.

And then I went there.

The negative suffix /ni₁/ occurs with object pronouns (Chart 3.33):

NegPrn / XPrn ni

with the orange of the entire the state of

yà cé wó--n ké.

I be he-not see.

I used not to see him.

3.4.2.5. The pronominal noun occurs with the subject pronoun as the subject of a clause; it consists of the subject pronoun $\frac{h^2}{h^2}$ for the second singular) and a nasal. It also occurs in lists with the morpheme $\frac{h^2}{h^2}$.

PrnNoun / ((ya, yi) ŋ), (ho m), (wo, ko, ho, lo₁, la, hã, hã, tha, ma) n)

3.4.2.6. Three deictic pronouns occur; in my material these are all third person.

DeicPrn / XPrn (no, ne, lo)

wono 'that'

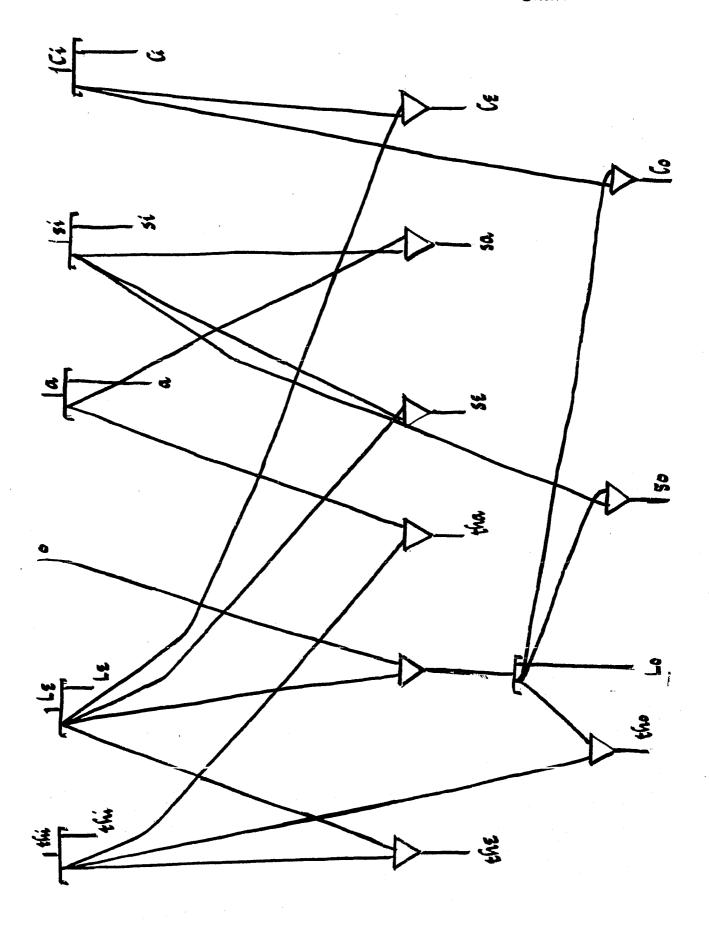
wone 'this'

Wolso 'that'

3.5. Morphemic sign pattern. The suffixes /thi, si, li/
enter into certain portmanteau realisations with following
/a, Le, Le-o/; the following chart is generated by the structure
shown on Chart 3.24.

thi tha the tho si sa se so li -- le lo

Chart 3.14



rái-ó 'this book'

rái-thó 'these books'

kén-do 'this knife'

ná-sò 'these cows'

Also: Le-o / Lo

3.6. Morphonic alternation pattern. In the morphonic alternation pattern MN/L/ is realised as P/1/ after /1, m, n, m/ and as zero elsewhere.

 MN /mi/ 'me' is realised as M /mi, m/: /m/ occurs only after vowels, and /mi/ occurs anywhere.

Verbal Formations

4. Lexology. The verb phrase consists of one or more verbs and optionally adverbial particles, an object, the reflexive particle /ni₂/, and the optional negative particle /ni₁/. If more than one verb occurs, the last one is the head verb and the preceding ones are attributive verbs. The order of the constituents of the verb phrase is determined by the lexotactics.

Attributive verbs are /ce/ 'be', /kon/
'have become, finished', or an auxiliary verb such as /ko/
'go', /hun/ 'come', /bo/ 'can', /si/ 'know how to', /yema/
'want to'. All attributive verbs also occur as head verbs.

The adverbial particles are /ka/ 'a long time past', /na/ 'recently, /vethe/ 'a few days ago', /pae/ 'a week or so ago', /ki/ 'distant future', /mu/ 'yet'.

Objects are nouns, pronouns, locative phrases in /ko/, or clauses. A noun phrase, locative phrase, or clause follows the verb phrase; a pronoun object is a part of the verb phrase. In discussing the tactics of the verb phrase below only pronoun objects will be considered.

Verbs which do not occur with objects are called intransitive verbs. Verbs which occur with noun phrases or their replacing pronouns as objects are called transitive verbs. Some verbs have two objects—an indirect and a direct object as determined by the semology; they are called indirect

object verbs. Some verbs which occur with locative phrases in /ko/ or with the replacing pr pronoun $/l_{2}$ / are called l_{2} -verbs.

The reflexive suffix /ni₂/ is found with a great many verbs; besides its basic reflexive meaning, in the plural it also has the meaning 'together' or 'each other'.

homa--ni 'talk to oneself'

ke--ni 'see oneself'

keth-ni 'cut oneself'

gbeska--ni 'walk together'

fosi--ni 'hit oneself repeatedly'

/ni₂/ also occurs as an intensive with /muni/ 'return':

muni-ni 'certainly return'

The otherwise unattested root /gbike/ is always followed by /ni₂/:

gbike--ni 'run'

The reflexive and negative suffixes fall together in the lexemic knot pattern:

- There is also an imperative verb phrase.
- 4.1. Three types of verb phrases may be distinguished: the nonfinite verb phrase, the finite verb phrase, and the imperative verb phrase.
- 4.1.1. The nonfinite verb phrase contains at least one

infinitive phrase (Chart 4.1.).

NFVP / Q hã R [P] [HVb] [ni2]
hã infinitive marker
ni2 reflexive particle

Certain combinations of lexemes optionally precede the infinitive phrase:

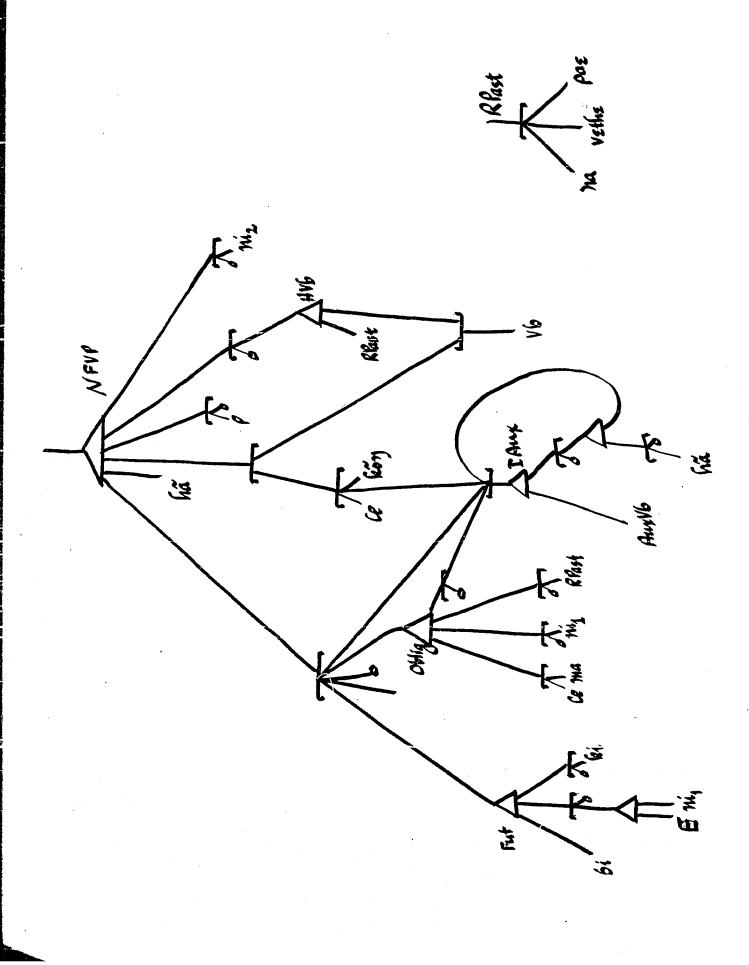
/ [Fut, con, Oblig, IAux] Fut / bi [A ni₁] [ki] Oblig / (ce, ma) [ni₁] RPast [IAux] RPast / [na, vethe, pae] coŋ 'will' 'have' bi hã 'will' bi inflectional particle ni, negative particle ki 'will later' ce 'be' 'recently' na vethe 'a few days ago'

An auxiliary verb occurs either alone or with the infinitive marker $/h\tilde{a}/;$ sometimes there is a sequence of auxiliary verbs.

'a week or so ago'

раε

IAux / AuxVb [[hã] IAux]
AuxVb / bɔ, kɔ, si, yema,...



yá hầ kôni

I to be-going

I ought to be going.

wà bi hà yil (Chart 4.2)

he have to get-drunk

He will get drunk.

nó pòkán bèn wò bi hã hún kébél-kò human male old he have to come farmhouse to An old man will come into the farm house.

yà bí hã cé wò ké I have to be he see

I will be seeing him.

yà bí kí hã kômá mô
I have will to go-with you
I will go with you.

yà bí hầ hối hấ kôni

I have to try to be-going

I will try to go.

yà cón hầ kó I will to go

I will go in the far distant future.

hà cé nà hà cé kéámp--kò (Chart 4.2)
they be recently to be Freetown-at
They were supposed to be in Freetown.

yà má hấ kố I ought to go I ought to go.

yà má-n hã kố I ought-not to go I ought not to go.

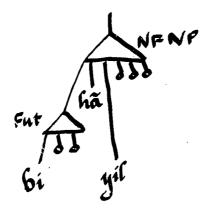
bő yèmá hã hã yà ka sákil (Chart 4.3) I want to can to to swim go I want to be able to go swimming.

yà yèmá bố kố sákil

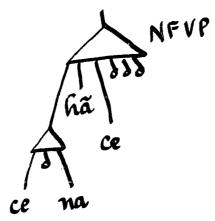
I want can go swim

I want to be able to go swimming.

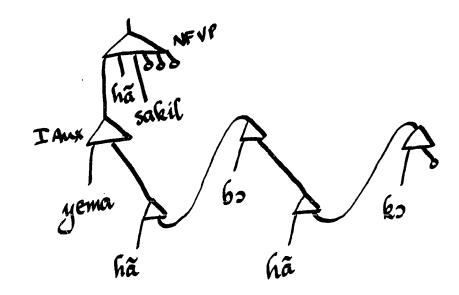
w3 bí hã yíl



hà cé nà hà cé kiámp kð.



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bo 'can'
ko 'go'
si 'know how to'
yema 'want to'

The infinitive phrase itself begins with the infinitive marker $\hbar \tilde{a}$ followed by a verb phrase:

R / (ce, kon, IAux) + Vb

HVb / RPast Vb

R + HVb / Vb

The ordered or at R specifies that at that point an attributive verb will occur, if there is one, rather than the head verb.

The ordered or above Vb specifies that a head verb alone will occur before the pronoun if possible (i.e. if an attributive verb does not also occur), if not, the head verb will occur after the pronoun.

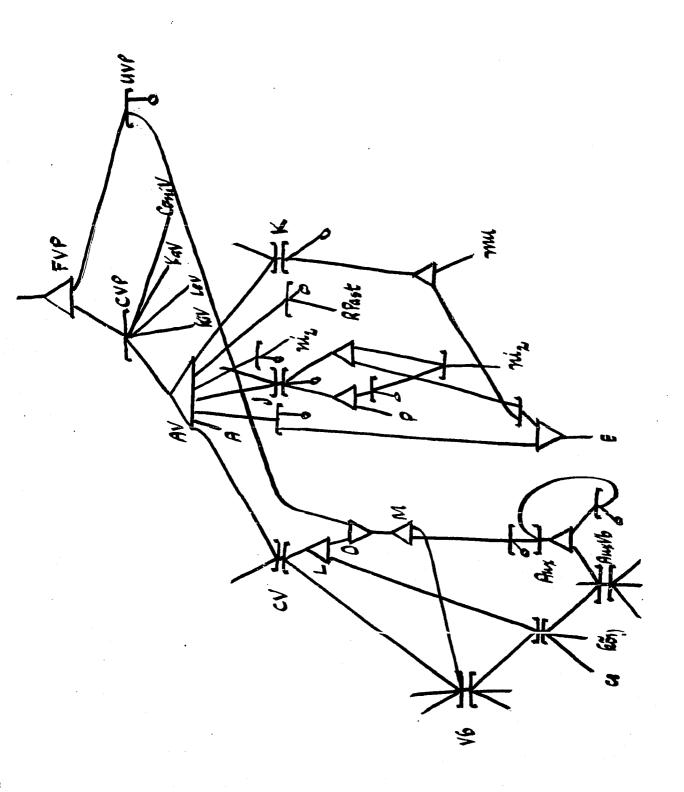
4.1.2. The finite verb phrase has one or two parts: (Chart 4.4)

 $FVP / (UVP + \emptyset)$

The first part (CVP) consists of the first, or conjugated, verb (CV), pronoun object, and adverbial particle; if the verb phrase has more than one verb, the remaining ones (UVP) follow the first part.

Five types of conjugated werb phrases are found:

CVP / AV, KiV, KaV, CeniV, LeV



4.1.2.1. The AV-phrase (Chart 4.4):

The conjugated verb is either the head verb (Vb) or an attributive verb; if it is an attributive verb, the head verb comes at the end of FVP as required by the upward and above M.

The optional negative particle follows an occurring pronoun; if there is no pronoum, E occurs before the negative particle.

E inflectional particle

If /mu/ occurs, /E/ also occurs whether there is an object pronoun or not.

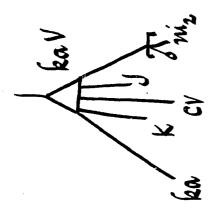
The unconjugated verb phrase consists of the head verb preceded by any number of auxiliary verbs. 4.1.2.2. In the <u>KiV-phrase</u> a pronoun object always precedes the conjugated verb (Chart 4.5):

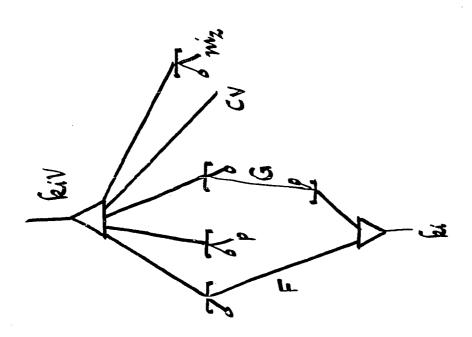
The optional adverbial particle /ki/ occurs either before or after the pronoun object; the variation in position corresponds to no: difference in meaning.

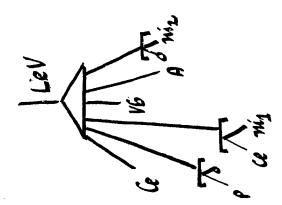
4.1.2.3. The the <u>KaV-phrase</u> the adverbial particle /ka/ is the first element. It is followed by the conjugated verb, the pronoun object, /mu/, and the reflexive particle /ni₂/ (Chart 4.5):

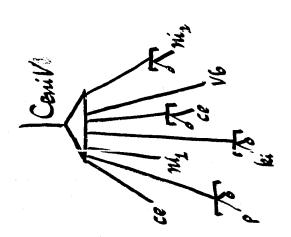
4.1.2.4. There is no negative construction corresponding exactly to the <u>KiV</u> one, but the <u>CeniV</u>-construction is roughly parallel to it in usage (Chart 4.6):

4.1.2.5. The <u>LeV</u>-construction is peculiar in that the head verb is followed by /A/. /ce/ occurs only in the positive. (Chart 4.6)









yà ké mò (Chart 4.7)

I see you

I see you.

yà ci--έ má--ni (Chart 4.7)

yà ci-A ma--ni

I carry it-not

I did not carry it.

yén--jó--è hố bi gbốs kélèn something-eat-the it has smell good Something smells good.

yà kônthi--é sôk--sé

I catch-freq-A chicken-pl-the

I caught the chickens.

mố kệthế **ni--**n mú you cut-A self-not yet You have not cut yourself yet.

wê--yê kố rék kîl wê-ê
he--then go build house his-the
Then he went to build his house.

yà ké mố nà

yà ke-A mo na

I see you recently

I saw you recently.

yà ci--é mà--n nà

ya ci--A ma--ni na

I carry it-not recently

I did not carry it recently.

yà ci--è mà-n nà mú

I carry it-not recently yet

I have not carried it recently, but I probably will soon.

m--bonth--o mi na ka

you-meet-A me recently here

You met me recently here.

yà ghảlá mố páê (Chart 4.8)

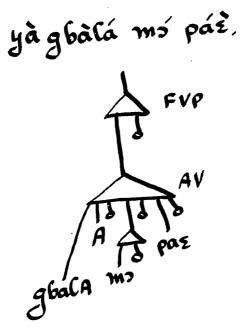
I write-to you a-while-ago

I wrote to you a while ago.

yà cé má--n ci

I be it-not carry

I used not to carry it.



yà cè mà--n mú ci

I be it-not yet carry

I have not been carrying it yet.

yà kốn mà--n cí (Shaik 148)

I already it-not carry

I have not carried it yet, I have not finished carrying it yet.

yà cé mố nà kè

I be you recently see

I have been seeing you recently.

yà cé nà kônth sôk-é

I be recently catch chicken-the

I was catching the chicken

yà kốh-5 mà-n mú ci (Chart 4.8)

I already-E it-not yet carry.

I have not carried it yet.

yà bố nà gbiể

I can recently walk

I could walk not long ago.

wò cé nà kùthả làkà--ái

he be recently plant time-in

He has been planting these last few days

yà yèmá sốm jố mi--è (Chart 4.9)

I want eat rice my-the

I want to eat my rice.

wò kốn mi nà liềi (Chart 4.9)

he already me recently greet.

He had already greeted me not long before.

yả mố kế

I you see

I see you, I will see you.

yà dinth-i kil--lé (cf. yà dinth-i-é kil-lé

I make-white house-the ya dinth-i-A kil-Le

I am painting the house white. I white-make-A house-the

I painted the house white.

yà mố gbálá

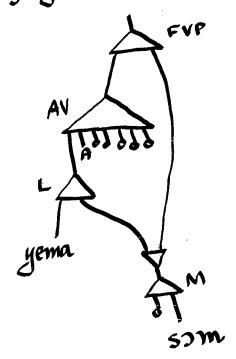
I you write-to

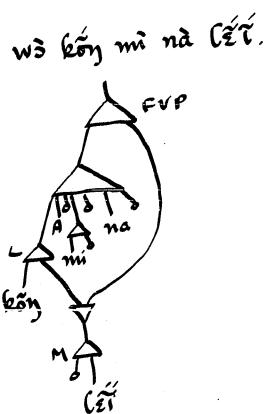
I am writing to you.

pò ló kó kéké ká lánc-è (Chart 4.10)

one there go quickly by launch-the

One can go there quickly by launch.





kúl móè kò mó yili drink palm-wine it you drunk-make Drinking palm wine will make you drunk.

yà mố cé kế (Chart 4.10)

I you be see

I used to see you.

yà mố kốn kế

cf. yà kốn mô kế

I you already see

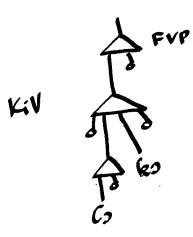
I have seen all of you,

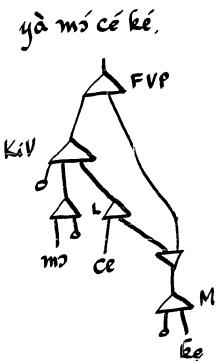
I have seen you completely.

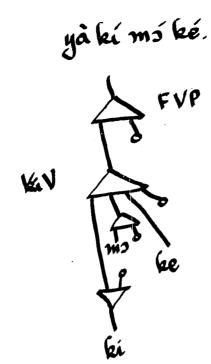
yà má cé kúl
I it be drink
I used to drink it.

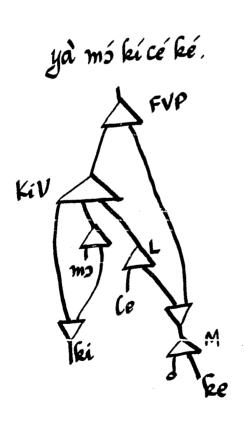
yi cé bố sákil we be can swim We used to be able to seim.

hã ló kổn cál they there already sit They sat all over it.









yà ki mố kế (Chart 4.11)

I will you seet

I will see you.

yà mố ki ké

I you will see.

I will see you.

yà mố kí cé kử (Chart 4.11)

I you will be sue

I will see you.

yi mố ki yá yên jó isố

we you will cooks for something eat morning

We will cook something for you to eat this morning.

yà ká kẻ mỏ

I past see you

I saw you long ago ...

yà ká cẻ mô lké

I past be you see

I used to see you I nong ago.

ya ká ci ma--nú (Chart 4.12)

I past bring it-mut

I did not bring it.

yà ká cè má--n cí
I past be it-not carry
I used not to carry it.

bá nà wò ká cẻ ki Mr. spider he past be here Mr. Spider was here.

yà ká kô pôthô-kô
I past go Europe-to
I went to Europe.

wò ká cẻ 'mi ká fẻ-έ he past be me gave money-the I used to give me money.

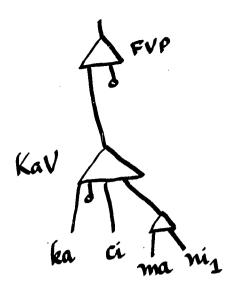
wò ká kổŋ cảl kả he past already sit here He had already sat down here.

yà cé má-n ci
I be it-not carry
I used not to carry it.

yà cé má--n ki ci (Chart 4.12)

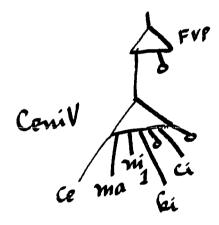
I be it-not will carry

I will not carry it.



yàkáci màni

yà cé márn leici



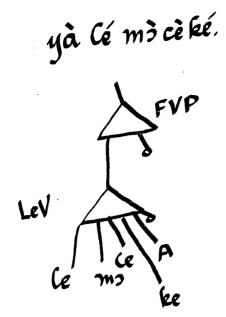
yà cé má-n kí cé cí
I be it-not will be carry
I will not carry it.

yà lé mò cè ké (Chart 4.13)
I used you be see
I used to see you.

yà lé mà--n ci--έ

I used it-not earry-A

I used not to carry it.



4.1.3. The imperative verb phrase consists only of the head verb and a following object. The subject of an imperative clause is a second person pronoun: /N/ 'singular' or /ha/' 'plural'. The negative /ma/ precedes /ha/ and follows /N/.

n--léli wô

(Chart 4.14-5)

you-look him

Look at him!

hấ léli wò

you(pl) look him

Look at him!

má símí i--lél mí--è

not spoil name my-the

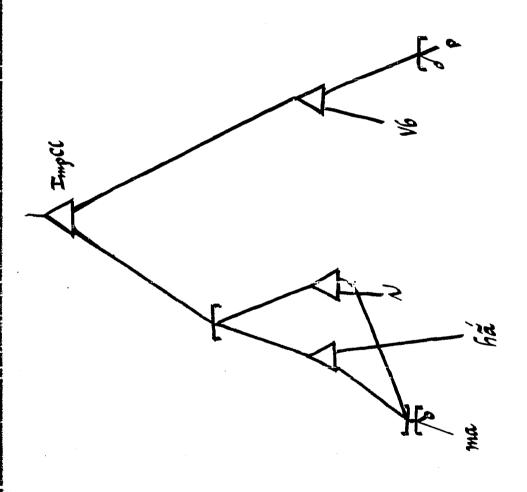
Do not spoil my name!

má hấ sém kỏ.

not you(pl) stand there

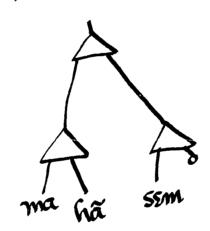
Do not stand there!

/N/ before a masal is lost in the phonology; therefore M/N ma/ is written@ds@ma.



ncéli wò

má há sém kð



- 4.2. Lexemic sign pattern. The verbal stem consists of a verbal root or a verbal root and a derivative suffix. Chart 4.20 in the morphotactics shows the observed suffixes, and Chart 4.17 shows the realisations of some verbs in the lexemic sign pattern. For example, the causative suffix /i/ occurs with the root /duk/ 'fall' forming the stem /duk-i/ 'throw' (Chart 4.16).
- 4.3. Morphemic alternation pattern. Two adjacent occurrences of the suffix /A/ are realised as one:

I sang something agood for you.

The first /A/ is the derivative suffix, and the second is the inflectional suffix.

An /A/ or /E/ which is prohibited by the morphotactics goes to zero.

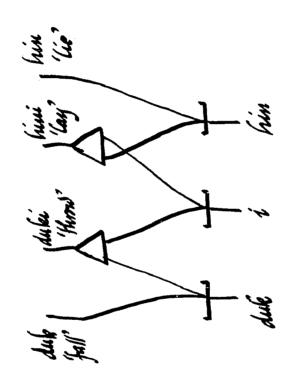


Chart 4,17

ho-m A 'tell'

bempa 'make' fos 'hit' bempaeni A 'prepare' fos-i A 'hit repeatedly' ben 'touch' fos-ka 'hit with' ben-ka 'touch with' fos-ka-ni 'hit oneself with' beth 'cut' gbal A 'write' beth-i A 'cut to pieces' gbal-A 'write to' beth-ka 'cut with, use' gbisi A 'marry' cal A 'sit' gbεε 'walk' cel A 'sit near' (cal-Il) gbee-ka 'walk with' cel-i A 'place on' gbee-ka-ni 'walk with oneself, ce 'be' together ce-ma 'be near' gbeki A 'hire' ci A 'bring' gbelen A 'spy one' cu 'stick' gbem A 'bear (children)' cu-ka 'stick with' hã 'do' cu-ka-ni 'stick oneself with' hã⊷ni 'happen'' duk A 'fall' her A 'cross' duk-i A 'throw' her-ka 'cross with' duki A 'bring' hel A 'try' dum A 'take care of' hin A 'lie' foth 'tell lies' hin-i A 'lay down' foth-ok A 'tell lies on hin-il A 'lie near' some one ' ho 'say'

foth-i A 'tell many lies'

hol A 'rest'

hoth 'fish'

hoth-ka 'fish with'

hun 'come'

hun-ma 'come with'

ka 'study, read'

ke 'see'

ke-ni 'look, seem,

see oneself'

keth 'cut'

ko A 'go'

ko-ka 'go with'

ko-ma 'go with'

kanth 'catch'

konth-i A 'catch often,

many'

kuthi A 'take'

lem 'tell stories'

lem-A 'tell stories to

someone'

leï A 'greet'

leli A 'look at'

lol A 'sleep'

lompu 'tie a knot'

mel / A / 'leave'

mel-ke 'leave for someone'

muni 'return'

muni-ni 'return'

noomi A 'find'

panth 'tie'

panth-i A 'tie many things'

pel 'smash'

pili A 'stroll'

pinki A 'change, make different'

keth-ni 'cut oneself' pinki-ni A 'change, become

different'

ko-ni 'be underway' pothi A 'open wide'

rok 'harvest'

rok-A 'harvest for someone'

sakil 'swim'

sakil-ma 'swim with'

senth 'break

sem A 'stand'

sem-i 'build'

sem-il 'stand near'

simi A 'spoil, ruin'

'play' sin

sin-k 'play with'

sol 'make canoe'

sol-A 'make (canoe) for someone'

```
sonth 'sew'
  sonth-A 'sew for'
tan A 'cry'
temi
    A 'bite'
tik
    A 'land (a boat)'
tonki A 'show'
ton 'sing'
  ton-A 'sing for'
tuk 'be lost'
  tuk-i A 'lose'
than A 'climb'
thol 'climb down'
  thol-i A 'put, bring down'
vel A 'call'
wom 'send'
wom-A 'send to someone'
won A 'crow'
wu 'die'
yi A 'open'
 yi-A 'open for someone'
yii A 'ask'
yil A 'get drunk'
  yil-i A 'get someone drunk'
yok A 'carry'
```

yuk A 'plant'

4.4. Morphotactics. Morphemic verbs consist of four parts: a verb root and optionally a derivative suffix, an inflectional suffix /A/ or /E/, and a suffix /ni/ (Chart 4.18). A verb stem consists of a verb root and any occurring derivative suffix. Some verb stems occur with /A/, and others do not. Some occur with /E/, and others do not; if both /E/ and /A/ occur, /E/ takes precedence, and /A/ goes to zero in the alternation pattern. /A/ and /E/ are neutralised in the morphemic knot pattern and are realised in the phonology as /ɛ, a, o/, having the same point of articulation as the preceding vowel plus PN/Lo/.

Some derivative suffixes, e.g. /i/, occur with /A/; others,/e.g. /ka/, do not:

yà bèth-i-é thốk-è. 'I cut up the stick'
yà bèth-ká li-kén. 'I cut with a knife.'

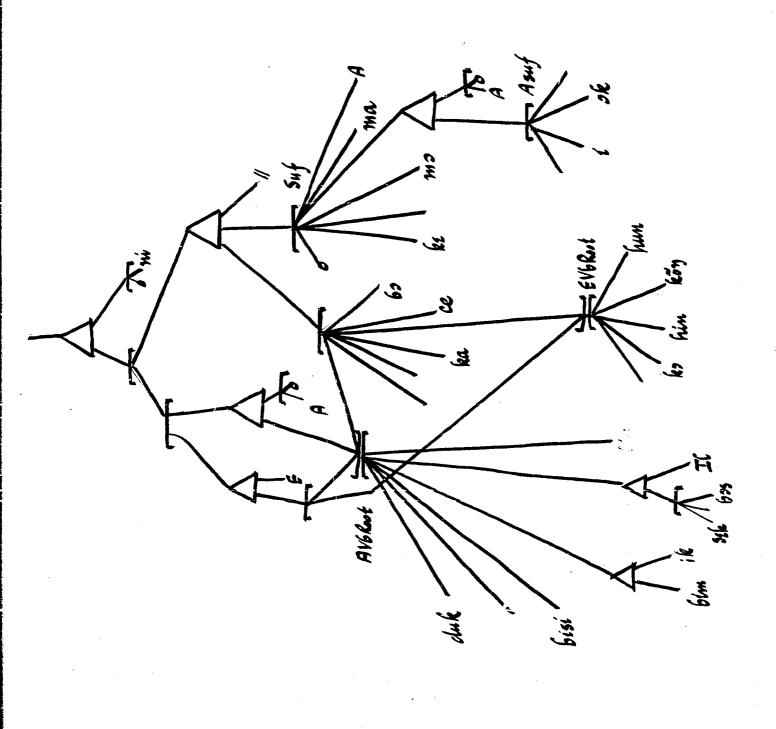
Some verb roots alone occur with /A/, and others do not:

yà vèl-ε wò. 'I called him.'
yà bέη wò. 'I touched him.'

Most verbs occur with /E/, but some, e.g. /ce/ 'be' and /ka/ 'give', do not:

yà cén wó ké. 'I did not see him.'
yà kồh-ốn wô ké. 'I have not seen him.

/A, E/ always have high tone. If neither is present, the



derivative suffix is high. If neither a derivative suffix or /A, E/occurs, the verb root itself is high. This tone pattern occurs if no controlling tone / ''/ from the lexology occurs, in which case the entire verb is low. The tone of /ni/ is controlled indepently by the lexology.

yà dúk. 'I fall'
yà dùk-i. 'I throw.'
yà dùk-i-é. 'I threw'

4.4.1. There are a few verbs which consist of an adjective root an a verbalising suffix (Chart 4.18).

The adjective roots /sek/'dry', /thuk/'hot',

/puth / 'rotten', and /bos/'wet, cold' form verbs with the

suffix /II/. P/I/ is realised as having the point of articulation

(/Pa, Lb·Ve, 9/) of the preceding syllable and the component

/hi/. The derived verb has the meaning become':

thuk 'hote thuk-Il 'become hot' thuk-Il-i 'heat'

puth 'rotten' puth-Il 'rot' intrans. puth-Il-i 'rot' trans.

bos 'wet' bos-Il 'get wet' bos-Il-i 'make wet'

All these derived verbs occur with the further causative suffix /i/.

Two verbs have the same root as adjectives, but with no suffix. They both have causative meaning. They are both A-verbs.

bisi 'tight bisi 'tighten'
puth, 'broken' puth 'break'

Two verbs are derived from adjectives by the /i/causative suffix:

kenth 'split' kenth-i 'to split'
pith 'white' pith-i 'whiten'

4.4.2. Denominative verbs are rare in Sherbro (Chart 4.18).

/mekini/ 'end' (intran.) is derived by an /i/ suffix from /mekin/ 'an end'.

/bimik/ 'cover, close (e.g. a pot)' is derived from
/bim/ 'roof'.

From the derived noun /binthik/ 'cover' another verb /binthiki/ 'cover' is derived. Both /bimik/ and /binthiki/ are A-verbs.

4.5. Morphemic sign pattern. In the upper part of the sign pattern there is one instance of portmanteau realisation:

thondo A / thohulo 'keep'

The lower part of the morphemic sign pattern is described implicitly by the use of the convention that morphemes are cited in their morphonic realisations.

4.6. Phonemic alternation pattern

ni / (ni), n

yà cén bố sákil. 'I couldn't swim'
yà céni bố sákil. 'I couldn't swim'

Chart 4.19

i Causative

duk-i 'throw' duk 'fall'

hin-i 'lay' hin 'lie'

puthul-i 'dry' (trans) puth 'dry' (intrans)

puth-i 'burst' (trans) puth 'burst' (intrans)

yil-i 'make drunk' yil 'be drunk'

sem-i 'build' sem 'stand'

Frequentative

beth-i 'cut up' beth 'cut'

fos-i 'beat up' fos 'hit'

konth-i 'catch many' konth 'catch'

kenth-i 'break' kenth 'break'

ma Accompaniment

ce-ma 'be with' ce 'be'

co-ma 'fight with' co 'fight'

ko-ma 'go with' ko 'go'

ho-ma 'talk with' ho 'talk'

ka Instrumental

ben-ka 'touch with' ben 'touch'

gbee-ka 'walk'with' gbee 'walk'

ya-ka 'cook with' ya 'cook'

il Proximate

lem-il 'follow closely' lem 'accompany'

Chart 4.19a

'stand near' sem-il sem 'stand' hin-il 'lie near' hin 'lie' cal-il 'sit near' cal 'sit'

realised as P/cel/

A Verbs with indirect objects have the suffix /A/, which does not depend on the lexology.

ton-A 'sing for' ton 'sing' 'tell to' hom-A 'tell' hom

'write to' gba l-A gbal 'write'

'harvest for' rok-A rok 'harvest'

Several derivational suffixed occur with only one root:

1 'scold' ho-1 ho 'say'

'go with' ko-mo ko

kε mel-ke 'leave for (someone) mel

foth-ok 'tell lies on someone' эk foth 'tell lies' V

Adverbs

Most lexemic constructions following the verb are nominal; however, there are some lexemes which are peculiar to that position, and these are called adverbs.

páž 'not long ago' 'here' kà vèthè 'a few days ago' kò 'there' céncá 'yesterday' kángbó 'together' nànté 'today' káth 'quickly' gbén 'tomorrow' thin 'still' gbét 'exactly'

A few adverbs are roots with suffixes (Chart 5):

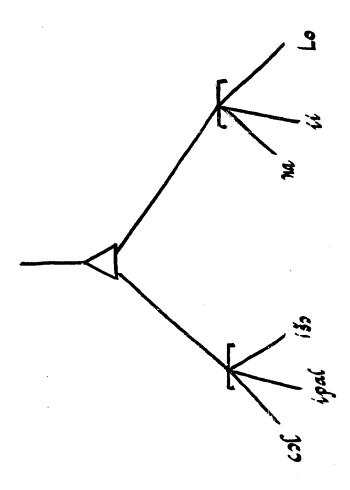
cól-nà 'last night' îpál-nà 'today'
cól-ii 'every night' îpál-ii 'all today'
cól-Lò 'tonight' îpál-Lò 'today'

îśó-nà 'early this morning'

îśó-Lò 'this morning'

There are a few compound adverbs:

gbén-cól 'tomorrow night' gbén-isó 'tomorrow morning'
gbén-ipál 'tomorrow night' cêncà-cól 'night before last'



Compare the word order of these adverbs with that of a noun phrase:

kil pé

house stone

A stone house, a house of stone

gbén-cól

tomorrow-night

Tomorrow night, the night of tomorrow

Particles

Many lexemes not mentioned above are realised as entire morphemic words:

hã 'to' infinitive marker

gbo 'only' occurs also in conditional clauses

gbi 'entirely'

Prepositions

ká 'by means of'

kó 'towards'

hink 'from'

kén 'like'

yèntha 'between'

Deictics (used principally with nouns)

ki 'here, this'

vε 'there, that'

Conjunctions

nè 'and'

kè 'but'

ó 'or'

haliwo 'because'

cel 'in order that'

thank 'although'

Interjections

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íi 'yes'

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