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By

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Approved:

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INTRODUCTION

Car Nicobarese is the language of the people of the island of Car Nicobar, which is located in the Bay of Bengal west of the Malay Peninsula (see preceding map). Car Nicobar is the northernmost and most populous and prosperous island of the Nicobar group, all nineteen of which lie south of the Andaman Islands and together with them constitute the major part of an archipelago which extends from Burma to Sumatra.

Since the middle of the seventeenth century the Nicobarese people have been increasingly in contact with the outside world. Portuguese sailors and French missionaries are the first recorded to have visited the islands, the latter beginning to attempt to convert the natives in 1688. French Jesuits, Faure and Taillander, followed in 1711 to continue the work. However, in 1756 the Danish East India Company gained control and began to try to colonize the islands, with its Moravian Mission in operation until 1768. During the Napoleonic wars the British acquired control of the islands and attempted to restrain the sea piracy of the Nicobarese, which had by this time become notorious. In 1814 they ceded the islands back to the Danes, during whose occupation the French Jesuits again tried vainly to convert the people. In 1837 the Danes officially left the islands, but they returned in 1845 for their last attempt to colonize the people, which again proved unsuccessful. After they left in 1848 the
islands were free from outside influence until the British again took possession in 1869, establishing a penal colony on the Andamans. From then until 1948, when the newly independent government of India took over control of the Andamans and the Nicobars, Car Nicobar was under British control except for Japanese occupation during World War II. Throughout all of the various periods of occupation the Nicobarese people have maintained extensive trade contact in coconut export to Burma, the Malay Peninsula, Ceylon, and now, India.

One of the results of this long contact between Car Nicobar and the outside world is a considerable number of loanwords in the Car lexicon. Loans from Hindi-Urdu, English, Portuguese, Burmese, and possibly French have been identified in a separate study; the scope of the study presented here does not extend to coverage of loanwords.

The population of Car Nicobar is concentrated in a number of villages which dot the perimeter of the Island. The informants reported that dialect differences exist between the various villages; brief contact with people from two villages other than from Small Lapati, from which the principle informants came, did confirm that at least some differences do exist, though there is no question of a problem of intelligibility.

The language of the Nicobars is traditionally said to consist of six principal dialects, of which one is now probably dead, with several recognizable sub-dialectical varieties. However, formal dialect studies and presentation
of supporting evidence has at least until very recently been totally lacking. It is clear, however, that at least two dialects, Car and Central, are to be distinguished.

Pinnow classifies Nicobarese in the South West subgroup of the Eastern higher grouping of his Austroasiatic. This is a very broad study, encompassing many languages and based in large part on library research. Recent detailed studies by Norman Zide and David Stamp (of The University of Chicago), based on fresh field work, have clearly established that Nicobarese is related to the Munda languages of India, thus substantiating the work of Pinnow.

Nicobarese became a written language at the end of the 19th century, when the Reverend George Whitehead, an Anglican missionary to the Nicobars, provided the language with a reasonably good orthography which is now in widespread use by the people of Car Nicobar. He also translated the New Testament and compiled a most useful Nicobarese-English dictionary, which includes about six thousand entries and fairly extensive notes on the language; it is an invaluable reference. His work is based on the dialect which is spoken in the capitol town of Mus; due to its generally high reliability and consistency I am inclined to believe that areas of consistent differences between his work and that of myself represent dialect differences between the two villages.

Due to an Indian government regulation prohibiting non-Indians from going to the Nicobar and Andaman Islands, I have never been to the Nicobars. I have been unable to
learn the reason for the prohibition against outsiders, even though in my efforts to obtain the necessary permission I was granted a personal appointment with Prime Minister Jawaharlal Nehru to discuss the matter in 1963, shortly before his death. Though he seemed to be genuinely sympathetic to my goals of scholarly research the effort was to no avail. But I am still hopeful that in time the ban will be lifted and I will have the opportunity of renewing my study of the language in the cultural and linguistic setting with which it belongs.

The data on which this study is based consists of field notes and tape recordings which were collected in Ranchi, Bihar, India. The field work was conducted as a part of a Munda Languages Project which was organized by Professor Norman Zide of the University of Chicago. Financed by a grant to the University of Chicago by the U. S. Department of State, the project was operative in India during the summers of 1962 and 1963. The principal informants were Mr. Fred James, with whom I worked extensively both summers, and Mr. Edmonds Matthew, who was the sole informant in the first half of the summer of 1962. Both of these men were college students in their mid twenties and fairly proficient in English. The other informants with whom I spent any significant amount of time were Mr. Chamberlain Paul, Mr. William Cyril, and Mr. Livingstone Moses, all of whom were also college students. In addition, a group of five young schoolboys, aged 8 to 17 years, provided a limited amount of tape recorded material.
The data available for this analysis has not been adequate for a definitive study. The periods of field work were altogether too brief — and at one time hampered by serious illness. Thus the grammar as presented — particularly the tactics — must be considered an introductory study. I personally expect to pursue the study in the near future.

In this day of intensive development of rigorously systematic models of linguistic description it seems somewhat quaint to write a grammar in the essentially eclectic manner that has been followed here. However, where it was repeatedly found impossible to arrive at definitive statements it was always possible to make at least some statements that were meaningful; thus the presentation has been shaped more by the meaningful statements that could be made than by any system of analysis that would demand a statement where none was available.

My sincere thanks go to my informants, especially to Fred James, who enthusiastically rose before dawn to work with me before class and came back as soon as school was out each day; to Dr. Norman Zide for his enabling me to pursue the research; to my professors at the University of California — especially to Professors Murray Emeneau, John Gumperz, and Wallace Chafe — and to my fellow graduate students with whom I spent many exciting and profitable hours in lively discussions. Special thanks also go to Marilyn Compton, Kathleen Grinsell, and Barbara Moore, who
typed the bulk of the manuscript. To my parents, Mr. and Mrs. Howard Critchfield, for inspiring my thinking in the direction of scholarly pursuits and for providing encouragement and support throughout my many years of study, I am most grateful. Finally, to my husband, Raymond S. Braine, for his understanding, patience, and assistance through long periods of confining hard work, go my most enthusiastic expressions of appreciation and gratitude.
Bibliography

Anon.

The British and Foreign Bible Society,
Rangoon. [Translated by George Whitehead
and John Richardson, though no mention of
this fact is made in the publication.]

1954  Car-Nicobarese Spelling and Reading Book.
R. Akoojee Jadwet & Co., Car Nicobar,
Publisher. [A booklet designed to teach
Car speakers to read and write their lan­
guage. It lists symbols used, gives a
fairly extensive vocabulary arranged in
order of syllable structure, and includes
about 20 stories, without translation.
Much of the vocabulary material is in­
cluded verbatim in Whitehead's Dictionary;
Whitehead is no doubt the author.]

n.d.  Ra-neh-lö (Genesis). D. Featherstone,
Publisher, for the Bible Society of India,
Pakistan, and Ceylon. [A Car Nicobarese
Translation of Genesis, done by John
Richardson though not credited to him.]

Barbe, P.

1846  Notice of the Nicobar Islands, Journal of
the Asiatic Society of Bengal, Vol. 15,
pp. 366-67. [Includes a short vocabulary of the Nancowry dialect.]

Dalgado, Sebastian R.
1913 Influencia do vocabulário português em linguas asiáticas (abrangendo cerca de cinquenta idiomas). Coimbra, Imprensa da Universidade. 253 pp., map.
1936 Portuguese vocables in Asiatic languages ... Translated into English with notes, additions and comments by Anthony X. Soares. Baroda, Oriental Institute, 520 pp. (Gaekwad's oriental series, no. LXXIV).

Fontana, Nicolas
1792 On the Nicobar Isles and the Fruit of the Mellori. Asiatick Researches. Vol. 3, pp. 149-163. [Includes a short Nancowry vocabulary.]

Gabelentz, G. C. von der

Grierson, Sir George A.

Hamilton, G.
1790 A Short Description of Carnicobar. Asiatick Researches, Vol. 2, pp. 337-44.
Hestermann, Ferdinand

Hutton, J. H.

Kloss, C. Boden
1903 In the Andamans and Nicobars. John Murray, London. [The Nicobarese sections are liberally sprinkled with Car vocabulary.]

Man, Edward Horace
1889 Dictionary of the Central Nicobarese language (English-Nicobarese and Nicobarese-English). W. H. Allen & Co., London. [This is an important work.]

n.d., between 1932-1934 The Nicobar Islands and their People. For the Royal Anthropological Institute of Great Britain and Ireland, Billing and Sons Ltd., Guilford, England. [An excellent account of the way of life of the Car Nicobarese; includes some language discussion and vocabulary.]

Pinnow, Heinz-Jürgen


Roepstorff, Frederik A. De.
Schmidt, Pater Wilhelm

1907 Les Peuples Non-Khmèr, trait d'union entre les Peuples de l'Asie Centrale et de l'Austronesie; Bull de l'Ecole Fr. d'Extrême-Or. 7, 213-63.

Temple, Sir Richard C.


Vaidya, Suresh


Whitehead, George, G. A.

1924 In the Nicobar Islands. Seeley, Service, & Co., Limited, London. [A lengthy discourse on the way of life of the Nicobarese, including a very good description of the language and a history of the islands.]

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1925  Dictionary of the Car-Nicobarese Language.
[A major work, highly reliable. Includes
some grammatical notes.]
SYMBOLS AND ABBREVIATIONS

Adj. adjective
Adj_n numeral adjective
an., anim. animate
aux. auxiliary
C consonant
Clf classifier
Conn. connective
CS causative stem
D demonstrative pronoun (in Morphology)
directional suffix (in Tactics)
DC dependent clause
DL demonstrative locative
du. dual
emph. emphatic case
Eng. English loan
excl. exclusive
H laryngeal consonant
in., inan. inanimate
incl. inclusive
inter. interrogative case
ICQ incorporated object quantifier
IR referential interrogative
L  labial consonant
lit. literally
M  nasal consonant (in Phonology)
noun (in Tactics)
Nc  common noun
Ncl  classified noun
Pp  proper noun
Nu  unclassified noun
NP  noun phrase
NPs  subject noun phrase
nucl. nucleus
Num  unaffixed numerator
Num F1  numeral phrase
P  non-laryngeal consonant
Pers. personal
pl. plural
poss. possessive case
Pp  possessive pronoun
Pred. predicate
pron. pronoun
S  major verb stem class
S  syllable
sg. singular
SR  special rule
subj. subject case
subor.  subordinate case
TS  thematic stem
V  verb (in Grammar)
vowel (in Phonology)
Vi  intransitive verb
vis.  visible
V na  non-agentive verb
VR  verb phrase
VR  referential verb
Vt  transitive verb
(W)  from Whitehead's dictionary
X-  X is a prefix
-X-  X is an infix
-X  X is a suffix
(X)  X is optional
[X]  X is phonetic
/X/  X is phonemic
//X//  X is morphonemic
{X}  X is morphemic
X ~ Y  X varies freely with Y
X ~ Y  X varies phonologically with Y
X ~ Y  X varies grammatically with Y
X ^ Y  X is rewritten as Y
$X^Y$

$\{X\} \rightarrow \{X\}$

$\emptyset$

X but not Y

X is rewritten as X,

Y is rewritten as Y

a place holder indicating the

absence of any element
CHAPTER ONE

PHONOLOGY

100. The Phonemic System

Nicobarse is analyzed here as having forty-one phonemes, of which seventeen are consonantal, twelve vocalic, and eleven prosodic.

The seventeen consonantal phonemes include a stop series contrasting with a nasal series at four positions of articulation, three fricatives, one lateral, one flap, two semivowels, and two laryngeals.

Vocalic phonemes include ten vowels and two vocalic modifiers. Components of tongue-frontness-or-backness and lip-rounding-or-unrounding combine to produce three contrastive series of vowels: front unrounded, central unrounded, and back rounded. Within these series three positions of tongue height are contrastive in the front and back series; four positions are contrastive in the central series. The two vocalic modifiers are vowel length and vowel nasalization.

The prosodic phonemes are five of juncture, three of stress, and four of pitch. The pitch phonemes include two relative pitch levels (relevant at the syllable level) within each of two relative pitch registers (relevant at the macrosegment level).
101. Consonants (C)
Stops
\( p \quad t \quad c \quad k \)
Nasals
\( m \quad n \quad ñ \quad ŋ \)
Spirants: voiceless
\( f \quad s \)
voiced
\( r \)
Lateral
\( l \)
Flap
\( r \)
Semivowels
\( v \quad y \)
Laryngeals
\( \theta \) and \( h \)

102. Vowels (V)

<table>
<thead>
<tr>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>( i )</td>
<td>( ï )</td>
</tr>
<tr>
<td>High mid</td>
<td>( e )</td>
<td>( ë )</td>
</tr>
<tr>
<td>Low mid</td>
<td>( ë )</td>
<td>( ø )</td>
</tr>
<tr>
<td>Low</td>
<td>( æ )</td>
<td>( a )</td>
</tr>
</tbody>
</table>

Vocalic modifiers: /\-/ Length, /\-\-/ nasalization

A single additional vowel phoneme, /æ/, must be added to the above list because of its occurrence in a few English loan words. As the informants used in this study all spoke English quite well and their use of English was continually reinforced in nearly every informant session, it is an open question whether this phoneme occurs as a regular feature of the English loan vocabulary or whether it is in the idiolects of only those Nicobarese speakers who also speak English—and then perhaps only in a predominantly English context.
103. Prosodies

Junctural: pausal

/.../ hesitation juncture
/↑/ series contour
/ , / macrosegment contour
/↓/ sentence contour

non-pausal

/+/ word juncture

Stress:

/""/ emphatic stress
/"/ primary stress

Weak stress is unmarked.

Pitch:

/3/ high pitch
/2/ low pitch
/-/ low register

High register is unmarked.

110. The Phonetic System

The phonological description presented here is essentially traditional in the handling of the segmentable phonemes, with bi-unique convertability maintaining between the phonetic and phonemic levels. The prosodies do not yield to such analysis, however, for the following two reasons.

1) Stretches of speech longer than the word are relevant to the description of several prosodic phonemes; for example, pitch allophony is conditioned by other pitches within the macrosegment; thus the macrosegment is the relevant unit within which pitches are distributed.
2) Allowance of phonemic overlap is essential to any meaningful description of the prosodies. An example is the fact that pitch of weak-stressed syllables is predictable - yet the absolute pitch phones involved are contrastive in strong-stressed syllables. To require the writing of pitch on all syllables obscures the essential function and distribution of contrastive pitch.

The presentation of the phonology reflects the inherent organization of the language. The phonemes are presented as constituents in phonological constructions. The phonological constructions are sentence, macrosegment, word group, word, and syllable; they are presented in this order.
120. The **sentence** is the largest unit which is distinguished phonologically. It consists of a sequence of one or more macrosegments and terminates with sentence final intonation, /↓/. The first macrosegment in a sentence has high pitch register, successive macrosegments may have either high or low register (sec. 134). The longest sentence observed in the corpus contains nine macrosegments, but this cannot be considered a limit to the number of possible macrosegments in a sentence.

Sentence final intonation contour is represented phonetically by a slight drop of pitch level and a trailing off of voice, tension, and loudness. This is symbolized both phonetically and phonemically as /↓/. The final macrosegment of the sentence retains its usual macrosegment final contour /, / (sec. 135). Thus a sentence ends phonemically in the sequence /, ↓/. In all cases except where they are specifically being referred to, these phonemes in sequence are represented here orthographically by conventional terminal contour symbols based on the grammatical content of the sentence: a question mark in case of questions, an exclamation point with exclamations, and a period elsewhere.

130. The **macrosegment** consists of the following components: a sequence of words or word groups (words being bounded by word juncture), pitch envelope, pitch register, and macrosegment-final contour. A macro-
segment contains at least one primary or emphatic stress.

131. The macrosegmental word sequence usually consists of from one to four words. Except in those macrosegments which contain series, which are potentially unlimited in number, few macrosegments are found having more than six words. In the following examples, macrosegments are separated by commas.

```
3 3 3 2 3 3 2
/kahi-the-ku-, ne na-, yohne nac, ne aso./
'Having finished eating, they went downstairs and began to race.'

3 3 3 2
/nac ?an nam tavuy-, ne ?i kuy may./
'The sun is now setting.'

3 3 2 3 3
/falgec caa-, ne kumte kasog, ne ho cum mat
2
nac cinet./ 'They took their box with them and ran away to the moon'.

3
/lam!/ 'Octopus!' (Said on sighting an octopus.)

3 3
/kul nosh cin./ 'I am cutting firewood.'
```

132. The word group is a special phonological construction employed to enumerate a series of items. It consists of a word or sequence of words plus series pitch contour. (Discussion of pitch is deferred to
below.)

Series pitch contour, /\u2191/, is realized as pause ([..]) plus, with the syllable immediately preceding /\u2191/, pitch [3] and diminution of tenseness and loudness with a coincident rising pitch glide following the syllable nucleus, ([\u2191]). (Segments are written phonemically in examples accompanying prosodic sections.)

E.g. 3 3 2 2 /\u0111un\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u0101\u01
from Madras and Calcutta went to Sumatra, Singapore and Burma and they took rubber, other non-edibles, and spices from it' ("it" refers to Car Nicobar).

133. The pitch envelope is composed of the pitches of the strong-stressed syllables of the macrosegment. Four relative levels of phonetic pitch may be readily distinguished; they are written as [1], [1⁺], [2], and [3] (from lowest to highest). The choice of the symbol 1⁺ for the mid-low pitch reflects the fact that it differs from [1] and [2] by about half the absolute distance in pitch which differentiates [2] from [3]. These pitches are distributed in two phonemic pitch registers - high and low - which differ in range of pitch variation, the low register varying less from high to low than the high register. While pitch [1] is the lowest pitch in both registers, pitch [3] does not occur in the low register, and pitch [1⁺] does not occur in the high register.

The high pitch register is unmarked in the transcription; the low register is designated by /-/- at the beginning of the macrosegment. The following chart shows the distribution of the pitch allophones in the two registers.

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Low register</th>
<th>High register</th>
</tr>
</thead>
<tbody>
<tr>
<td>/3/</td>
<td>[2]</td>
<td>[3]</td>
</tr>
<tr>
<td>/2/</td>
<td>[1⁺]</td>
<td>[2]</td>
</tr>
</tbody>
</table>

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(The symbols 2 and 3 have been chosen to represent the pitch phonemes — rather than the preferred 1 and 2 — in order to avoid confusion and error in the transcription from the phonetic orthography.)

Examples:

2 3 2 3 2 2
/kó'ořén 'an, neŋ hén mihē're, ne côn patí'../ →
2 2 3 1 1 2 2 3-11 1 1 2 1^+1
[kó'ořén 'an..neŋ hén mihē're..ne côn patí'..↓]

'It can be used otherwise as timber.'

3 3 2 3
/fálneře cá'ä, ne kümte kasńře../ →
3 2 2 3 1 1 1 1 2 1
[fálneře cá'ä..ne kümte kasńře..↓]

'They took their box and ran away.'

3 3 2 2 2
/káhá-thě-kú', ńac cüh panámře,/ →
2 3 3 2-1 1^+ 2 3 2 1
[káhá-thě-kú'..ńac cüh panámře..]

'Having finished eating they went to their village..' 

2 3 3 2 3 2 2 2
/hén háh 'ek, ?insöl'e ?á-p, ńe sákü-te, →á-p
2 2 2 3 3 3 3 3
?ăh hańoć, ńe ?in cayhín, →á-p ?ăh sé-ti
2 2 3 1^+ 2 3 2-1 2
la?öl'e../ → [hén háh 'ek ?insöl'e ?á-p..ńe
3 2-11 1^+ 2 1^+2 2 2 3 2 2 2
sákü-te..?á-p ?ăh hańoć..ńe ?in cayhín..?ă-p
'Once there was a canoe race between Sakutu, a canoe of Nis, and Cayhin, a canoe of Small Lapati.'

Pitch register is ambiguous when the stressed syllable of a macrosegment with only one stress is macrosegment-initial and has pitch [2]; it may be considered to be either pitch /3/ in the low register or pitch /2/ in the high register. All such cases are considered here to be instances of the more frequently occurring high register, e.g.

2 2 3 3

... /ŋac kō•teku•?, tō ?u, neŋ mahā•mārsē,

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?āh./ ... [ŋac kō•teku•... tō ?u... neŋ

2 31 1 1 2

mahā•mārsē .. ?āh .. ↓] '... and found that it was only full of blood.'

The pitch of weak stressed syllables is predictable and is considered allophonic with weak stress; it is described under weak stress. Following emphatic stress the entire remainder of the sentence may ( stylistically) optionally occur with pitch [1]. In such instances, and in all instances of /'/ following /"'/ within a macrosegment, the contrast between the phonemic pitches is neutralized; (?) is written here to...
indicate the ambiguous pitch, e.g.

2 3 (?) 2 2 j l 2 1
/héŋ kēhtēn, 'in kol./ → éŋ kēhtēn... 'in kol. ↓

'There is just one problem facing us.'

A glide from pitch /2/ to pitch /3/ occasionally (though infrequently) occurs on an initial syllable having a long vowel (one example having a short vowel is the result of a contraction). This appears to be motivated by considerations of style. It is indicated by /2-3/ wherever found, e.g.

2-3 2 2-3 2 2 2 1
/tāć hék yik tařīk./ → [tāće hēk yik tařīk..]

'The men planted again.'

3 2 2-3 2 2-3 2
/sin + peři + 'ak + minē?ēn †o, -néŋ + kāp./ →

3 2 2 2 3 2 1 1†2 1†1
[sin peři 'ak minē?ēn †o... nēŋ kāp..]

'Yet his name still remained.'

Analysis of pitch and pitch register has not proceeded beyond determination of their phonemic status, with the exception that their contrastive function in distinguishing yes-no questions from statements has been noted. Compare the following:

3 3
/tēlağān †oŋ ne lī-poře?/ 'Is it a heavy book?'

3 2
/tēlağān †an, -ne lī-poře./ 'It is a heavy book.'
'Are you (du.) finished wrestling?'

'We (du.) are finished wrestling.'

'How many will the moon be tonight?' (i.e. 'How many days will it be since the new moon?')

'It will be the fifth tonight.'

All yes-no questions have high pitch on the final stressed syllable, which occurs in a high register macrosegment, e.g.

'Have you not yet sneezed?'

'Shall I myself kill him?'

'Did you go in the evening?'

'Shall I kill him?'

But not all instances of final high pitches in the high register are questions, e.g.
Her name was 'Selfish'.

The coconuts were increasing in number again.

It is probable that further analysis would show that various pitch envelopes have morphemic status, each of which is correlated with a syntactic construction, indicating the construction type.

As with English, Nicobarese may be readily read by a person knowing the language without any indication of pitch. Because of this marginal function of pitch, and because pitch was omitted from much of the data used in making this analysis, pitch is not indicated throughout the rest of the grammar.

135. /,/, macrosegment contour, has the following allophones:

- a pause (written as [.] in the speech stream;
- pitch allophones as follows:
  [1] occurs with weak stressed syllables which occur following the last stressed vowel of the macrosegment, e.g.
  \[3^{3.1^1 2^2 1 1 }\]
  /.. → ne mahā·mēvē, ↓/ → [.. ne mahā·mēvē.. ↓]
  'It was full of blood.'

A glide to pitch [1] occurs on (1) a final syllable with primary stress, and (2) a non-final syllable with primary stress when it
has a long vowel and is the last syllable with /'/ in the macrosegment.

3 3 3 3 3 3 3-1
/lúkheře ěk sanlíṃ, ↓/ → [lúkheře ěk sanlíṃ..↓]

'He was returning to fetch the box.'

3 3 3 3 2
/tú'kten řo, nác, →ne ři róŋ havá'ña, ↓/ →

3 3 1 3-1 1+ 1+ 2 2 1+1
[tú'kten řo..nác..ne ři róŋ havá'ña..↓]

'She then pulled her down from the cobweb.'

(Note: a final stressed closed syllable ending in a stop and having a short vowel glides very little; it is almost entirely on pitch [1], e.g.

2 1+ 2 1+1
/.. →ne tařik, ↓/ → [.. ne tařik..↓] 'refers to) person'

As the pace of speech is stepped up some of the distinctive characteristics of /,/ separating constructions of close constituency are successively lost, [...] being dropped first, with the glide and subsequent low pitch allophones following. In rapid speech weak-stressed syllables before /,/ have pitch [2] in high register macrosegments, pitch [1+] in low register macrosegments.

E.g. 3 2 3 2 2 3 2-1
/ŋác řan, ne haté·m, ↓/ → [ŋác řan ne haté·m..↓]

3 1+ 2 3 2-1
(fast speech) or [ŋác řan..ne haté·m..↓] (slow speech) 'It is night already'.
31. \( /t\dot{u}^{*} y \ 'el \ k\ddot{u}y\ddot{r}e \ 'a\dot{n}\ddot{g} \ vam\ddot{i} \cdot r\ddot{g} \cdot ?, \to \ te \ tuml\ddot{a}t, /\rightarrow 3 \ 3 \ 3 \ 1^{+} \ 1^{+} \ 1^{t} \ 2 \ 1^{+} \ 1^{t} \ 2 \ 1^{+} \ l^{-1} \)
\[ /t\dot{u}^{*} y \ 'el \ k\ddot{u}y\ddot{r}e \ 'a\dot{n} \ vam\ddot{i} \cdot r\ddot{g} \cdot ? \to \ te \ tuml\ddot{a}t. / \]
\[ 3 \ 3 \ 3 \ 1^{+} \ 1^{+} \ 1^{t} \ 2 \ 1^{+} \ 2 \ 1^{+} \ l^{-1} \]
(fast) or \[ /t\dot{u}^{*} y \ 'el \ k\ddot{u}y\ddot{r}e \ 'a\dot{n} \ vam\ddot{i} \cdot r\ddot{g} \cdot .. 1^{+} \ 2 \ 1^{+} \ l^{-1} \]
\[ \text{te tuml\ddot{a}t. /} \] (slow) 'Word-maker threw soil on her head.'

136. Hesitation juncture, /.../, is realized phonetically as pause [...], a longer pause than the [...] associated with other junctures. Unlike macrosegment-final contour, hesitation juncture is not accompanied by any pitch allophony. Like emphatic stress, hesitation juncture does not participate in the dualism that characterizes the relationship between phonology and grammar, instead standing in a one to one relationship with a morpheme meaning '(hesitation, thoughtfulness)'.

\[ 2 \ 3 \ 2 \ 2 \ 3 \]
\[ /h\dot{e}^{*} k \ k\ddot{e}^{*} nup...r\ddot{o} \cdot pe\ddot{r} \ y\ddot{s}^{o} \cdot ov \ mas\ddot{a} \cdot la \ ?i\ddot{n}\ddot{e} \cdot, \]
\[ 3 \ 2 \ 2 \ 3 \ 2 \ 2 \ 3 \]
\[ \text{ne r\ddot{a} \?a\dot{n} \ ?i\ddot{n} \ ?e. /} \rightarrow [h\dot{e}^{*} k \ k\ddot{e}^{*} nup...r\ddot{o} \cdot pe\ddot{r} \ ... \]
\[ 2 \ 3 \ 2 \ 3 \ 2 \ 2 \ 2 \ 2 \ 3 \ 3 \ 2 \ 1 \]
\[ y\ddot{s}^{o} \cdot ov \ mas\ddot{a} \cdot la \ ?i\ddot{n}\ddot{e} \cdot \ne \ r\ddot{a} \?a\dot{n} \ ?i\ddot{n} \ ?e. /] \]
'
\[ \text{And they took...rubber, other non-edibles, and spices from it.}'

140. The WORD is a sequence of syllables which is
potentially bounded by pause, that is, it is a minimum free form. Except when the word boundary coincides with one of the other junctures, however, the potential pause only rarely in fact occurs. It is the potentiality of this pause ([..]) plus the relevance of its location to determining pitch allophony of weak stress, that is written as phonemic word juncture, /+/. In citing text material /+/ is indicated by space between words. It is only in the morphophonemic rules that the symbol /+/ is used.

Phonological clues as to the presence of word juncture in a normal utterance are very few, and word juncture is highly elusive, though it is intuitively valid to the native speaker. Exact location of word juncture was not carefully worked out with the informant, and boundaries indicated here reflect immediate constituent structure. This is an area deserving of additional study.

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Syllable boundaries are entirely predictable, occurring as follows: (boundaries are indicated by hyphens in phonetic examples)

1. between adjacent vowels, e.g. /vē-ōk/ → [vē-ōk] 'to grunt'
2. before an intervocalic consonant, e.g. /la-ōh/ → [la-ōh] 'to be broken'
3. between two consonants which are intervocalic,
e.g. /kúyle/ → [kúy-la] 'prow'

4. between the first and second consonant of a three consonant intervocalic sequence, e.g. /mistří/ → [uis-tří] 'carpenter'.
150. The SYLLABLE consists of a sequence of segmental phonemes and coincident stress.

Segmentally the syllable consists of an optional consonant onset, an obligatory vowel, and an optional consonant coda. A syllable with a coda is referred to as closed; a syllable without a coda is open.

There are three contrastive degrees of stress: primary, weak, and emphatic. The peak of intensity of stress, which is the peak of the syllable, occurs on the vowel.

151. /', primary stress, is realized as a degree of tension and fortisity intermediate between that of weak and emphatic stress. It has three allophones, given in order of decreasing degree of phonetic tension and fortisity: ['] primary stress, ['] secondary stress, and ['] tertiary stress. Their distribution is as follows: (In the following discussion of stress allophony, the unit within which the stresses are distributed is the macrosegment. Occurrence of weak stress is irrelevant to environmental statements of strong stress allophony and is hence omitted from them.)

['] occurs between primary stresses, e.g.

3 3 3
/tisokqeskuy kilo qecin/

2 3 3 3 3 1 1
[tisokqeskuy kilo qecin ]
'I jump over the fence.'
The coconuts were increasing in number again.

[""] occurs macrosegment-finally when no /""/
occurs in the macrosegment, e.g.

3 3 3 3
/kuŋtén có·n cin,↓/

2 3 3 3-1 1
[kuŋtén có·n cin..↓] 'I pull John down.'

[""] occurs elsewhere, i.e.

(1) macrosegment initially (If another /"/ or /""/ occurs in the macrosegment), e.g.

3 3 3
/kăh•te kú·? cin, ū·?,↓/

2 3 3 3-1 1 2
[kăh•te kú·? cin↓ ū·?..↓]

(2) macrosegment finally when preceded by /""/ (only a single /"/ has been observed following /""/ in a macrosegment), e.g.

2 3 (?) 2
/hăŋ káhtén,ʔíŋ kól/

2 3 1 2 1
[hăŋ káhtén,ʔíŋ kól] 'There is only one problem (facing) us.'

Weak stressed syllables are relatively lax and lenis, as compared with syllables having primary or emphatic stress. Pitch of weak stressed syllables
is predictable and is considered allophonic with weak stress. These pitch allophones are as follows (recall that pitch of weak stressed syllables following the last stressed syllable of a macrosegment is allophonic with juncture, not stress):

<table>
<thead>
<tr>
<th>Register</th>
<th>Rule</th>
<th>Additional relevant environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>[2]</td>
<td>[3]</td>
<td>2. Occurs with all successive weak stressed syllables preceded by word juncture and followed by a final /2/ or word juncture plus final /2/.</td>
</tr>
<tr>
<td>[1]</td>
<td>[1⁺]</td>
<td>4. Occurs with all successive initial weak syllables before a non-final syllable with pitch /2/.</td>
</tr>
</tbody>
</table>

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Examples:
The allophonic rule accounting for the pitch of weak stressed syllables is indicated directly below the syllables, in the row labeled 'rule'.

\[ /\text{fastit ti·? cihn ?en nс·}/ \rightarrow \]
\[ 3333 \]
\[ [\text{fastit ti·? cihn ?en nс·}..] \]

Rule: 3

'Who chipped these chips?'

\[ /\text{fe·n sumkám fе·n,?in ?e, ?ey rа·`in metr·s}, \]
\[ 3333111111 \]
\[ [\text{fe·n sumkám fе·n,?in ?e..?ey rа·`in metr·s}..] \]

Rule: 3

'It took us four days to go from Madras to Calcutta.'
In ancient times there were no coconut trees in any other places, only in Car Nicobar.

They were served by their friends.

It reached Small Lapati.
Little time was spent with the informant working out prosodic problems; this was an unfortunate omission as many questions have been left unanswered by the available data. It is clear that syllables with primary stress contrast at two pitch levels; the obvious solution of considering strong stress an allophone of each of two pitch phonemes has been rejected here because the pitch system seems to be separate from the stress system. Given knowledge of the grammatical
class of morphemes it is possible to predict almost entirely which syllables will have primary stress; pitch level prediction and function however have not thus far yielded to analysis.

152. Emphatic stress, /'\text{''}/, is the strongest and most intense degree of Nicobarese stress. It is always accompanied by pitch /3/. Pitch phonemes and primary stress have special allophony following emphatic stress; this has been noted in connection with the presentation of these phonemes.

Like hesitation juncture, emphatic stress stands in a one to one relationship with a single morpheme, in this case '(emphasis)'. It normally occurs with all expletives; it may also occur with any primary stressed morpheme to draw attention to it.

Examples:

2 3 2 2
/háŋ kihtén, 'ín kol./

2 3 2-1 2 1
[háŋ kihtén, 'ín kol.. ↓]

'There is only one problem (facing) us.'

3
/1\$\text{\textquoteleft}/

3-1
[1\$\text{\textquoteleft}.. ↓] 'An octopus!'

3 3 3 3
/'\text{''}h. ké'ë níh savón man./

3-1 3 3 3 3 1
[/'\text{''}h.. ↓ ké'ë níh savón man.. ↓] 'Here! Take this soap.'
\[ /\text{kap\'\text{"ah} cin.}/ \]
\[ 2 3 1 \]
\[ [\text{kap\'\text{"ah} cin.} \downarrow] \]

Lit: 'I am dead!'; equivalent to 'My God!' (surprise).

Description of the distribution of phonemes in the syllable is the subject of the phonotactic section, deferred to after the presentation of consonant and vowel allophony.
160. The Consonants.

The stops are voiceless in all their environments. In syllable initial position they are fortis in articulation; syllable finally, they are lenis and, unless they are before pause, are without audible release. Before the pause associated with any juncture, they have a slightly aspirated release. Elsewhere they are unaspirated. (Examples are cited phonemically.)

/p/ is bilabial.

po-p  'to make'
hapé-te  'to burn'
cáple  'to put up'
kinpó-ke  'the tying'

/t/ is alveolar.

tú-kle  'to pull up'
mát  'eye'
mítti  'to go down'
maté-re  'eagle'

/c/ is palatal. Prevocally it is usually affricated: [tʃ].

có-k  'place'
kó-c  'to write'
canó-ce  'hurricane'
?incét  'small fish trap'

/k/ is a back velar stop when it is before /a/ or /ɔ/ or when it is syllable final after /ɔ/; elsewhere it is a velar stop.
sikόŋ 'elbow'
kάː? 'fish'
látókkati 'to be broken down'
kán 'to carry on shoulders'
súkteŋ 'to fall'
tέːk 'to be lined up'

The nasals parallel the stops in their positions of articulation. As a syllable coda to a stressed oral vowel a nasal has homorganic, voiced, lenis pre-stoppage. This is essentially a lack of simultaneity of closure of the oral passageway and opening of the velic, resulting in the affricated nasal phones [ŋm], [ŋn], [ŋn], [ŋn]. The oral stop component of the phone is shorter in duration than is the nasal stop. In all other environments the nasals are fully nasal, voiced, and fortis.

/m/ is bilabial:

máh 'hey there'
kúm 'to bring'
límlé 'roll up'
kammép 'barber'

/n/ is apico-alveolar:

náːre 'outrigger'
cóːn 'tree'
?innéːte 'third'
kímóːné 'knee'

/ŋ/ is palatal:
ňá' 'to eat'
káñ 'to be old'
sé·ňle 'to shred, cut up'
mumňám 'player'
sé·ňe 'be shredded'
sé·ňñe 'to mince and take away'

/ŋ/ has a post velar allophone when it is syllable final after /o/, elsewhere it is a velar nasal.

ňá·v 'ripe (of fruit)'
nóŋ 'classifier used in counting animals'
tú·ňñe 'to slice out'
fíňñe 'to burn away'
há·ňe 'to be obeyed'
cí·pga 'to go straight away'

The fricatives share a phonological feature of spirantization and a distributional feature of infrequent- or non-occurrence syllable finally. (The peculiarity that two of the spirants, /f/ and /s/, are voiceless in all their environments while the third, /r/, is voiceless, is a reflection of the historical development of /r/ from an earlier /'y/.)

/f/ is a voiceless labiodental spirant:

fé·l 'to kill'
fatá·k 'to slap'
kufón 'to be thick'
kalfú·t 'ear wax'.

/s/ is a voiceless apicoalveolar rill spirant:

sát 'seven'
sařó·l 'to bulge'
rás 'to sprinkle'
kisát 'to jerk'
hanú·sə 'steam'
kinsóh 'fingernail'

/r/ is a voiced apico-domal fricative. The dominant phonetic quality of this phoneme is the retroflexion; the spirantalization is much weaker than that of the voiceless fricatives.

rá·le 'last, youngest'
?ínrú·y 'a fly'
sú·re 'be dragged along side'

/l/ is a voiced alveolar lateral; in syllable final position it is flapped.

lám 'to fold'
kilé·p 'throat'
talkic 'ant'
fo·ole 'prow of canoe'
?úlle 'dug up'
tafú·l 'six'

/f/ is a voiced alveolar flap. In syllable initial position /f/ is usually accompanied by apico-alveolar pre-stoppage, [t] when preceded by a voiceless consonant, [d] elsewhere.
řé·n  'foot'
lamřít  'tail'
kůkře  'my coconut'
patí-pře  'my house'
hévhař  'eight'

/v/ represents the apparently unconditional alternation between [v] (a voiced labio-dental fricative), [w] (a voiced labialized velar nonsyllabic vocoid) and [ʢ] (a voiced bilabial fricative). Of these three phones [ʢ] is the most frequent.
vó·k  'a hook'
valhé·  'yesterday'
kavál  'to fish (with net)'
ce·vne  'be quiet'
kinvál  'net (for fishing)'
ğá·v  'ripe, old'

/y/ is a voiced palatal non-syllabic vocoid:
yín  'to come'
yaná·ce  'poverty'
?iyiŋ  'to dwell'
kú·yle  'front piece of canoe'
kumyŋ  'soldier'
?inru·y  'fly (insect)'

The two laryngeals, /ʔ/ and /h/, constitute a class by virtue of their identical role in many morphophonemic rules. They show partial complementation on the
phonemic level: syllable finally /h/ is never preceded by a long vowel, /ʔ/ always is. It is likely that these phonemes were formerly allophonic variants of a single phoneme.

/ʔ/ is a glottal stop. Word initially it does not contrast with zero and is frequently omitted, especially in rapid speech. Elsewhere between vowels it is weakly articulated. Syllable finally it is more fortis, especially word finally. Like the other stops, /ʔ/ has a non-contrastive aspirated release before pause.

ʔahá 'to fish (with poison)'
ʔám 'dog'
lúʔu 'to be chased'
ráʔte 'to be put'
kinʔí·c 'matches'
káʔ 'fish'

/h/ as a syllable coda is actualized as a voiceless non-syllabic offglide of the same quality as the preceding vowel. A considerable amount of air escapes through the vocal cords, producing a breathy, spirantalized sound, for example, fóż 'to sweep'
séhti 'to be overcooked'

As a syllable onset /h/ is actualized as a voiceless (initially or following a consonant) to slightly voiced (following a vowel) onglide of the same quality...
as the following vowel. It is accompanied by minimum
glottal friction, for example,

fóho 'to be swept'
humlúm 'gold'
ró·lhaka 'to be lying down'
kahál 'to cook'
típhet 'to press (thing) in'

161. Examples of consonant contrasts are,

p - t - c - k:
pó·k 'to bind together'
tó·k 'to drive a nail'
có·k 'to sew'
kó·k 'to beat'

káp 'be firm'
káit 'be energetic'
kác 'to pluck'
kák 'to sever'

m - n - ŋ - ŋ:
tám 'to harpoon'
tán 'be immobile'
tañ 'be savage'
taña 'put up a wall'
mé·m 'older brother'
né·m 'coconut fibre cloth'
ñé·k 'to tie'
<table>
<thead>
<tr>
<th>Noun</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ηέ·c</td>
<td>'to look carefully'</td>
</tr>
<tr>
<td>ηά·k</td>
<td>'be spread out'</td>
</tr>
<tr>
<td>ηά·k</td>
<td>'be spoiled'</td>
</tr>
<tr>
<td>f - s - r - h - y:</td>
<td></td>
</tr>
<tr>
<td>fát</td>
<td>'to capsize'</td>
</tr>
<tr>
<td>sát</td>
<td>'tell before'</td>
</tr>
<tr>
<td>rát</td>
<td>'to slice crosswise'</td>
</tr>
<tr>
<td>hát</td>
<td>'be light'</td>
</tr>
<tr>
<td>kiyát</td>
<td>'ant'</td>
</tr>
<tr>
<td>r - ř - l:</td>
<td></td>
</tr>
<tr>
<td>řít</td>
<td>'harvest coconut'</td>
</tr>
<tr>
<td>řít</td>
<td>'taut'</td>
</tr>
<tr>
<td>lít</td>
<td>'to cut or trim'</td>
</tr>
<tr>
<td>p - n - v:</td>
<td></td>
</tr>
<tr>
<td>săp</td>
<td>'to stab'</td>
</tr>
<tr>
<td>sám</td>
<td>'gum'</td>
</tr>
<tr>
<td>pisáv</td>
<td>'to mess up'</td>
</tr>
<tr>
<td>p - f - v:</td>
<td></td>
</tr>
<tr>
<td>pěh</td>
<td>'to toss'</td>
</tr>
<tr>
<td>fěh</td>
<td>'to lift up'</td>
</tr>
<tr>
<td>věh</td>
<td>'to be warped'</td>
</tr>
<tr>
<td>t - n:</td>
<td></td>
</tr>
<tr>
<td>sá·t</td>
<td>'to weave'</td>
</tr>
<tr>
<td>sá·n</td>
<td>'be busy'</td>
</tr>
<tr>
<td>c - ñ:</td>
<td></td>
</tr>
<tr>
<td>tác</td>
<td>'to reach'</td>
</tr>
<tr>
<td>táñ</td>
<td>'be savage'</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>$k - \eta$:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ták</td>
<td>'measure with arms'</td>
</tr>
<tr>
<td>tá·ŋ</td>
<td>'portable oven'</td>
</tr>
<tr>
<td>$h - \emptyset$:</td>
<td></td>
</tr>
<tr>
<td>síʔi</td>
<td>'devil'</td>
</tr>
<tr>
<td>síhi</td>
<td>'be blown aside'</td>
</tr>
<tr>
<td>ñák</td>
<td>'to drink'</td>
</tr>
<tr>
<td>hók</td>
<td>'to bale water'</td>
</tr>
<tr>
<td>$\emptyset$ - $\emptyset$:</td>
<td></td>
</tr>
<tr>
<td>sú'</td>
<td>'to drag along side'</td>
</tr>
<tr>
<td>sú·ʔ</td>
<td>'to jump down'</td>
</tr>
<tr>
<td>kamʔ·t</td>
<td>'one who drinks'</td>
</tr>
<tr>
<td>kamä·t</td>
<td>'one who rows'</td>
</tr>
</tbody>
</table>
The vowels are voiced in all their environments. In rapid speech, macrosegment-final vowels tend to be weakly articulated and are sometimes hardly audible.

Before syllable-final /h/ vowels are exceptionally short in duration — approximately one half a mora. Elsewhere, unlengthened vowels are about one mora in length. (See page 57 regarding contrastive vowel length).

An epenthetic vocalic palatal glide [i] occurs following a vowel — short or lengthened — before the palatal consonants /c/ and /ń/ when they are syllable final, for example:

- pé·c 'snake'
- lác 'to skewer'
- f5·cle 'canoe prow'
- kń 'old, ripe'
- sé·ńle 'to mince'
- ?5·ńci 'monkey'

In the following environments all vowels have slightly nasalized allophones: (See sec. 150 for discussion of the syllable).

(a) In an unstressed closed syllable beginning with /ʔ/ or /h/ and ending with a nasal consonant, for example,

- ?inrúy 'fly'
- humłúm 'gold'
(b) After a nasal consonant when neither /ʔ/ or /h/ follows, for example,

tani'y  'ive'
mél.  'just now'
malá·ke  'citron'

Little additional environment-conditioned allophony is found among the vowels. Only /i/, /u/ and /a/ have somewhat consistently perceptionally distinct allophones in complementary environments.

Similar environments determine the distribution of the allophones of /i/ and /u/. The relevant environments are shown in the following chart.

<table>
<thead>
<tr>
<th>Environment</th>
<th>Allophone</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/</td>
<td>/u/</td>
</tr>
<tr>
<td>1. Before length</td>
<td>[i]</td>
</tr>
<tr>
<td>2. Unstressed in open syllables; stressed in closed syllables</td>
<td>[i·...i]*</td>
</tr>
<tr>
<td>3. Unstressed in closed syllables</td>
<td>[I·...i·v]</td>
</tr>
</tbody>
</table>

(*...here means that the allophones vary freely over a range bounded by the phones given; · means 'lowered'.)

Examples:

/i/ /u/
1) lí·m 'to roll' tú·ŋ 'to slice lengthwise'
    tafí·si 'widow' pinřú·ŋe 'mist'
2) miléh 'to move' tuřé- 'be dark red'
lařít 'tail' tům 'bunch'
fé-li 'be killed' só-?tu 'be forbidden'
?i 'to, in' ?uhō-m 'to breathe'
3) kinsóh 'fingernail' kumyá-ne 'earthquake'
tilŋí?ī 'clam' kunléh 'something thrown'

/a/ is a low central unrounded vocoid; it is backed when stressed and preceded by /k/; for example,
máy 'sea' talá-ke 'be falling apart'
láč 'to skewer' kaná-ne 'sister'
lá-č 'to massage' ?ó-lka 'custard apple'
ňá?á 'food' sák 'to fish with a spear'

The phonetic qualities of the remaining vowels are as follows:

/e/ is a mid close front unrounded vocoid, for example,
héŋ 'one'
hé- 'when'
péh 'a bubble'
ké?eŋ 'take away'

/e/ is a mid open front unrounded vocoid, for example,
cátŋén 'be lost'
pép 'slap'
ňé-n 'be tight'
pé-t 'be burned'
[ε] and the sequence [εɔ] are almost in complementary distribution, [εɔ] occurring stressed before k, η and l, and [ε] occurring elsewhere. (Recall the front glide before palatals, found after all vowels.) In violation of this distribution are a few loan words and a few infixed forms where [ε] represents //e// after a nasal, e.g.

/sekenteŋi/ 'secondary'
/humεŋ/ 'only one', {hεŋ} 'one'

Compare /kanεŋŋ/ 'piece of stick on a long fishing line'.

Phonetically the sequence [εɔ] is a diphthong, with stress on the [ε], when it is short. When it is long, however, the stress is on the [ɔ], with both [ε] and [ɔ] clearly occupying the peaks of syllables. This sequence [εɔ] is phonemicized here as /εɔ/.

Examples:

/pεɔk/ 'to pull'
/pitεɔŋŋ/ 'to make something numb'
/kuhɛʊl/ 'to be concave'
/cintɛɔŋŋ/ 'mosquito curtain'

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/ə/ is a high close central unrounded vocoid, for example,

kát 'be sharp'
káxét 'to be finished'
tá. 'to glide through air'
háh 'to cease, desist'
tá·ki 'be pulled'

/e/ is a high open central unrounded vocoid, for example,

kát 'be vigorous'
'ık '(a cry of pain)'
tá·ki 'be removed from fire (of pot)'
tálé·ke 'parrot'

/e/ is a mid open central unrounded vocoid,

xek 'he (subj. pron; past, anim., non-vis.)'
ñeëó 'dove'
méy 'unbreakable'
tálé·ke 'road'
háh 'light (in weight)'
piré·y 'to dissolve'

/o/ is a mid close back rounded vocoid, for example,

róq 'to accompany'
'ufón 'be cold'
tó·k 'to drive a nail'
ha?ó· 'to drive cattle'
/ɔ/ is a mid open back rounded vocoid, for example,

rón 'product, fruit'
ló 'to crawl, creep'
ńōk 'to suck'

/æ/ is a low front unrounded vocoid. This phoneme is marginal to the language, occurring only in a few loan words, for example,

plēŋkēt 'blanket'
?æsit 'acid'

Special comment is in order regarding /ɪ/ and /æ/. It is clear that these vowels, now distinct, were formerly allophones of a single phoneme, [ə] occurring unstressed, after a nasal, or before /h/, and [ɪ] occurring elsewhere, i.e. stressed, not after a nasal, and not before /h/. This complementation is still found when the vowels are short -- with the exception of the two loan words /kētte/ 'donkey' (Hindi), and /třém/ 'drum' (English) and one word having a nasalized vowel /tikā-č/ 'person having protruding buttocks.' (/ɪ/ and /æ/ alternate freely before /s/ in stressed, closed syllables, e.g. /rīs ʃ rēs/ 'to irrigate'.)

Contrast is found between /ɪ/ and /æ/, however, when they are long and in open syllables. Note the pair

/lɪ·ke/ (lɪk + ə) 'to be gone along, by way of'
/lē·ke/ (lē·k + ə) 'to do well'

This contrast is the result of a historical change in the language to the effect that all stressed vowels in open
syllables were lengthened, unless a laryngeal followed.

A ten vowel system is clearly required to handle the long vowels. If loan words were ignored, nine vowels would be adequate for the short vowels. However, such a solution would require separate sets of long and short vowels; *// could not be treated as a "vocalic modifier", and hence the relationship between long and short vowel forms of a single morpheme could not readily be shown. This would be a serious violation of the dynamics of the language. For this reason, because of the occurrence of [s] in loan words in environments non-complementary with [t], and because of strong informant insistence about the distinction of these vowels, the present solution has been adopted.

Two vocalic components have been isolated as separate phonemes: length and nasalization. This solution was adopted over one setting up separate series of vowels — short, long, short nasal, and long nasal — because this present solution simplifies the statement of the morphophonemics — as well as the phoneme inventory — and hence represents the structure of the language more adequately.

Long vowels vary in length from about one and a half to two and a half morae. The shortest length occurs when the vowel is followed somewhere in the macrosegment by a stressed syllable while the longest occurs when the vowel is immediately followed by an open syllable.
In environments other than these a long vowel is about two morae in length. Examples of long vowels have been presented above.

Phonemic nasalization, in contrast to the predictable nasalization described above, is produced with wide velic opening, resulting in considerable nasal resonance. Examples:

\[ \text{'a light'} \]
\[ 'to have consumption' \]
\[ 'to groan' (onomatopoetic) \]
\[ 'gas on bowels' \]
\[ 'a person deformed by protruding buttocks' \]
\[ 'a duck' \]
\[ 'be curved, rounded' \]
\[ 'yes, to wish, want' \]

Examples of vowel contrasts are,

\[ i - e - \varepsilon : \]
\[ 'be blown (of nose)' \]
\[ 'slats (for floor)' \]
\[ 'be overcooked' \]
\[ 'to capsize' \]
\[ 'quiet' \]
\[ 'a fruit shoot' \]
\[ 'to stab' \]
i - i:

sín    'to call on'
sín    'stout'

I - ø:

pip    'throw eggs'
pép    'type of tree'

ø - a:

mày    'courage'
mày    'sea'

i - I - ø - a:

kalá·ke    'be tickled'
kalà·ke    'to shake'
talá·ke    'parrot'
talá·ke    'road'
talá·ke    'be out of order'

i - ã:

tík    'to split'
 ták    'to jerk'

ã - u:

túŋ    'to overflow'
táŋ    'to perch'

e - I - o:

héŋ    'one'
híŋ    'to wait for'
?ihóŋ    'stone'
<table>
<thead>
<tr>
<th>Phonetic</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lúhŋe</td>
<td>'to unloose'</td>
</tr>
<tr>
<td>lónŋe</td>
<td>'to hit and leave'</td>
</tr>
<tr>
<td>lóhŋe</td>
<td>'the south, south wind'</td>
</tr>
<tr>
<td>lāhŋe</td>
<td>'chip off a piece'</td>
</tr>
<tr>
<td>léhle</td>
<td>'to get loose'</td>
</tr>
<tr>
<td>láhŋe</td>
<td>'to tear down'</td>
</tr>
<tr>
<td>tú*k</td>
<td>'to pull'</td>
</tr>
<tr>
<td>tô*k</td>
<td>'to drive a nail'</td>
</tr>
<tr>
<td>vô*k</td>
<td>'bathe'</td>
</tr>
<tr>
<td>vô*k</td>
<td>'fishhook'</td>
</tr>
<tr>
<td>pé*p</td>
<td>'poisonous tree'</td>
</tr>
<tr>
<td>pá*p</td>
<td>'a reed type'</td>
</tr>
<tr>
<td>vá*k</td>
<td>'to grasp'</td>
</tr>
<tr>
<td>vô*k</td>
<td>'fishhook'</td>
</tr>
<tr>
<td>kó*?</td>
<td>'to be able'</td>
</tr>
<tr>
<td>ká*?</td>
<td>'fish'</td>
</tr>
<tr>
<td>síc*t</td>
<td>'to stab'</td>
</tr>
<tr>
<td>sá*t</td>
<td>'to weave'</td>
</tr>
<tr>
<td>sip</td>
<td>'type of knife'</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Roman</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>sip</td>
<td>'to grow'</td>
</tr>
<tr>
<td>e - e':</td>
<td></td>
</tr>
<tr>
<td>sampêt</td>
<td>'papaya'</td>
</tr>
<tr>
<td>pé't</td>
<td>'to be healed'</td>
</tr>
<tr>
<td>ε - ε':</td>
<td></td>
</tr>
<tr>
<td>pép</td>
<td>'to slap'</td>
</tr>
<tr>
<td>pé'p</td>
<td>'poisonous tree'</td>
</tr>
<tr>
<td>ā - ā':</td>
<td></td>
</tr>
<tr>
<td>tic</td>
<td>'to rip with teeth'</td>
</tr>
<tr>
<td>tí'c</td>
<td>'to plant'</td>
</tr>
<tr>
<td>e - e':</td>
<td></td>
</tr>
<tr>
<td>pép</td>
<td>'a type of tree'</td>
</tr>
<tr>
<td>pé'p</td>
<td>'a type of reed'</td>
</tr>
<tr>
<td>a - a':</td>
<td></td>
</tr>
<tr>
<td>cát</td>
<td>'to be lost'</td>
</tr>
<tr>
<td>cá't</td>
<td>'move'</td>
</tr>
<tr>
<td>u - u':</td>
<td></td>
</tr>
<tr>
<td>túŋ</td>
<td>'to cause to overflow'</td>
</tr>
<tr>
<td>túŋ</td>
<td>'to slice'</td>
</tr>
<tr>
<td>o - o':</td>
<td></td>
</tr>
<tr>
<td>ról</td>
<td>'to insert'</td>
</tr>
<tr>
<td>ró'l</td>
<td>'to be many'</td>
</tr>
<tr>
<td>o - o':</td>
<td></td>
</tr>
<tr>
<td>ŋók</td>
<td>'to pluck'</td>
</tr>
<tr>
<td>ŋó'k</td>
<td>'to suck'</td>
</tr>
<tr>
<td>æe - æe:</td>
<td></td>
</tr>
<tr>
<td>plæŋkét</td>
<td>'blanket'</td>
</tr>
<tr>
<td>plékpó't</td>
<td>'blackboard'</td>
</tr>
</tbody>
</table>
Statements made in this section do not apply to loan words unless so specified.

a. Nasalization co-occurs with stress, with but two exceptions;

\[\text{?čá·ve} \quad \text{'light'}\]
\[\text{pān} \quad \text{'pound' (Eng.)}\]

The following chart lists the vowels with which nasalization may co-occur.

<table>
<thead>
<tr>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>u</td>
<td>i</td>
</tr>
<tr>
<td>a</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td></td>
</tr>
<tr>
<td>o</td>
<td></td>
</tr>
</tbody>
</table>

\[\text{?i}/\text{ occurs in only one form, /tiká·c/ 'person having deformed, protruding buttocks.'}\]

The presence of both nasalization and length with \[\text{?i}/\text{ are surprising and unique in this word.}\]

The following vowels are always nasalized.

1. A long vowel following a nasal consonant, e.g. ně·t 'two'.

2. A tonic or post-tonic vowel following a laryngeal when there is a nasal in the preceding syllable, e.g.

\[\text{mihá·ye} \quad \text{'caterpillar (type)'}\]
\[\text{?inhú·te} \quad \text{'catching with a string'}\]
tilpi?i  'clan'

b. Length occurs contrastively with all vowels except the new phoneme /æ/. However, certain limitations to the distribution of /i/ must be mentioned.

1. /æ·/ contrasts with /æ/ only when a nasal precedes.

2. /e·/ and /o·/ and, to a lesser extent /ɛ/ and /ɔ/ are almost in complementary distribution with, respectively, /e/, /o/, /ɛ/ and /ɔ/, the short vowels occurring before the fricatives /h/ and /s/ and in the environment _H_ where H is a laryngeal, and the long vowels occurring elsewhere. (A special statement for /ɔ/ is that it occurs additionally (1) before the velars /k/ and /ŋ/, and (2) unstressed). There are exceptions to each of these statements of complementation, but it should be noted that most of the data exhibits the complementation as stated.

3. Length does not occur contrastively with /i/ in closed syllables. (tik,k, noted above, is a single exception.) Thus length is freely contrastive only with the symmetrical vowels /i, ɨ, u, a/.  

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Long vowels nearly always co-occur with stress, but there are exceptions, e.g. /pínfe/ 'and', /póː/ 'because', /ʃeː/ 'if'.

C. The syllable canons are:

\[ V(C) \quad CV \quad CVC \quad CV(C) \]

Differing distributions of phonemes in these syllable types precludes collapsing the canonical formulae. There is by no means free occurrence of consonants and vowels within these formulae. Possibilities are as follows:

1. Syllables without onsets.

Type \( V(C) \) : \( V = a, \acute{a}, \circ \)

C = k, ŋ, l after \( \circ \)
C = t, v after a (only two instances.)

/ɛ/ precedes VC syllables in all instances except the interjection /æː/ 'look', which also provides the only example of /æː/ in a syllable without an onset. Syllables of this type are by far the least frequently occurring in the language.

Examples:

- pantɛ́-ka 'melon'
- kapɛŋ 'porpoise'
- kuḥsöl 'be concave'
- tiʔɛ́-t 'to groan (onomatopoetic)'
- kumea*v 'cat'
2. Syllables with onsets.

Vowel harmony and metathesis result in some consonant and vowel distributions which occur nowhere else in the language. As a result of vowel harmony alone, any vowel which may occur stressed before a laryngeal may also occur unstressed after it. This includes all vowels except /ɪ/ and /æ/.

E.g.

/ʃóho/ 'be whipped'
/ʃi?i?i/ 'to be admired'

As a result of both vowel harmony and metathesis, the consonants /l, ɹ, η, v, y/ occur syllable finally after all vowels except /ɪ/ and /æ/ in unstressed syllables beginning with a laryngeal,

E.g.

/sóʔov/ 'be rejected'
/véʔeʔ/ 'be told'
/péhɛʔ/ 'be thrown away'

What appears to be vestigal vowel harmony is seen in the following five forms:

páháː 'morning'
řehɛn 'cord'
cehɛn 'thing'
ʔčeː 'to sneeze'
káháːt 'be complete'
These forms are exceptions to the distribution of unstressed /ɨ/ and /ɛ/. (A number of forms with prefix te- such as /tehê:mni/ 'which is flowing out' show that the first vowel in each of the above forms cannot be construed as schwa assimilated to the following stressed vowel.)

In order to present a clearer picture of the phonotactics, syllables which are the result of metathesis and/or vowel harmony are excluded from the following discussion.

a. The following general restrictions obtain on the sequence consonant-vowel.
   1. The high mid vowels /e, ɨ, o/ do not occur after a nasal consonant, nor does the new phoneme /æ/.
   2. /ɨ/ does not occur after /ń/.

b. Syllables having an initial consonant are of the following types.
   Type CV :  C = all consonants
   V = a, e, i, u

   The only syllables of this type which have not been noted are *fu, *fû.

   A single CV syllable is not described by the above formula: ũe. /ɛ/ does not occur unstressed anywhere except in this syllable and in harmonic situations discussed above.
Type $C_1VC_2$: $C_1 = \text{all } C \text{ except } r, v$

$C_2 = \text{all } C \text{ except } f, s, ?, r$

$V = a, e, i, u$

Only a relative few of the seven hundred and eighty possibilities generated by this formula have been found to occur; those which have been found are given in Appendix I.

The high frequency of m and n as syllable-final is due to their occurrence in infixes.

Surely many of the gaps in the charts are fortuitous. Two systematic restrictions have been noted:

1. i does not occur before a labial consonant unless juncture follows.

2. p, f do not occur before /un/, i.e.

*pun, *fun.

In addition to the above CVC syllables, o and e each occur in a handful of weak stressed CVC syllables — most of which are contractions, e.g.

- poc (póː əc) 'because I'
- pom (póː əm) 'because you (sg.)'
- pon (póː ə na) 'because he, they'
- kol 'surely'
- yec (yéː əc) 'if I'
- yey (yéː hiː?) 'if we (pl., incl.)'
- setmák 'bee'
Type $C_1 \hat{V}(C_2)$: $C_1 = \text{all } C \text{ except for the general restrictions already mentioned.}$

$V = \text{all } V$

$C_2 = \text{all } C \text{ except } /\ddot{r}, r/$

Restrictions:

1. $/f/$ occurs syllable-finally in only one word — probably a loan, although the source has not been identified: caf 'tamarind'

2. $/n/$ does not occur syllable-finally after $/\breve{r}/$.

3. $/\?/$ is always preceded by $/\breve{r}/$ when syllable-final.

4. The following vowel-consonant sequences do not occur in the data.

$\{e, \dot{e}\}p \quad \{h, \?\}$

$ey \quad \{u, \dot{e}, \varepsilon\}v$
The morphophonemic rules are an ordered sequence of phonological rewrite rules which operate on a string of phonological elements which are termed morphophonemes. The input to the rules is the phonological shapes of morphemes, which are written morphophonemically. The output of any particular rule is without theoretical significance; the output of the whole set of rules is the phonemic representation of the data.

It is perhaps of interest to note that while order is an important factor in the application and statement of the morphophonemic rules given here, it is not true that each rule must be ordered with respect to every other rule. The rules are presented here according to which portion of the word they apply to: pretonic, tonic, and post-tonic, or inter-tonic syllables. Among the rules of the first group, order is not relevant, nor need these rules be ordered with respect to the other groups. But within the tonic – post-tonic group the rules must be ordered fairly strictly, although there is some flexibility. The single inter-tonic rule appears to be unordered.

Morphophonemic processes found in Nicobarese include both consonantal and vocalic assimilation, loss, and metathesis, consonantal dissimilation, vocalic change, consonantal prothesis, semivocalic epenthesis, vowel-semivowel alternation, and vowel length and
nasalization loss.

Three special statements of an upper-level phonological nature which are not technically morphophonemic rules need to be made, concerning (1) the use of special rules (SR); (2) the mechanics of infixation, and (3) macrosegmental stress placement.

(1) Irregularities of a portmanteau or restricted phonological nature are described by special rules, which pertain only to the morphemes or phonological segments of morphemes specifically designated.

The rules, designated by SR, are presented in the grammar in connection with the constructional statement which brings the morphemes or segments together. The output of the special rules is morphophonemic and hence subject to the morphophonemic rules.

E.g.

SR: { -am- } + { vé· } → //mē· // 'those (anim.)'

(2) Morphs with hyphens on either side are infixes; they occur with stems having either the shape CVC or CVCVC, and are infixed into these phonological strings according to the following rules:

(a) with stems having the shape CVC, the infix has the shape VC and occurs after the initial consonant, e.g.

//-am- fē·1// → //famē·1// 'killer'
//-ah- tɛ·c// → //tahɛ·c// 'what is planted'
(b) with stems having the shape CVCVC, the infix has the shape C and occurs after the initial CV, e.g.

//-n- kuléh// → //kunléh// 'what is thrown'
//-m- taníy// → //tamnúy// 'five only'

In this respect it should be noted that hyphens written with morphs or morphemes are without theoretical or segmental significance; their use is strictly as a designation of whether the affix is a prefix, infix or suffix. Where the context makes this clear the hyphens are omitted.

(3) Every macrosegment has at least one primary or emphatic stress. If none of the morphemes of the macrosegment is inherently stressed, macrosegmental primary stress occurs on the first syllable. In the following examples the word having macrosegmental stress is underlined.

E.g.

//acín ap kumyéh, te 'úk cu, mín?/ 'Who will scratch my back?'
//?á·e an có:n, tóc.// 'John is praised by me.'
//sé·lò an ñam sá:n, té méh.// 'The rice is spooned by you.'

In the statement of the morphophonemic rules below the following special symbols are used: (see also symbols and abbreviations, pages 14 - 16).
\( \ddot{V} \) weak-stressed vowel

\( \dot{S} \) syllable with primary stress

* Rule is optional. In general, the optional rules a-e less likely to occur in slower and more deliberate speech.

- The location in the environment in which the alternation occurs.

\( V_1 \ldots V_1 \) Vowels designated by subscript one are identical in all respects, including vocalic modification features (i.e. length and nasalization).
210. Rules pertaining to pretonic syllables.
These rules are unordered, with respect both to each other and to the other rules.

1. Vowel loss
The first of two adjacent unstressed vowels is lost.

\[ \ddot{\mathbf{v}} \rightarrow \emptyset / \ddot{\mathbf{v}} \]

E.g.

//kain\ddot{\mathbf{r}}\ddot{\mathbf{i}}.r// \rightarrow \text{kain\ddot{\mathbf{r}}.r} 'cooking utensil'
//siin\ddot{\mathbf{r}}.\ddot{\mathbf{o}}.\ddot{\mathbf{a}}.// \rightarrow /\text{sin}\ddot{\mathbf{r}}.\ddot{\mathbf{o}}.\ddot{\mathbf{a}}./ 'butting'
//maan?ih\ddot{\mathbf{e}}.\ddot{\mathbf{n}}.// \rightarrow /\text{maan}\ddot{\mathbf{?}}\ddot{\mathbf{e}}.\ddot{\mathbf{n}}./ 'what can be stopped'
//\ddot{\mathbf{a}}\ddot{\mathbf{n}}.\ddot{\mathbf{a}}.// \rightarrow \text{a\ddot{\mathbf{n}}.a.} 'he'

2. Vowel assimilation # one
Unstressed i and \(\ddot{\mathbf{a}}\) assimilate to a followinglabial consonant that is not before juncture.

\[ \ddot{\mathbf{a}}, \ddot{\mathbf{i}} \rightarrow \ddot{\mathbf{u}} / \underline{-+} \]

E.g.

//kim\ddot{\mathbf{h}}.\ddot{\mathbf{i}}.t// \rightarrow \text{kum\ddot{\mathbf{h}}.t} 'one who finishes'
//kimy\ddot{\mathbf{\acute{y}}}.\ddot{\mathbf{n}}.// \rightarrow /\text{kumy\ddot{\mathbf{\acute{y}}}}.\ddot{\mathbf{n}}./ 'soldier'
//kiv\ddot{\mathbf{\acute{a}}}.\ddot{\mathbf{y}}.// \rightarrow /\text{kuv\ddot{\mathbf{\acute{a}}}}.\ddot{\mathbf{y}}./ 'to wave'

3. Vowel assimilation # two
Unstressed schwa assimilates to a following unstressed vowel when a laryngeal intervenes.

\[ \ddot{\mathbf{e}} \rightarrow \mathbf{v}_1 / \underline{\dddot{\mathbf{h}}\mathbf{v}_1} \]

E.g.

//m\ddot{\mathbf{a}}\ddot{\mathbf{\dddot{y}}}\ddot{\mathbf{\dddot{y}}}\ddot{\mathbf{\dddot{n}}}.\ddot{\mathbf{\dddot{n}}}// \rightarrow /\text{mi}\ddot{\mathbf{\dddot{y}}}\ddot{\mathbf{\dddot{y}}}\ddot{\mathbf{\dddot{y}}}\ddot{\mathbf{\dddot{n}}}./ 'inhabitants'
4. Dissimilation
(a) One of the two consonants in the sequence 
\( h\)h dissimilates to \( _\)h.

\[ h\rightarrow h\? \rightleftharpoons h\] 

E.g.

//mahahö·r// → maʔahó·r \( \rightleftharpoons \) mahaʔó·r 'one who 
drives (something) away'

//hahāŋ// → ahāŋ \( \rightleftharpoons \) haʔāŋ/ 'to cause to 
hear; what one hears'

(b) \( h\) before \( af\) or \( as\) dissimilates to \( _\)h.

\[ h\rightarrow ?\rightleftharpoons ã\] 

E.g.

//hafāl// → ahāl/ 'to cause to run'

//hasēh// → asēh/ 'to cause to be overcooked'

5. Glottal stop prothesis
Glottal stop is introduced before an initial 
vowel.

\( ò\rightarrow ?\rightleftharpoons ò\) 

E.g.

//an// → òan/ 'He (subj., non-past, vis.)'

//em// → òem/ 'you (sg. sub.)'
6. Unstressed VH loss

The sequence vowel-laryngeal is lost before another unstressed vowel in a closed syllable.

\[ \text{VH} \rightarrow \emptyset / \_\_\_\_VC \]

E.g.

- \[ \text{mu'umfó}\cdot v \rightarrow /\text{mumfó} \cdot v/ \] 'one who makes (something) cold'
- \[ \text{mu'umrén} \rightarrow /\text{mumrén}/ \] 'one who causes one to be startled'

220. Rules pertaining to tonic and post-tonic syllables.

Rule six is unordered with respect to all other rules; the other rules are fairly strictly ordered.

7. Vowel lowering

A mid vowel becomes a lower mid vowel after a nasal or a cluster of nasal plus h.

\[
\begin{align*}
\{[e] \} & \rightarrow \{[ɛ] \} \\
\{\mid \} & \rightarrow \{[ə] \}
\end{align*}
\]

E.g.

- //lamék// \rightarrow /lamék/ 'one who goes through'
- //kané\cdot tē// \rightarrow kané\cdot tē 'the binding together'
- //?inhó\cdot nē// \rightarrow ?inhó\cdot nē 'a driving away'

8. h loss

h is lost before ?.

\[ h \rightarrow \emptyset / \_\_? \]
E.g.
\[ \text{ŋíh}^{\prime}\text{a} \rightarrow \text{ní}^{\prime}\text{a} \] 'this (inan., specificative)'
\[ \text{ŋóh}^{\prime}\text{a} \rightarrow \text{nó}^{\prime}\text{a} \] 'this (anim., specificative)'
\[ \text{mēh}^{\prime}\text{a} \rightarrow \text{mé}^{\prime}\text{a} \] 'you (sg., emphatic)'

9. Vowel lengthening
A stressed vowel in an open syllable is long unless the next syllable begins with a laryngeal.
\[ \emptyset \rightarrow \text{V}_\text{PV} \]
E.g.
\[ /\text{félə}/ \rightarrow /\text{fé}⋅\text{lə}/ 'be killed' \]
\[ /\text{ħəŋəkú}?// \rightarrow /\text{ħi}⋅\text{ŋəkú}?/ 'be expected, waited for' \]
In slow speech a vowel in an open syllable before h is sometimes lengthened:
E.g.
\[ /\text{pihə}/ \rightarrow /\text{pihə}/ \text{or} /\text{pi}⋅\text{hə}/ 'spouse' \]

10. Assimilation: tonic nasalization
A long vowel after a nasal consonant is nasalized.
\[ \text{V} \rightarrow \tilde{\text{V}}/\text{N} \]
E.g.
\[ /\text{ŋá}?// \rightarrow /\tilde{\text{ŋ}}\acute{\text{á}}/?/ 'to eat' \]
\[ /\text{pumná}⋅\text{me}/// \rightarrow /\text{pumná}⋅\text{me}/ 'a village' \]
\[ \text{kanē}⋅\text{tə} \rightarrow /\text{kanē}⋅\text{tə}/ 'the binding together' \]

11. Length loss
Length is lost before glottal stop when a vowel follows.
• (→) Ø / _?V

E.g.

ñá·ʔe (→) ñáʔe 'be eaten'

lú·ʔe (→) lúʔe 'be chased'

Note: this rule is sometimes inoperative in slow speech.

E.g.

ñá·ʔe → /ñáʔe/ 'be eaten'

Most of the following rules pertain to post-tonic syllables; note however that rule eighteen applies both to tonic and post-tonic vowels.

12. Metathesis

A sequence Re (where R is any of the resonants l, m, n, ñ, or V) is metathesized after a laryngeal.

Re (→) eR / H_

E.g.

//rúhle// (→) rúhel 'to move up'

//vé·ʔe// (→) vé·ʔeŋ 'to tell'

//hó·ʔe// (→) hó·ʔeu 'be agreeable'

//hací·ʔei// (→) hací·ʔei 'be shortened'

Note: This rule is optional when the segments to which it pertains are in word-final position; otherwise it is obligatory:

E.g.

//kó·ʔełó·n// → kó·ʔeqłó·n 'be satisfied'

(especially of food)
13. Semivowel rule # one
Unstressed i and u become y and v, respectively, after a vowel.

\[
\text{i, ū} \rightarrow \text{y, v} / \text{V}_-\]

E.g.

\[\text{hō·ʔeu} \rightarrow \text{hō·ʔev} \ 'be agreeable'}\]
\[\text{cē·ʔeurén} \rightarrow /\text{cē·ʔevrén}/ \ 'have something left'}\]
\[\text{hací·ʔsi} \rightarrow \text{hací·ʔey} \ 'be shortened'}\]

*14. Vowel loss
An unstressed vowel is lost following an unstressed vowel with an intervening consonant other than t or r.

\[\text{V} (\rightarrow) \emptyset / \text{VC}^-t,r_-\]

E.g.

\[//\text{kafítqelə}// (\rightarrow) /\text{kafíthel}/ \ 'to flick something) up'}\]
\[//\text{ŋáthaka}// (\rightarrow) /\text{ŋáthak}/ \ 'to be bound'}\]
\[//\text{macúhteř} // (\rightarrow) /\text{macúhteř}/ \ 'nine'}\]
\[\text{hō·ʔeva} (\rightarrow) \text{hō·ʔev} \ 'be agreeable'}\]

15. Semivowel rule # two
Semivocalic glides y and v are introduced between ie and ue respectively.

\[
\begin{align*}
\{\text{ie}\} & \rightarrow \{\text{iye}\} \\
\{\text{ue}\} & \rightarrow \{\text{uye}\}
\end{align*}
\]
16. Vowel assimilation # three

Schwa is totally assimilated to a preceding stressed vowel when a laryngeal intervenes.

\[ e \rightarrow V_1 / \hat{V}_1 H \]

E.g.

\[
\begin{align*}
\text{na}_\text{e} \rightarrow \text{nah}_\text{e} & \\
\text{fohaye} \rightarrow /\text{fohoye}/ & \text{'be driven out'} \\
\text{?ah}_\text{e} \rightarrow \text{?ah}_\text{a} & \text{'be alive'}
\end{align*}
\]

(Note that vowel length blocks this rule: \( \text{nah}_\text{e} \neq \text{'nah}_\text{e} \text{'ah}_\text{a} \).

This rule often does not operate in slow speech or when \( V_1 \) is i or u;

E.g.

/\text{kù}_\text{e}\text{sti}/ \rightarrow /\text{kù}_\text{e}\text{ste}/ \text{'toward'}

17. Nasal loss

If identical vowels are separated by glottal stop and the first of those vowels is nasalized and stressed, the nasalization is lost.

\[ \hat{V}_1 (-) V_1 / \hat{\hat{V}}_1 \]

E.g.

\[
\begin{align*}
\text{nah}_\text{a} (-) /\text{nah}_\text{a}/ & \text{'be eaten'} \\
\text{lù}_\text{u} (-) /\text{lù}_\text{u}/ & \text{'be chased'}
\end{align*}
\]
18. R loss

R is lost before a consonant or juncture.

\[ r \rightarrow \emptyset /_C^- \]

E.g.

//ʔasé·rhas// → //ʔasé·has/ 'pour in'

//ʔasé·r// → //ʔasé·/ 'to pour'

19. Assimilation: nasalization

A tonic or post-tonic vowel is nasalized if there is a nasal in the preceding syllable and a laryngeal intervenes.

\[ V \rightarrow \tilde{V} / N(V)H^- \]

E.g.

//mahú·ve// → //mahú·ve/ 'a wave'

//kamhúl// → //kamhúl/ 'a cook'

//kiní·c// → //kiní·c/ 'a match'

méʔe → /méʔe/ 'you (sg. emph.)'

20. Non-correlative q

//q// represents the following alternation:

\[ q \rightarrow \emptyset /_?^- \]

\[ q \rightarrow \text{h} / \text{Elsewhere} \]

E.g.

//mařó·ʔqañ// → //mařó·ʔañ/ 'be left behind'

//fê·lqañ// → //fê·lhañ// 'to kill (someone)'

ʔet ŋamto·ʔqara → //ʔet ŋamto·ʔara/ 'to not play at all'
230. Rule pertaining to inter-tonic segments.

*21. Unstressed er loss

The sequence er is lost between stressed vowels.

er (→) Ø / S(C)_V

E.g.

//pó·yteró·?// (→) /pó·ytó·?/ 'be great (of sound)'

//kanó·?leró·?// (→) /kanó·?ló·?/ 'blessing'
300. Introduction to the Morphology

The morphology comprises statements of allomorphy, stem structure, and word composition; it involves the description of derivation and inflection.

The major Ficobarese form classes, defined by both morphological and tactic criteria, are noun, classifier, numerator, pronoun, verb, demonstrative pronoun, and interrogative.

Morphological processes involved are inflection, which is accomplished by suffixation, and derivation, which is accomplished by prefixation, infixation, suffixation, and compounding.

Major semantic contrasts around which the language is organized are animate/inanimate, which are inherently contrastive in nouns, pronouns, and demonstrative pronouns, and personal/non-personal, which are inherently contrastive in nouns and are inflectional with pronouns.

Description of the noun centers on two topics: derivation and classification. Derivation is a major process of noun formation, most forms consisting of a verb root or stem plus an affix. Classification of the nouns is tactic, distribution within the noun phrase defining common and proper classes, each of which has animate and inanimate subclasses.

The classifiers are a morphologically simple tactic class, most members of which are also nouns.
The numerator class comprises the series numerators, which is a class of numerator roots, and the quantifiers, which are roots which are also nouns or verbs. Description of the numerator involves presentation of the formation of the series constructions and description of the five numeral inflectional constructions, two of which also occur with verbs.

The demonstrative pronoun description involves both derivation and inflection; the roots contrast as to proximal/distal, number and animate/inanimate.

The pronouns are a morphologically and semantically highly complex paradigm, at various points within the paradigm showing either implicit or explicit contrast for person, number, case, personal/non-personal, animate/inanimate, near/remote, visible/non-visible, and past/non-past.

Verb description involves statements of stem composition and description of the thirteen inflectional constructions. Stems are either simple or derived, and are distributed in three classes: transitive, intransitive, and non-agentive. Five of the inflectional suffixes consist of a stem plus a single suffix; the other seven describe paradigms which are inflected for direction/aspect, and which differ with respect to voice.

The interrogatives comprise interrogative roots and derived stems; they are distributed in four tactic posi-
tions and are presented together as a morphologically
interlocking set of forms.
400. Nouns

Nouns are identified by their distribution in syntactic constructions. Any word which may occur as head of a noun phrase is a noun.

410. Noun stems

Description of noun stems involves consideration of stem allomorphy and morphemic composition of stems.

1. Stems which are identical to root morphemes, e.g.
   \{róŋ\} 'fruit, product; side'
   \{?á·p\} 'canoe'
   \{?atulín\} 'small pox, measles'
   \{?á·tu\} 'duck'
   \{kinláŋpá·\} 'hole'
   \{kó·fi\} '(a type of fish)'
   \{sampét\} 'papaya'

2. Two small classes of stems having allomorphy, e.g.
   a. patí·?≈ mití·? 'house'
      saká·me≈ sikám 'day'

The second form of each of the above pairs occurs with \{mi-\} 'nominal'; e.g. sunkám 'day (numerated)'; the first form of each pair occurs in all other environments, e.g. patí·? cin 'my house'.

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b. cêhen ~ cêhe 'thing'
cêhe occurs as a bound form in compounds; e.g. cêheti* / 'tool' (lit: thing-hand), cêhexo·n 'bird', (lit: thing-tree).
cêhen is a free form, e.g. cêhen 'thing'

3. Stems with augment

Many forms appear to consist of a stem plus a discontinuous affix, which in turn consists of a prefix or infix plus a final //e//.

//e// occurs with the morpheme {-in-} 'gerund' and in some instances with the morphemes {ka-} 'vocative', {mi-} 'nominal', and {ta-} 'nominal'. With {-in-} 'gerund', //e// has a limited contrastive function, distinguishing some forms with {-in-} from forms with {-an-}. With the other nominal affixes, //e// appears simply to be an augment.

This is probably a problem of a residual nature which would yield to analysis were more data available. For purposes of this description, this analysis considers this //e// suffix as a stem augment; indication of its occurrence is given in every instance that is known.
4. Stems consisting of more than one morpheme.

This study does not attempt to provide an exhaustive study of derivation. There is a large stock of derivatives, many of which are frozen forms containing no derivational marker. The purpose of the discussion of derivation given here is to provide a general acquaintance with the problems and processes involved in the language.

Nicobarese derived nouns are of three types:
1. Compounds.
2. Derivatives containing only one root and no derivational marker.
3. Derivatives containing a root plus a derivational affix.

Compounds

If one or both of the constituents is itself a derived noun or is three or more syllables in length, the constituents of the compound are written as separate words. While this is somewhat arbitrary it conforms fairly closely to native speaker feeling for the language.

Compounds having only nouns as constituents.

This is a highly productive process of noun derivation; most compounds that are nouns are of this type.

Compounds in which primary noun roots are the constituents.

Body part words are the most productive roots in compounds. Examples are,
Compounds in which at least one constituent is polymorphic, for example:

/ku*? saiaa*/ 'chin'; {ku*?} 'face, surface', //sana*7// 'jaw', ({sa*7} 'chief', {an} 'agentive')
/mak ?alaha rongc-o-n/ 'fruit juice'; {mak} 'water', {?alaha} 'body', //rongc-o-n/ 'fruit, vegetables'
/cu*k finra*y/ 'frying pan'; {cu*k} 'place', //finra*y// 'frying', ({fira*y} 'to fry', {in} 'gerund')
/tetmak ran*ve/ '(banana type)'; //tetmak// 'which doesn't look' ({te} 'which (adj.)', {et} 'negative', {mak} 'see, look'); //ran*ve// 'being ripe', ({ra*v} 'be red, ripe', {in} 'gerund')

Compounds consisting of a noun plus a numeral, for example:

/tan*yrOH/ '(tree type); (leaves fall off in five nights)'; {tan*ry} 'five', {rOH} 'night'
/tumne*ta/ 'twin'; {tumn} 'bunch', {ne*t} 'two', (schwa stem augment).
Compounds consisting of a noun plus a verb, for example:

noun plus verb:
/túmʔáhā/ 'berry'; {túm} 'bunch', {ʔáh} 'to have, belong to', (schwa stem augment).
verb plus noun:
/re*nroʔ/ 'noise'; {ré.n} 'be a substitute', {róʔ} 'voice, word'

Such compounds are very infrequent.

Compounds consisting of a locative plus a noun or numeral.

In all such examples the locative precedes the noun, as it does in a locative phrase;
/ʔelré.n/ 'sole'; {el} 'in, on', {ré.n} 'foot'
/ʔelké.l/ 'armpit'; {el} 'in, on', {ké.l} 'arm'
/ʔilú.y/ 'spring'; {ín} 'within', {lú.y} 'three'

Derivatives consisting of one root and no derivational morpheme.

Many nouns are clearly to be identified as verb roots plus regular verb affixes, or as verb affixes attached to bivalent bound roots which are the base of both noun and verb derivatives. The composite form functions as a derived noun and has a meaning which is relatable to that of the morphemes of which it is composed. Examples are as follows:

verb plus suffix:
/ylqen/ 'leader'; {ylq} 'be great', {rem} 'involuntary action'

/roqti/ 'half'; {roq} 'be a row', {t} 'down, toward', {i} 'intransitive stem closing suffix'

verb plus prefix:

/etvac/ 'lobster'; {et} 'not', {vac} 'be quick'

/sikenq/ 'hot season'; {si-} ? {kq} 'be dry', {q} 'perfective', {a} 'noun derivative'

/husat/ 'basket'; {hu-}'(emphasizes type of action)', {s-at} 'to weave'

bivalent bound root plus verb suffix:

/roqti/ 'base'; {roq} 'foot; to go', {t} 'toward, down', {i} 'intransitive stem closing suffix'

There is one example of a noun derived from a bound noun root plus a verb suffix and a numeral classifier, i.e.

/roqlon/ 'height (of something relatively tall and slender)'; {roq} '(large) measure of time or space', {l} 'upward', {mon} '(classifier with long, slender objects)'

Surprising is the occurrence of verb suffixes with one noun in derived form.

/kulya/ 'decoration front of canoe'; {kury} 'head, top', {l} 'up', {a} 'noun derivative'
412. Derivatives containing a root plus a derivational affix.

Derivational affixes are of two types:

1. Those deriving nouns proper; such nouns have all and only the properties of nouns.

2. A vocative affix, deriving nouns used as vocatives.

413. Derivational affixes deriving nouns proper.

414. Productive affixes

{mi-} 'nominal' occurs with both noun and verb stems, deriving (1) a class of numerable nouns, and (2) a class of derived nouns that occur either with or without a numerator.

SR: //Ha// - Ø /{mi}__

E.g. {mi-} + {haté-m} - /mité:m/ 'night (numerated)'

- {mi-} - {m-} derive numerable nouns from the class of noun stems listed below. The allomorphs are distributed as follows:

- {m-} occurs with CVCVC stems, e.g. /tamlí·ke/ 'hut (numerated)'; /sumkéhne/ 'summer (numerated)'.

- {mi-} occurs with CVC stems, e.g. /mité:m/ 'night (numerated)'; /miké·le/ 'an arm's length'.

All but two of the nouns derived with {mi-} have schwa stem augment when occurring with {mi-}. The following list of nouns occurring with {mi-} is complete for my data:

Stems requiring schwa augment (cited morphophonemically):

'áfta 'week' sikéhne 'summer'
ciqē·t  'moon'    süŋ  'monsoon'
kufīt  'wind'      takān  'thigh'
panām  'place'     talī·ke  'hut'
pīhē·?  'morning'  tuhē·t  'village'

Stems which do not have schwa when occurring with {mi-}:
hatē·m  'night'    sakā·me  'day'

Examples:
/nē·t tumhē·te/  'two villages'
/lū·y miʔā̄fta/  'three weeks'
/hēŋ mitē·m/    'one night'

{mi-} has a collective meaning with five nouns, all of which occur only with numerals. Possibly these are also classifiers, but evidence is lacking, e.g.
/ʔā·p/  'canoe', e.g. /hēŋ miʔā·p̚e/  'one canoe plus contents'
/cō·ŋ/  'ship', e.g. /hēŋ micō·ŋe/  'one ship plus contents'
/kupōk/  'small boat', e.g. /hēŋ kumpō·ke/  'one small boat plus contents'
/patī·ʔ/  'house', e.g. /hēŋ mumtīʔi/  'one house plus contents'
/pī·he/  'spouse', e.g. /hēŋ mupī·he/  'one nuclear family'

{mi-} occurs with a small class of noun and verb stems having schwa augment, deriving numerable nouns, all of which may occur either as nouns or as numeral classifiers.
The meaning of the forms derived from verbs is
'(a unit which is the result of the action of the verb)'
e.g.
/mirá-te/ 'a slice', {rát} 'to slice'
/míli-me/ 'a parcel', {lím} 'to fold'
With noun stems the meaning of {mi-} is '(a unit of measure)', such as 'a ___ full'.
E.g.
/puml-ns/ 'a bottle full'
/miké-la/ 'an arm's length'
The following lists of stems occurring with {mi-} in this usage are complete for my data. (Citations are morphophonemic.)

Verb stems
kíc 'to pluck, pick (of fruit, vegetables, eggs)'
té-k 'to be in a row'
pó-k 'to bind or string'
rát 'to slice'
láh 'to tear down a whole stalk (of bananas)'
sá-k 'to bag, sack'
lim 'to fold'
harúŋ 'be wrapped around'
hayúl 'to bag'
řik 'to chop or cut'

Noun stems
kasón 'box'
patí-ŋ 'house'
ké-l 'arm'
pilín 'bottle'
kuvó-ka 'basket'
tání-ye 'cooking pot'
ní-ŋ 'jar'
tín 'tin'
{mi-} is identified in a small class of nouns derived from verb stems; its meaning is one of the following:

Agent: a non-personal doer of the action (usually a specific animal or insect term).
All but two nouns of this type have schwa augment, i.e. /milá·c/ 'masseur', /miŋé·c/ 'examiner'.

Abstract quality of being: All such derived nouns of this type are without schwa augment.

This distribution of {mi-} is non-productive; the forms so derived appear to be frozen forms.

E.g.

/miŋó·kə/ 'leech', {ŋó·k} 'to suck'
/miʔé·lə/ 'anklet', {ʔé·l} 'be in, around'
/misó·ke/ 'index finger', {só·k} 'to point'
/misi·pe/ 'fruit which has germinated', {sí·p} 'to grow'
/miri·vló·n/ 'sorrow', {harívló·n} 'be sorrowful'
/micí·l/ 'deceit', {hací·l} 'to entice, cheat'
/mikáh/ 'knowledge', {ʔakáh} 'to know'

{-ə} occurs with a small class of verb stems, either simple or thematic, deriving nouns referring to one of the following:
1. (with transitive verbs) the instrument by which the action is accomplished; or the result of the action;
2. (with intransitive verbs) something having the quality described by the verb.
3. With both stem types there are some noun derivatives whose meaning is only abstractly related to the stem.

E.g.

/tô·pe/ 'tongs', {tô·p} 'to grasp' (V\t)
/rā·le/ 'a bow', c.f. //hafal// 'to shoot (with gun)' (V\t)
/ňáhā/ 'injury'; {ňáh} 'to beat' (V\t)
/piňē·ñe/ 'straw'; {piňēň} 'to cut in pieces' (V\t)
/cé·ce/ 'surfboard'; {cé·c} 'to slide' (V\i)
/rō·ne/ 'spine'; {řón} 'be in a disjointed row' (V\i)
/rá·le/ 'last (person), youngest'; {rá·l} 'to be young, new, fresh' (V\i)
/pó·?ke/ 'a wave which is ridden to shore'; {pó·?} 'catch fish' (V\t), {k} '(imperfective)
/líkla/ 'device used in climbing'; {lík} 'to go via' (V\t), {l} 'up'
/kítá·le/ 'jelly fish'; {kitá·r} 'to fly' (V\t), {l} 'up'

{ta-} occurs with a small class of verb stems and
with a very few noun stems, deriving nouns referring to the following:

1. Something having the characteristic or quality described by the verb. A proportionately large number of such words are descriptive terms for coconut trees.

2. The result of the action. (These are few in number.)

3. An agent which performs the action.

For example,

1. /tavú·y/ 'sun'; {vú·y} 'be hot'
   /taŋé·?/ 'bone'; {ŋé·?} 'be hard'
   /taʔiック/ 'coals'; {?iック} 'be burning'
   /taɾá·n/ 'slanted coconut tree'; {ɾá·n} 'to be leaning'
   /taŋút/ 'humped coconut tree'; {qút} 'be rounded, curved'
   /talú·k/ 'erect coconut tree'; {lú·k} 'to be straight up'

2. /taŋukjæ/ 'torch of bound coconut leaves';
   //ŋukjæ// 'to tie coconut leaves'; {ŋ} 'perfective', //ə// '(schwa augment)'

3. /tará·l/ 'a head louse'; {rál} 'to crawl'
   /takán/ 'thigh'; {kán} 'carry'

Five nouns derived from verb stems by {ta-} have schwa augment, i.e.
/tayóho/ 'ladder'; {yóh} 'to climb a ladder'
/taflte/ '(tree type)'; {fît} 'to strike with a stick' (questionable derivative)
/talé·kɔ/ 'road'; {lîk} 'to go through, via'
/ta9o·kɔ/ 'coconut'; {?ɔk} 'to drink; drink'
/talí·me/ 'cigar'; {lîm} 'to roll, wrap around'

Not all verb stems occurring with {ta-} are primary, e.g.
/tañukqɔ/ 1) 'a torch of coconut leaves', 2) 'a banana'; {ŋük} 'to tie coconut leaves', {ŋ} 'perfective'; //ŋükqɔ// is not known to occur as a derived formation; it is a regular verb construction.
/tacóŋkú·?/ 'foreigner'; {cōŋ} 'be long', {kų·?} 'face'

{ta-} is known to occur with two noun stems and one numeral, i.e.
/tamá·ye/ 'fire'; {máy} 'a fire for warming oneself'
/ta9u·ku/ '(tree type)'; {?uk} 'back, bark', {uve} 'have'
/tasím/ 'a fathom, yard'; {sí·n} 'ten'

{te} 'grammatical relator' is of questionable classification as a noun deriving affix. It occurs broadly as an adjective formant and clause introducer, but it is also found as a prefix in a few derived nouns, occurring with both verb and noun stems, e.g.

with verb stems:
/teri·la/ 'animal, beast'; //ri·la// 'be crawling', {ri'l} 'to crawl', {a₂} 'stative'
/te'aqú·ʔ/ 'a creeper (has a bitter taste)'; {?aqú·ʔ} 'be bitter'
/te'amí·nu/ 'owner'; //amín// 'possession, attribute', {uve} 'have'

with noun stems:
/tetú·mu/ 'robbers'; {tum} 'bunch', {uve} 'have'
/takaná·t/ 'a paddle steamer with oars'; //kaná·t// 'oar'; {ká·t} 'to row', {an} 'instrument')

Contrast between {te-} and {ta-} is shown by the following pairs:
/teñó·r/ 'dry (adj.)'; {ño·r} 'be dry'
/tañó·r/ 'dry land'
/te'ó·ke/ 'which is drunk (adj.)'; //ó·ke// 'to be drunk (passive)'
/taó·ke/ 'coconut'

{-an-} 'instrument' refers to an instrument by which the action of the verb is accomplished. It occurs with transitive verbs and a very few nouns. With verbs it is extremely productive, for example,

-an- - in- - n-

-an- occurs with CVC stems, e.g.
/ŋaŋát/ 'cord'; {gát} 'to tie'
/fanóh/ 'a whip'; {fóh} 'to whip';

-n- occurs after //u//, e.g.
/kunléh/ 'what is thrown'; {kuléh} 'to throw';
-in- occurs elsewhere, e.g.

/kinří/ 'cooking utensil'; {kaří·r} 'to make curry'

/sinřó·l/ 'horn (what butts)'; {siřó·l} 'to butt'

{-an-} has been observed with idiomatic reference with a single noun, i.e.

/kaně·l/ 'tusk'; {ké·l} 'arm'

{-ah-} 'object' denotes the object of the action of the verb. It occurs only with transitive CVC stems; it is very productive, e.g.

/tahí·c/ 'what is planted'; {tá·c} 'to plant'

/sahé·n/ 'something minced'; {sé·n} 'to mince'

{-in-} 'gerund' occurs with schwa augmented verb stems, deriving verbal nouns having one of the following meanings:

a. 'Quality or state of being' (intransitive verbs only), e.g.

/ranā·ca/ 'heat', {rác} 'be hot'

b. 'Action of _ing', (transitive and intransitive verbs), e.g.

/yanihī/ 'coming'; {yih} 'to come' (Vi.)

/sinū·re/ 'burning', {sú·r} 'to burn' (Vt.)

b. 'An instance of the action' (transitive verbs only), e.g.

/ñináʔa/ 'dinner'; {ñaʔ} 'to eat'
{-in-} also occurs with any numeral expansion, deriving ordinal forms of the numerals. With \{héŋ\} the derived form means 'unity, oneness'. Schwa augment of numeral expansions with {-in-} occurs with numbers up to nineteen and is apparently optional; it occurs suffixed to the final stem in the construction, e.g. 

/ʔinné·t si·ne/ 'twelfth'

{-in-} has allomorphs as follows:

- an- - -in- - -n-

- an- occurs with intransitive CVC stems, e.g.
  /vana·ke/ 'belching'; \{vé·k\} 'to belch'
  /manáttə/ 'the setting'; //máttə/ 'to set (of sun or moon)'

- in- - -n- occur elsewhere,

- n- occurs after //u//, e.g.
  /ʔunréhe/ 'startled-ness'; \{uréh\} 'be startled'
  /kunléhe/ 'throwing'; \{kuléh\} 'to throw at'

- in- occurs elsewhere, e.g.
  /ʔincá·pe/ 'piling'; //hacáp// 'to pile'
  /sinqú·le/ 'darkness'; \{saŋúl\} 'be dark!
  /tiní·pe/ 'pressing'; \{típ\} 'to press'
  /tinní·yón/ 'five hundredth'; //taní·yóŋ// 'five hundred'
  /linú·ye/ or /linú·y/ 'third', \{lú·y\} 'three'.

{-in-} derives kinship terms with two nouns, i.e.
/kanā·nə/ 'sister; female cousin of boy'; {kán} 'female'
/kano·nə/ 'brother; male cousin of girl'; {kó·nǐ} 'male'

Perhaps {kán} and {kó·nǐ} should be construed as verbs.

{-am-} 'agentive', with allomorphs -am- -m- -ma-, occurs with verb and unit numeral stems. With verb stems it denotes a person or thing that performs the action of the verb. With the unit numerals it derives a noun meaning 'only so many'.

-am- occurs with CVC stems, e.g.
/famē·l/ 'killer'; {fé·l} 'to kill'
/samī·p/ 'what grows'; {si·p} 'to grow'
/samá·m/ 'ten only'; {sì·n} 'ten'

-me- occurs with CVCVC stems beginning with a laryngeal, e.g.
/mahakēŋ/ 'fisherman'; {hakēŋ} 'to fish'
/miʔiŋih/ 'seller'; {ʔiŋih} 'to sell'
/maʔanē·t/ 'two only'; {nē·t} 'two'

-m- occurs elsewhere, e.g.
/kamhūl/ 'a cook'; {kahūl} 'to cook'
/kumčik/ 'taste'; {kucik} 'to taste' (Vi.)
/tamnāy/ 'five only'; {tanāy} 'five'

Non-productive affixes. Four are mentioned here; there are doubtless others.

a. {li-} 'nominal', occurs with one verb stem and one classifier, e.g.
/likán/ 'neck'; {kán} 'carry on shoulder'
/litá·k/ 'tongue'; {tá·k} 'classifier with flat objects'

b. Three prefixes ending in /1/: {kil-}, {tal-}, and {til-}. Each occurs in one noun, e.g.
/kiltó·ce/ 'husk of coconut', {tó·c} 'to husk a coconut'
/talřěhti/ 'type of banana - stalk is very near ground'; //řěhti// 'base, (near down)'
/tilká·nu/ 'type of basket'; {kán} 'carry on shoulders', {-uva} 'have'

The vocative affix.

{ka-} 'vocative' has two allomorphs;
ke- - ka-
ke occurs before unstressed syllables, e.g.
/kakahé·me/ 'brother!'
ka occurs elsewhere, e.g.
/kapí·ha/ 'wife!' 
/kakú·ne/ 'child!!'

{ka-} has been found only with the following nouns, all of which have schwa augment when occurring with {ka-}; however, it is likely that it may occur with any kinship term of address as well as other nouns of personal reference:

{hól} 'friend'
{kahé·m} 'younger brother, sister, or cousin'
{kú·n}  'child'
{mé·m}  'elder'
{pí·hə} 'spouse'
{yǐŋ}  'parent'
{yó·m}  'master'}
420. Noun Classes

A noun is any word which may occur as head of a noun phrase. Nominal subclassifications are tactically defined, distribution within the noun phrase and the verb phrase each defining separate but overlapping classes. The small subclass defined by verb phrase distribution is discussed in connection with the presentation of the verb phrase.

Distribution within the noun phrase defines common and proper classes, each of which has animate and inanimate subclasses. The common animate class has personal and non-personal subclasses.

Common and proper noun classes are defined respectively by the potential occurrence or non-occurrence of the noun with demonstrative adjectives, numeral classifiers, possessive pronouns or the reflexive {řɛ}, or the derivative possessive {uve}. Proper nouns comprise personal and place names; common nouns comprise all other nouns.

Animate and inanimate subclasses of each of these two major classes are defined by the distribution of the singular demonstrative morphemes and the classes of reference of the third person singular animate and inanimate pronouns, as follows:

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>3rd pers. sg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>animate</td>
<td>ŋôh</td>
<td>ŋ</td>
</tr>
<tr>
<td>inanimate</td>
<td>ŋîh</td>
<td>ŋ</td>
</tr>
</tbody>
</table>

As proper nouns do not occur with demonstrative adjectives, the class of reference of the third person singular pos-
sessive pronouns is the defining criterion of animate and inanimate subclassification.

These are formally defined classes; the names animate and inanimate are justifiable only in that the animate class includes all nouns of animate reference of both the plant and animal kingdom; however, there are some semantically inanimate nouns in the animate class. More precise specification of the membership of the classes is given in the designation of subclass membership, below.

421. The proper animate class consists of all personal names and names of members of the animate class.

E.g. (All examples are morphophonemic.)

- teké·n 'Conscientious' (personal name)
- tétmák 'Not Water' (personal name)
- vamí·ró-'t 'Word Maker' (personal name)
- sá·kú·t 'Face-like' (canoe name)

The proper inanimate class consists of all place names.

E.g.

- mú·s 'Mus'
- sé·ti la?ó·la 'Small Lapati'

422. The common animate class has personal and non-personal subclasses, defined by the distribution of the dual and plural demonstrative pronouns, the third person plural possessive pronouns, the third person dual and plural subject and interrogative pronouns, and the numeral classifiers, as follows:
<table>
<thead>
<tr>
<th>Demonstratives</th>
<th>Personal</th>
<th>Non-personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual</td>
<td>ná·</td>
<td>nē·</td>
</tr>
<tr>
<td>Flural</td>
<td>vé·</td>
<td></td>
</tr>
</tbody>
</table>

3rd person pronouns

<table>
<thead>
<tr>
<th>Subj. and Inter. Stems</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual</td>
<td>na-</td>
<td>nu-</td>
</tr>
<tr>
<td>Flural</td>
<td>yi-</td>
<td></td>
</tr>
<tr>
<td>Possessive Flural</td>
<td>ca</td>
<td>u</td>
</tr>
</tbody>
</table>

Classifiers

(subclasses in non-personal)

|   | {taka} | {ma·?} |

422.1 The personal common animate class includes only and all common nouns having reference to human or spiritual beings, e.g.

- ní·? 'child'
- kammóp 'barber'
- ṭaṛík 'person'
- sí·?e 'devil'

422.2 The non-personal common animate class has three subclasses, defined by the distribution of numeral classifiers.

1. Nouns occurring with {ma·?} 'a plant or tree'

   This class includes all nouns naming plants and trees; e.g.

   - cón 'tree'
   - taʔó·ké 'coconut tree'
   - taʔúkŋe 'banana plant'
   - kuʔíŋ 'pandanus tree'
2. Nouns occurring with {noi\} 'an animal or long, narrow object' Two semantic subgroups comprise this subclass, as follows:

a. Nouns referring to all non-human members of the animal kingdom, e.g.
   - ká·ʔ 'fish'
   - pə·koře 'goat'
   - ceheco·n 'bird'
   - 'inru·y 'fly'

b. Nouns referring to objects which are relatively long and slender in shape. While this class is open ended and includes new loans of definitely long and slender shape, it is necessary to list the membership in that there are some words which might be construed to fit into this class but which in fact are in the common inanimate class. The members of the non-personal common animate class which are semantically not animate are as follows:
   - '?á·p 'canoe'
   - kupók 'row boat' (w)
   - cé·ce 'surfboard'
   - linřěni 'bow (weapon)'
   - có·ŋ 'ship'
   - ţóh 'firewood'
   - có·k 'arrow'
   - pensil 'pencil'
   - fě·l 'knife'
   - saká·ʔ 'knife'
   - hutú·k 'bow (weapon)'
   - tinkúŋ 'stick'
Whitehead adds that the words for oar, paddle, and axe are also in this class; data as to what the specific morphemes are are lacking.

{nóŋ} has an allomorph //-ŋ/> which occurs as a suffix in derivations with the noun root {ró·?} 'length, distance' and its verb derivative //mařó·?/> 'be long', e.g.

/ró·?lóŋ/> 'height (of a long slender object)'
/mařó·?tón/> 'be long (of a long slender object)'

3. Unclassified nouns. A single non-personal common animate noun has been identified which occurs with out a numeral classifier in a numerative phrase, i.e. /'?ihόŋ/> 'stone'.

423. The common inanimate noun class includes all other nouns. There are clearly numerous subclasses defined by the distribution of the numeral classifiers; data are lacking to pursue the analysis. Only three divisions are made in this analysis, as follows:

1. Nouns occurring with {lá·?} 'a body part which is paired', e.g.

/mát/> 'eye'
/ŋάŋ/> 'ear'
/ké·l/> 'arm'

2. Unclassified nouns. Three common inanimate nouns have been identified which occur without
a numeral classifier; a systematic check of all nouns would surely reveal more. The three identified are:

/ɪˈpe̝ːɾ̥s/ 'book' /piɾʊm/ 'lead'
/pətɪʔ/ 'house'

3. All other nouns. This class includes nouns referring to objects, fruits (there possibly are subclasses here), actions, abstract qualities, etc. Examples of members of this class are as follows:

/mák/ 'well' /píháʔ/ 'morning'
/mínúʔ/ 'mocking' /talé:kə/ 'road'
/panám/ 'country' /cěːcə/ 'wave'
/váːn/ 'wound' /yǐŋʔóh/ 'log'

424. Residue

There are additionally nine common nouns which occur without a numeral classifier but for which data are lacking to determine the animate/inanimate classification. They are as follows:

/céʔ/ 'outtrigger' /sáːn/ 'rice'
/cíl/ 'guess' /saykil/ 'cycle'
/náʔːn/ 'pot' /sinrōːl/ 'horn (animal)'
/ranáːmelóːn/ 'happiness' /túʔ/ 'fishing sinker'
/rotíʔ/ 'bread'
425. Common noun suffixation

Any common noun of appropriate semantic content may occur in each of two constructions unique to them among nouns, i.e. with either the reflexive {ře} or the derivative possessive {uve}, both of which also occur with verbs.

425.1 The suffix {uve} 'have'

{uve}, with allomorphs //ue∞ æue - ue - ve - u(e)
- u // indicates possession. Nouns with {uve} are limited in their distribution to predicate positions. {uve} also occurs with verb stems in the possessive construction. The full statement of allomorphs is given here, as follows:

ue occurs with verbs in the possessive construction, e.g.

//kahúllue// → /kahúlluva/ 'have something to cook'.

//hayúnque// → /hayúnquve/ 'have something to hide'.

æue - ue occur elsewhere after stressed syllables ending in a laryngeal.

æue occurs finally, e.g.

//mikáhaue// → /mikáhave - mikáhay/ 'have faith'.

//káʔeua// → /káʔava - káʔav/ 'have fish'.

ue occurs non-finally, e.g.
'/cá.ʔu:`erén// - /cá.ʔavrén - cá.ʔavrén/
'have something remaining'
'/kē.ʔuakú?// - /kē.ʔevkú? - kē.ʔavrén/
'to have given'

ve - u(ə) occur elsewhere.

ve occurs following a vowel or when two primary stresses precede in the word, e.g.
'/kanihñenve// 'be in danger'
'/lī.peřeves// - /lī.peřey/ 'have a book'

u(ə) occurs elsewhere finally, e.g.
'/ho.lu// - / hô.lu/ 'have a friend'
'/ho.łuues// - /ho.łuuev/ 'have a friend'

Examples of nouns with {uve} are as follows:

kō.ʔu cin. 'I have a can'.
rēhewe cin min ?ip hafáp. 'I have someplace I must go tonight.'
tela?enve cin cúʔu. 'I have work to do.'

425.2 The reflexive {ře}

{ře} is distributed with several classes of words; other than in its occurrence as a verb suffix it forms a class with the possessive pronouns and indicates that the person named as possessor of the noun is the same person as the subject of the clause.

Examples of {ře}:

ruhul kumlē.ʔře ʔan ʔam canó-ce. 'The storm is increasing its strength.'
'etkó? cin te né. kinláhaře. 'I was unable because of these (my) temptations.'

ké?e qam tasí·le cu; hő. máyle vókře cin. 'Bring me my tackle box; I want to tie my hook'.

mitra ?ek có·n, ne rá?aŋ patí·?ře. 'John ran away from his home'.
500. Classifiers

A classifier is any word which may occur in the classifier position in the numerated noun phrase. The class meaning is 'a unit quantity of that denoted by the noun it modifies.'

The data available pertaining to numeral classifiers is not as complete as one might hope; full study of each might reveal more restricted distribution than those stated here.

Most of the classifiers also belong to the noun class; those which are only classifiers are as follows:

- {ta}n (\textit{a person})
- {má} (\textit{an animal; a long, slender object})
- {kən} (\textit{a plant or tree})
- {ka\textsuperscript{\textdagger}} (\textit{kind, type})

An example of a stem which is both a noun and a classifier is \{tahó\cdot l\}, seen in the following:

\[\text{//á\cdot mhe\textsuperscript{\textdagger} tahó\cdot l \?\?\?y/ 'How many pairs (of fish) have you caught?'}\]

\[\text{//hë\textsuperscript{\textdagger} tahó\cdot l kük/ 'One pair of coconuts.'}\]

Most nouns (except those in the animate personal class other than \{kú\cdot n\} 'one's children') may occur with more than one classifier, nearly always with a contrast in meaning. Most nouns which may occur without a classifier when numerated may optionally occur with
a classifier, again with contrast in meaning. These statements apply especially to nouns in the inanimate class.

e.g.

/héŋ kúk/ 'one coconut'
/héŋ misá·ke kúk/ 'one sack of coconuts'
/héŋ miká·ce kúk/ 'one plucked coconut'
/héŋ tahó·l kúk/ 'one pair of coconuts'

However, some nouns of other classes may occur contrastively with more than one classifier, e.g.

/héŋ tasí-im ʔá·p/ 'a one arm's-span wide canoe'
/héŋ noŋ ʔá·p/ 'one canoe'

The only pair of classifiers which do not seem to contrast are {manák} and {taka},

e.g.

/héŋ taka kú·n/ 'one son'
/héŋ manák kú·n/ 'one son'

It should be noted, however, that manák only occurs with {kú·n} and refers to one's offspring, while {taka} is a general classifier for the personal animate class.

The classifiers are presented here under headings of the noun class membership of the nouns with which they have been found. Limitations of distributions of the classifiers with nouns are largely of semantic consideration. The listing is complete for my data.
Animate personal

manák  'an offspring' (occurs only with (kú·n) 'one's children')
taka  'a person'

Animate non-personal

má?  'a plant or tree'
noŋ  'an animal; a long slender object'

Inanimate, animate non-personal

tahó·l  'a pair'
tá·k  'a flat object; money'

Inanimate

kamsó·ŋe  'a boxful'
kumvó·ke  'a basketful'
lá·?  'side' (noun); a body part which is paired, e.g. arm, eye, ear, etc. (classifier)
mícú·re  'a portion, bit'
miká·le  'slice'
miké·le  'an arm's length (fingertip to center of chest)'
miké·ce  'a fruit or egg'
miláha  'a bunch of bananas'
míli·me  'a parcel, packet'
milí·ce  'something which has been plucked or picked out (selected)'
mílono  'a small piece'
| minít       | 'a minute'     |
| mináʔĩ     | 'a jarful'     |
| mirúŋe     | 'a bundle'     |
| mifé̈      | 'a side'       |
| mifí̈ke     | 'a piece, verse' |
| misáka     | 'a sackful'    |
| mité̈ka    | 'a row'        |
| mití̈ne    | 'a canful'     |
| miyú̈le    | 'a bundle, packet' |
| mufí̈të   | 'a section of coconut (shell plus kernel)' |
| mumú̈le    | 'a ball of pandanus paste' |
| mupó̈ke    | 'a bunch, cluster (of fruit), string (of fish)' |
| pumlí̈ne   | 'a bottleful'  |
| tamní̈ye    | 'a potful'     |
| tasám      | 'an arm's span measure - from fingertip to fingertip' |
| tíʔʔ       | 'a beating; something done with the hand' |

**All common nouns**

| kaŋen       | 'kind, type' |
| micé̈me     | 'a score (= 20)' |
| mihē̈re     | 'kind, type' |
| túm         | 'a bunch, group' |
600. Numeration

610. The series numerals comprise most of the numerator class. They themselves constitute a subclass due to their occurrence in sequence in counting. The system is essentially decimal, with single words for the numbers from one to nine, and for ten, times ten, hundred, and thousand. Competing systems occur for the numerals from ten to twenty.

The unit numerals consist of two words for one, namely \{kaho'k\}, which is used only in numeration, and \{heq\}, which is used both in numeration, and in indeterminate situations where 'a' would be a better translation; a subclass \(\mathbb{N}_1\) consisting of the numerals from two to nine, respectively \{né't, lú'y, fé'n, taný, tafú'l, sát, hévheē, macúhteē\}; and the numeral for ten, \{sí'n\}. Allomorphy:

\{héŋ\}: héŋ ŋ héŋ ŋ héŋ

héŋ occurs with \{ka-\} 'distributive', i.e.

\(/kahéŋ/ 'one at a time';

héŋ occurs with \{ta-\} 'nominal', i.e.

\(/tahéŋ/ 'other, another'

héŋ occurs elsewhere, e.g. \(/tæhéŋ/ 'one'

(adj.); \(/hén/ 'one' (num.)

\{kaň'o\}: kaň'o ŋ kahúk 'one'

\{né't\}: né't ŋ 'ané't 'two'

né't occurs unprefixed and with \{ta-\}

'adj.', i.e. né't 'two'; tæně't

'which is two'
'ané\-t occurs elsewhere, e.g. ka'ané\-t 'two at a time'

{hévhéře}: hévhéře ≠ hé\-věře 'eight' (hévhéře preferred)

{macúhteře}: macúhteře ⇄ macú\-teře 'nine'.

(while /macúhteře/ was given as the only acceptable form by Mr. James, /macú\-teře/ was given as a freely varying alternant by Mr. Matthew and as the only form by Whitehead.)

{sí\-n}: -sí\-n ⇄ sí\-m 'teen, ten'

sí\-m occurs when {sí\-n} is preceded by word juncture, e.g. /sí\-m/ 'ten'; /sí\-m keň/ 'ten thousand'

-sí\-n occurs elsewhere, e.g. /kahó\-ksí\-n/ 'eleven', /macúhteře\-sí\-n/ 'nineteen',
/tasí\-m/ 'a fathom, yard.'

{sí\-n} may be preceded by {kahó\-k} or a member of class N₁ to form the teens from eleven to nineteen, i.e.

\[ N_{tn} = + (N_1, \{kahó\-k\}) + \{sí\-n\} \]

Examples: /kahó\-ksí\-n/ 'eleven'
/taná\-ysí\-n/ 'fifteen'

The tens from ten to a hundred are indicated by {?aná\-y} 'a group of ten' preceded by either {héň}, a unit from two to nine, or {sí\-n}. The numbers between the tens are indicated optionally by adding a unit numeral
to the appropriate word for the ten, i.e.

\[
U: \{\text{héŋ}\}, N_1, \{\text{sí·n}\}
\]

\[
N_{\text{ty}}: + U + \{\text{'aná·y}\} \pm (U, \{\text{kahó·k}\})
\]

Examples: /hég 'aná·y/ 'ten'

/hé่วยhe 'aná·y taníy/ 'eighty five'

The numerals from ten to nineteen are more frequently indicated by the construction with \{sí·n\} than by the construction with héŋ 'aná·y. héŋ 'aná·y has an idiomatic use in which it refers specifically to pairs, e.g. /hég 'aná·y lu·y/ 'thirteen pairs'.

The hundreds are indicated by \{róŋ\} 'hundred' preceded by a member of class U. The numbers between the hundreds are indicated optionally by adding after \{róŋ\} either a unit numeral or either of the two constructions for the teens or tens, i.e.

\[
N_{\text{un}}: + U + \{\text{róŋ}\} \pm \begin{cases} U, \{\text{kahó·k}\} \\ N_{\text{tn}} \end{cases}
\]

Examples: /ně·tönj kahó·kṣi·n/ 'two hundred eleven'

/macúhṭeře rón héŋ 'aná·y sát/ 'nine hundred seventeen'

héŋ 'one hundred' is far more frequently used than sí·n 'aná·y 'ten tens'.

\{róŋ\} also occurs with \{kahó·k\}, idiomatically, to mean 'an odd one' (in counting pairs), e.g.

\[
\begin{array}{cccccc}
2 & 3 & 3 & 3 & 2 & 2 \\
/hég 'aná·y kahó·k, kahó·kọ, -ko?arọ·/. /Ko?arọ? got eleven pairs and an odd one'.
\end{array}
\]
Allomorphy:

{rōŋ}: rōŋ - ʊŋ 'hundred'

rōŋ occurs after unstressed syllables, e.g.
/macúhteře rōŋ/ 'nine hundred';
/hēvůře rōŋ/ 'eight hundred'

-ʊŋ occurs elsewhere, e.g. (/hē·ŋοŋ/)
'one hundred'; /tafu·lön/ 'six hundred'

The thousands are indicated by {kəŋ} 'thousand' preceded by any of the numeral constructions thus far presented or a unit numeral other than {kaho·k}. To indicate the numbers between the thousands, {kəŋ} is followed by any of the above constructions or any unit numeral, i.e.

\[ ^{N_u}\text{-}\text{hun}: ^{N_u}\text{hun}, ^{N_t\text{-}y}, ^{N_t}\text{u} \]
\[ ^{N_u}\text{-}\text{num}: + ^{N_u}\text{-}\text{hun} + \{kəŋ\} ± \]

Examples:

<table>
<thead>
<tr>
<th>Construction</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>[(^{N_u}\text{-}\text{hun} + {kəŋ} + ^{N_u}\text{-}\text{hun})]</td>
<td>/hěŋoŋ fê·n ḏan á·y fê·n keŋ ně·tóŋ lû·y ḏan á·y kahó·k/</td>
</tr>
<tr>
<td></td>
<td>'one hundred forty four thousand two hundred thirty one'</td>
</tr>
<tr>
<td>[(^{N_t}\text{-}n + {kəŋ} + U)]</td>
<td>/ně·tsí·n keŋ tanáy/ 'twelve thousand five'</td>
</tr>
<tr>
<td>[U + {kəŋ}]</td>
<td>/hěŋ keŋ/ 'one thousand'</td>
</tr>
</tbody>
</table>
Allomorphy:

{kën}: kën ≠ kën 'thousand'

Certain of the numerators presented above occur in derivative constructions. Derivatives with {-am-} 'agentive' and {-in-} 'gerund' are nouns and are described in the discussion of noun stems. The unit numerals also occur with the prefix {ka-} 'distributive'; the resulting form seems to be a numeral but is too infrequent in the data for definite classification; e.g.

/kahēŋ/ 'one at a time', {hēŋ} 'one'

/kaʔanē·t/ 'two at a time', {né·t} 'two'

/hēŋ ke kalú·y noŋ yiʔi, hō· yiʔ?, ṭet laŋān./ 'Each of you take three torches so that you will not be burdened.'

Non-series numerators are termed quantifiers; there are two classes, referred to as $Q_1$ and $Q_2$. The quantifier class designated by $Q_1$ shares all the distributional properties of the series numerator class excluding occurrence in the series. {ʔâ·m} 'How many' is an exception; it occurs only sentence initially. The class consists of the following four morphemes.

{ʔâ·m} 'how many', e.g. /ʔâ·m manâk kū·n ?əm?/

'How many children do you have,'

{harōhtüm} 'some', e.g. /harōhtüm tá·k kahe·ʔti
man, τε ŋupiʔ?./ 'Give me some money.'

{rō·l} 'many', e.g. /rō·l máʔ cō·n/ 'many trees'
The set of six morphemes relating to size which are distributed with a common set of suffixes, among which are three of the suffix configurations of the Numerator inflectional constructions (sec.): incremental, incorporated object, and qualifier. Four of the members of Q2 are also members of the verb stem class S₂; they are called quantifier verbs (V_q) and are as follows:

- {pó·y} 'be many, great, much'
- {kú·n} 'be small, few'
- {rahec} 'be little (in amount)'
- {maɾó·ʔ} 'be long'

The other two members of Q2 are also nouns; they are called quantifier nouns (N_q) and are as follows:

- {fó·ʔ} 'length' and {ró·k} 'size, amount'

There are two suffixes, {én} 'quantity' and {e₉} 'size', which are restricted in distribution to occurrence with three members of Q2: {pó·y}, {kú·n}, and {ró·k}.

- {én} 'quantity'

én - yén

yén occurs after a palatal consonant; the single example is //řahécyén// 'be little' (of a non-countable substance.)
én occurs elsewhere, i.e.

//pó·yén//  'be many'

//kú·nén//  'be few' (of countable objects)

The verb stem members of Q₂ with {én} and {e₂} are distributed like a numerator plus a classifier, e.g.

//pó·yén minřé·re an.//  'It has many sides.' (Great-size side it.)

//kú·nén nun ně· kanú·c.//  'There are few pencils.' (Small-size they these pencil.)

//kú·ne an ṇam tařík.//  'The man is small.' (Small-size he the man.)

Two of the Q₂ stems, {pó·y} and {ró·k}, occur suffixed with {ti} and {tá·k} when they refer to objects which are, respectively, relatively long and narrow, or broad. {ti} has been found only with these two stems and means 'long and narrow'; {tá·k} is identified elsewhere as the classifier for broad, flat objects.

E.g.

//pó·ytá·k an ṇam mí·s.//  'It is a wide table.' (Great-breadth it the table.)

//pó·yti en ṇam tahé·l.//  'It is a wide river.' (Great-width it the river.)

//iró·ktá·k en ńihn mí·s?//  'What is the width of this table?' (How-great-breadth it this table?)
The unit numerals and the quantifiers occur with five types of inflectional suffixes: incorporated object, adverbial, attributive, incremental, and qualifier. Two of these suffix types - the incorporated object and the incremental - also occur with verbs in essentially the same usage.

Numeral inflection pertains to unit numerals and quantifiers. With bi-morphemic numerators (or larger) the suffix is affixed to the unit numeral. The symbols used below to designate the stem are as follows:

- Numerators (Unit Numerals, $Q_1$): $NUM$
- Quantifier verb: $V_q$
- Quantifier noun: $N_q$

631. The Incorporated object quantifier consists of a numerator or a quantifier verb plus $\{q\emptyset\}$ 'incorporated object' followed by a directional suffix (D) or $\{\hat{\emptyset}\}$ 'into, to the interior'. $\{q\emptyset\}$, the directional suffixes, and $\{\hat{\emptyset}\}$ also occur with verbs.

Incorporated object quantifier:

$$\left[\frac{NUM}{V_q}\right] + \{q\emptyset\} + \left[\frac{D}{\{\hat{\emptyset}\}}\right]$$

The following special phonological rule pertains to $\{q\emptyset\}$:

SR: $\emptyset \rightarrow a / _{-}Ca$

I.e.

//pó·yqətə// $\rightarrow /pó·yhatə/ \ 'do many toward'
This paradigm expresses direction or aspect pertaining to the number or quantity of actions accomplished with respect to an unspecified object, which may in fact be clarified by a satellite phrase. The examples should clarify this meaning.

E.g.

//fē·nhēt cin, fōhn.// 'I am beaten four times.'
(Four-in I, beaten.)

//lú·yqšl mitō·m cin, i rō·y có·n.// 'I was up in a tree branch three nights.' (Three-up night I, in branch tree.)

//rāhēcqēta man, tē cī·ni, 'in cu.// 'Give me a little sugar.' (little-toward you, of sugar, to me.)

//harōhtūmqēta man, tē pīrūm.// 'Give me some lead.' (Some-to you, of lead.)

//hēqqaś cin, fē·l tāřik.// 'I have killed one man.' (One-out I, kill man.)

//lū·yqšn cin.// 'I caught three.' (Three-out I.)

Perhaps a more literal translation of this last example would be "I 'outed' three." This is the sense of the predication in each of the above examples; the specific object or type of action referred to by the Incorporated object quantifier is stated optionally.
632. The Adverbial numeral consists of a numerator plus either of the morphemes \{háh\} 'time (of repetition)' and \{ván\} 'time (of going)'.

\[\text{Adverbial numeral: } \text{NUM} + \begin{cases} \{\text{háh}\} \\ \{\text{ván}\} \end{cases}\]

The Adverbial numerator indicates the number of times an action is accomplished. Its distribution is predicational, either in the clause nucleus or satellite.

E.g.

//hé̱gháh ək yắŋ \text{inyú-ga.}// 'Once there was a fierce battle.' (One-time it fierce battle.)

//rö̱·lháh cin, kifé·nəɕəc.// 'I frequently go walking.' (Many-time I, walk.)

//ʔá·nván əm, cūh ŗə̱·ńci?// 'How many times did you go to Ranchi?' ([How many]-time do-you, [go to] Ranchi?)

//rö̱·lván cin, cūh \text{ʔintə}.// 'I went to India many times.' (Many-time I, go India.)

//mə̱xan cin, hé̱gháh, ne \text{ʔulá-ya.}// 'Once I saw him stealing.' (See-him I, one-time, he stealing.)

633. The Attributive numeral consists of a numerator plus \{əŋ\} 'attributive.'

\[\text{Attributive numeral: } \text{NUM} + \{\text{əŋ}\}\]
The Attributive is the obligatory form of an otherwise unsuffixed numeral when it modifies and unclassified noun and occurs either directly before the noun or sentence finally.

E.g. //á·me tú·? am mêh·?a?// 'How many sinkers do you have?' ([How many] sinker you yourself?)
//ké·?te lí·peře cu man hařóhtúme.// 'Give me some books.' (Give-to book me you some.)
//lú·ye kahé·? man te lí·peře.// 'Take three books.' (Three [what is taken] you of book.)

Compare
//lú·y má· kahé·? man te có·n.// 'Take three plants' (Three classifier [what is taken] you of plant.)
//né·te lí·peře cin.// 'I have two books.' (Two book I.)

Compare
//né·t mik·ce 'uhé· cin.// 'I have two eggs.' (Two classifier egg I.)

Note the following example of numerators modifying unclassified nouns but occurring neither directly before the noun nor sentence-finally:
//mák patí·? cin fé·n, i kú·y řó·qe.// 'I see four houses on top of the hill.' (See house I four, on top hill.)
//tálló·nře man hařóhtúm te lí·peře.// 'Select some books.' (Choose-wish-self you some of book.)
The Incremental quantifier consists of a numerator, a quantifier verb or a quantifier noun plus either of the directional suffixes \{l\} 'up' or \{t\} 'toward; down', plus the suffix configuration of the Reflexive passive verb, i.e. \{s\} 'reflexive stem extending suffix' and \{r\} 'reflexive'.

\[
\text{Incremental quantifier: } \frac{V}{N} + [\{l\}] + \{s\} + \{r\}
\]

It is possible that other directional suffixes may occur in this construction; these are the only two attested. The suffix configuration here is identified as the same as that of the Reflexive passive verb because in addition to sharing the same shape the two constructions also share the meaning of increment of the stem. The Incremental quantifier occurs adjectivally or predicationally, with or without a following attributive noun.

E.g.

//fé-ntësë sumkám cin, kapáh.// 'I will die in four days.' (Four-increasing-to day I, die.)

//táŋ cin min, umúh, i ap te tafúlterë sumkám.// 'I will be there in six more days.' (Arrive I will, there, in it of six-increasing-to day.)

//tanáyleśe máyl an.// 'The meter has reached five miles.' (Five-increasing-up mile it.)

//póyleśe en qam mák el qam tahé·l.// 'The water in the river is increasing.' (Great-increasing it the water in the river.)
The **Qualifier quantifier** consists of a numerator, a quantifier verb or a quantifier noun plus either of the morphemes {tit} 'remain' or {vát} 'portion, share'.

\[
\text{Qualifier quantifier: } \begin{array}{c}
\text{NUM}\{tít\} \\
V_q \\
N_q \{vát\}
\end{array}
\]

This may well be a residual rather than a formal class of suffixes; there is no logical reason why the two suffixes could not co-occur, however they are not so attested - neither with numerals nor with verbs, with which {tít} also occurs. The quantifier with {tít} indicates the number remaining or left over; with {vát} it indicates the number, quantity or size of portions. The qualifier quantifier occurs predicationally or in the numerated noun phrase.

**E.g.**

//šımít nun.// 'Ten remain.' (Ten-remain they.)
//lú·ytít tá·k cá·?rén in.// 'We have three rupees left' (Three-remain [flat object classifier] remainder we.)
//pó·yvát man, mën?e.// 'You have a big share.' (Great-share you, you.)

The evidence of the occurrence of {vát} with numerals is from Whitehead:

heŋ vat tamká·ne teŋ haʔun. 'One leg (lit. thigh) of this pig (as food).'</nospace
700. Demonstrative pronouns

The demonstrative pronouns consist of a paradigmatic set of twenty forms based on five demonstrative roots with or without either or both of the affixes \{am\} 'distal' and \{?a\} 'specificative'. They are distributed both adjectivally and pronominally.

Categories of animate-inanimate (See Nouns, Sec. ) and number are implicit in the demonstrative stem (DS); without affixation of \{-am-\} the demonstratives are proximal, as follows:

\{\ŋôh\} 'this (sg. anim.)'
\{\vé\} 'these (pl. anim.)'
\{\ná\} 'these (du. anim.)'
\{\nín\} 'this (sg. inan.)'
\nín occurs with \{am\} 'distal', e.g. /ŋamů́n/ 'that'
\nín occurs elsewhere, e.g. /nín/ 'this'
\{\né\} 'these (pl. inan.)'

In some descriptive constructions where predication is effected without a verb the demonstrative stems occur in the subject phrase with a force only of number and anim./inan. designation. It is only in this usage that the demonstratives do not refer to objects that are necessarily visible and in view, e.g.
/"et sinrō·lu nun nē· ha'ūn./ 'Pigs have no horns.'
/tetlē·n ?an nīh milīp./ 'Selfishness is bad.'
/ma'alāhave yin vē· kūpāh./ 'The dead have spirits.'

Demonstrative force is achieved by use of a second identical demonstrative following and in apposition to the subject phrase, e.g.
/tsc4·'ta 'an noh kanū·c, noh./ 'This is a short pen.'
/tavā·y nun nē· yanē·te, nē·./ 'These jewels are pretty.'

710. Distal forms of each of the above demonstratives are derived by the morpheme {am} 'distal' by the following construction:

\[ DS_d : \{-am-\} + DS \]

\( (SR: \{-am-\} + \{vē\} \rightarrow /mē// 'those (anim.)' \)

This form could be treated as //mi-// + //vē// with a morphophonemic rule for loss of //iv// before a stressed vowel, then regular mid-vowel lowering after a nasal would account for the /e/. But while there is no evidence contradictory to such an interpretation, it is simpler to write the special rule given here.) E.g.
/ŋamōh/ 'that (anim.)' /minē/ 'those (pl. inan.)'

Allomorphy:

\{-am-\} -am- ∞ mi-

mi- occurs with stems beginning with //n//,
  e.g. /minē/ 'those (pl. inan.)'

-am- occurs with stems beginning with //η//,
  e.g. /ŋamūh/ 'that (inan.)'
The distal demonstratives are not as general in usage as are the proximal stems; a by-product of this fact is that proximal forms are about two and a half times more frequent in the data than are distal forms.

When used attributively, the primary force of both proximal and distal unemphasized demonstrative pronouns is one of definitizing and number designation, with a secondary force of proximal-distal.

/kavál ʔiʰon yin, meʰ ʔi?ʔ./ 'The children are throwing stones.'
/máʔ ʔon ʔon taʔoʔ⁷ ʔe, te roʔ ʔoʔ ʔah púʔʔ./ 'The Nicobarese say the coconut is chief.'
/laʔon ʔon nîʔ ʔalrp⁷ ʔu. 'My leg is broken.'
/píʔ ʔe, kâʔ ʔi nîʔ ʔalrp⁷ ʔu ʔa. 'Peter, press my long pants.' (Peter press these [long pants]-my you.)

The emphatic morpheme [ʔa] '(specificative)' is used when the speaker is pointing to or somehow emphatically singling out the object in question.

Emphatic:  
\[
\begin{array}{c}
\text{DS} \quad + \{\text{ʔa}\} \\
\text{DS}_d \\
\end{array}
\]

Examples: /qîʔa/ 'this (sg. inan., specificative)'  
/méʔa/ 'those (pl. anim., specificative)'  
/véʔa/ 'these (pl. anim., specificative)'

The emphatic demonstratives are quite specific in meaning; they have none of the general usages of the non-emphatic forms. These are the least frequently occurring demonstratives in the data.
Examples:
/tuřē·rōŋ nun minēʔā rōŋ taʔō·kē./ 'Those coconuts are reddish brown.'
/marō·ʔa hōʔeʔa rōŋ tinkūŋ, te namōʔā tinkūn./ 'This stick is longer than that stick.'

It may be noted here that {ʔa} also occurs with the demonstrative adverbs {hīh} 'here' and {mūh} 'there', a pair of words which show implicit contrast for proximal-distal.

It is in the pronominal use of the demonstratives that the proximal-distal contrast is maximized.

/taɾīk ʔaɾāha cu yin, vē./ 'These are my servants.'
/kāp ʔan namōh, kūʔ hīʔ, tētmāk./ 'That's a tortoise in front of us, Tētmak!' 
/nōh ʔan cō·n, ranēh tanā·c cu./ 'This is the first tree I planted.'
/tanē·ʔa ʔan nīh./ 'This is a bone.'
/sā·ʔa mifūn nīh ʔen, nīʔā./ 'This (color) is like this color.'
/sā·ʔa ʔel māt rōŋ nōh ʔen, namōʔā./ 'That (color) is like (the color of) this fruit.'
Demonstrative contractions

{ηam}, {ηih} and {ηoh} are contracted when they occur with {"in} 'to, in' and {te} '(grammatical relator)'. The six forms, presented phonemically, are as follows; they are best described by allomorphy of the demonstrative.

<table>
<thead>
<tr>
<th></th>
<th>ηam</th>
<th>ηih</th>
<th>ηoh</th>
</tr>
</thead>
<tbody>
<tr>
<td>te</td>
<td>ηam</td>
<td>ηih</td>
<td>ηoh</td>
</tr>
</tbody>
</table>

The allomorphic statement is as follows:

{ηam}: ηam - m 'The'
{ηih}: ηih - η 'This (inan.)'
{ηoh}: ηoh - η 'This (anim.)'

The longer allomorph occurs when preceded by juncture; the shorter allomorph occurs elsewhere.
810. Personal pronoun stems (including two third
person non-personal stems as shown below) are in-
flected for five cases: subject, interrogative, subor-
dinate, possessive, and emphatic. (These labels are
not fully adequate but are a compromise between White-
head's terms and the functions of the pronouns.)
The ten pronoun stems occurring in the paradigm are
semantically complex, showing implicit contrast for
categories drawn from three persons (first, second,
third), three numbers (singular, dual, plural), in-
cclusive/exclusive (relevant to first person non-singu-
lar only), and in the third person, animate/inanimate,
personal/non-personal, very near and remote.

Dual and plural are explicitly marked in the
first and second person and in the third person in the
subject case. The third person dual and plural personal
morpheme {ca} does not occur in the subject case, the
respective second person forms being used instead.
Inclusive forms occur only in the possessive and em-
phatic cases, in which cases the first person dual and
first person plural stems are specifically exclusive.
The third person singular very near morpheme occurs
only in the subject case.

Table I shows the first and second person pronouns
in all five cases; the third person forms are complete
<table>
<thead>
<tr>
<th>Meaning: person morphemes</th>
<th>Person Number</th>
<th>Subject 'non past, vis.' (in)</th>
<th>Interrogative (e₁)</th>
<th>Subordinate (e₂)</th>
<th>Possessive unmarked</th>
<th>Emphatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg.</td>
<td>(cu)</td>
<td>-</td>
<td>e ini</td>
<td>e cu</td>
<td>e c</td>
<td>cu</td>
</tr>
<tr>
<td>2sg.</td>
<td>(meh)</td>
<td>-</td>
<td>m ana</td>
<td>e meh</td>
<td>e m</td>
<td>meh</td>
</tr>
<tr>
<td>1du. (excl. in poss. &amp; emph.)</td>
<td>(ay)</td>
<td>(a)</td>
<td>ø an</td>
<td>ø ay ah</td>
<td>ø ay</td>
<td>ay ø</td>
</tr>
<tr>
<td>1 inclusive</td>
<td>(h)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1pl. (excl. in poss. &amp; emph.)</td>
<td>(y₁)</td>
<td>(i)</td>
<td>ø in</td>
<td>ø y ih</td>
<td>ø y</td>
<td>ø ih</td>
</tr>
<tr>
<td>2nd &amp; 3rd pers. in subj.; elsewhere 2nd</td>
<td>(y₂)</td>
<td>(n)</td>
<td>y i na</td>
<td>y i</td>
<td>y i</td>
<td>y i</td>
</tr>
<tr>
<td>3non sg., (pers.)</td>
<td>(oa)</td>
<td>-</td>
<td>a ca</td>
<td>-</td>
<td>ca</td>
<td>ca</td>
</tr>
<tr>
<td>2nd &amp; 3rd in subj.; elsewhere 2nd</td>
<td>(n)</td>
<td>(a)</td>
<td>n an</td>
<td>a n ah</td>
<td>a n</td>
<td>a n</td>
</tr>
<tr>
<td>3sg. (near)</td>
<td>(e₂)</td>
<td>-</td>
<td>e ni</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3sg. an.</td>
<td>(a)₄</td>
<td>-</td>
<td>a na</td>
<td>e aqah</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3sg. in.</td>
<td>(e)₄</td>
<td>-</td>
<td>e quh</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3rd</td>
<td>(n)₄</td>
<td>(u)</td>
<td>n un</td>
<td>e n uh</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table I: Personal pronoun morphemic composition
in the subordinate, possessive, and emphatic cases, but additional subject and interrogative forms are presented in section 811. Person, number, and case allomorphs are presented in combination.

The meanings of the number morphemes are as follows: \{a\} 'dual, personal', \{i\} 'plural, personal', \{u\} 'non-singular, non-personal'.

While all the permissible morpheme sequences are presented in Table I, it is useful to summarize the constructions represented in the table, as follows:

<table>
<thead>
<tr>
<th>Sg.</th>
<th>Non-sg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>+P+{in}</td>
<td>+(ə)+P</td>
</tr>
<tr>
<td>+P+{in}</td>
<td>+(ə)+P+N</td>
</tr>
</tbody>
</table>

P→{cu, meh, a, o, ε} P→{ay, h, y₁, y₂, ca, n} N→{a,i,u}

It may be noted at once that not all possibilities generated by these simplified, generalized constructional statements do in fact occur; the limitations and possibilities are shown by Table I.

Note also that the same construction generates both the Interrogative and Subordinate singular pronoun—while in Table I different number allomorphs are shown to occur in the two forms. As is alluded to in footnote 2 to Table I, the salient environmental difference is that the longer allomorphs are optional variants when the pronoun is the head of a subject phrase (see footnote 2 for examples).
Table Ib: Summary of morphemes occurring in the pronoun constructions presented in Table I.

<table>
<thead>
<tr>
<th>Morpheme</th>
<th>Allomorphs</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Person Morphemes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cu</td>
<td>c-cu</td>
<td>1sg.</td>
</tr>
<tr>
<td>meh</td>
<td>m-meh</td>
<td>2sg.</td>
</tr>
<tr>
<td>ay</td>
<td>a-ay</td>
<td>1du. (excl. in poss. and emph.)</td>
</tr>
<tr>
<td>h</td>
<td>h</td>
<td>1 incl.</td>
</tr>
<tr>
<td>v₁</td>
<td>v-∅</td>
<td>1pl. (excl. in poss. and emph.)</td>
</tr>
<tr>
<td>v₂</td>
<td>v</td>
<td>2 &amp; 3pl. pers. in subj; elsewhere 2pl. pers.</td>
</tr>
<tr>
<td>ca</td>
<td>ca</td>
<td>3 non sg., pers.</td>
</tr>
<tr>
<td>n</td>
<td>n-an-∅</td>
<td>with {a} 'du., pers.' together with {in} 'non past, vis.': 2 &amp; 3; elsewhere: 3</td>
</tr>
<tr>
<td>e₂</td>
<td>e</td>
<td>3sg. near</td>
</tr>
<tr>
<td>o</td>
<td>o-anah</td>
<td>3sg. anim.</td>
</tr>
<tr>
<td>ε</td>
<td>ε-ŋuh-ŋuh</td>
<td>3sg. inan.</td>
</tr>
<tr>
<td><strong>Number, Personal/Non personal Morphemes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>a-ah-a·ʔ-∅</td>
<td>du., pers.</td>
</tr>
<tr>
<td>i</td>
<td>i-iḥ-i·ʔ</td>
<td>pl., pers.</td>
</tr>
<tr>
<td>u</td>
<td>u-uḥ</td>
<td>non sg., non pers.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Morpheme</th>
<th>Allomorphs</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>case morpemes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in</td>
<td>ini-ana-na-ni</td>
<td>subj, non past, vis.</td>
</tr>
<tr>
<td>e₁</td>
<td>e-a</td>
<td>inter.</td>
</tr>
<tr>
<td>..?e</td>
<td>..?e</td>
<td>emph.</td>
</tr>
</tbody>
</table>
Footnotes to Table I:

1. Subject case morphs ending in a vowel occur too infrequently in the data to allow definitive analysis. However, it seems to be true that the vowel optionally occurs if the pronoun is the unmodified head of the subject phrase; otherwise it does not occur.

E.g. "talale? tak0? en(i)." 'It is very strong.'
"rar0 en y0h ni?; v?y en(i), te lo?n cu. 'The child's head is hot; he has a fever. I think.'

But "tev?y en 'ih sakame, ni?h. 'Today is a nice day.'

2. Final V and VC of the interrogative pronouns, like the final vowel of subject case morphs, occur optionally, and then only when the pronoun is the head of the subject phrase.

E.g. "rar0 qe y0h em?h? 'here have you come from?'

But "?is?h em, me?eh/" /?is?h ?em, me?e/ 'where are you?'

Historically the long interrogative forms may well have developed from the sequence short interrogative plus emphatic, as shown in the sequence em me?e above.

The occurrence of final h in most of the interrogative forms is an interesting fact which does not yield to synchronic analysis.
3. Corresponding third person pronouns do not occur in the subordinate case. Functionally the particle {ne} 'subordinate third person' is substituted.

4. With the interrogative morpheme {e₁} these morphemes all have a component 'visible'. An alternative analysis would be to consider the third person interrogative stem morphs as allomorphs of the demonstrative pronouns, all of which have a component 'visible'. Either interpretation seems acceptable.

5. //aŋáhʔe//⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻⁻åde/ is often contracted to /ʔəŋ/.

6. Stress invariably occurs on the preceding syllable.

It is interesting to note that allomorphs of the dual and plural morphemes have the shape V₁h in the interrogative case and V₁ʔ in the possessive case. Complementation of /ʔ/ and /h/ with respect to presence or absence of preceding vowel length was mentioned in the discussion of these phonemes. One could on the basis of this complementation partially regularize the shapes of these morphs by various morphophonemic solutions, but the fact remains that the dual and plural morphs differ consistently in the interrogative and possessive cases by the same phonological factor, which is not segmentable.

The meaning of the morpheme {e} 'near', found only in the one form eni 'third singular, non-past, visible, subject', is not in all cases clear. In most occurrences {e} seems to indicate that the object is quite near the speaker. If a proximal demonstrative is used with a third person singular pronoun, {e} must be used rather
than //a// of {e} and {o}. With distal forms of demonstratives //a// must occur.

E.g. //hú·'ke nap ŋí·ʔ, ten rú·lę̞ en nih taŋũ·kne.//
'Call for the boys, for this torch is about to
burn out.

//ką́p an, namóh.// 'That is a tortoise.'

Compare //talú·kketi an nam ?inkĩ̀n cu.// 'My float is
going down.' (in fishing)
with //talú·klaŋe en nam ?inkĩ̀n cu.// 'My float is
coming up.'

But note //cá·tlaŋe an nam ŋí·ʔ, té cu.// 'The boy is
being lifted by me.'

However, some occurrences of {a} contradict this inter-
pretation, e.g.

//maŋ·?vát en nam lĩ·pe̞e, ne rá·ŋe ʔihĩ́h.// 'The
book is far from here.'

811. Tense/visibility morphemes with third person pronouns.

Subject case morphemes contrasting with {in} 'non-
past, vis.', are {p} 'non-past, not vis.', and {k}
'past.' These tense/visibility morphemes occur only
with third person pronoun morphemes. The subject case
forms derived with {p} and {k} occur as stems in the
derivation of a set of what appears to be vestigal inter-
rogative case forms. As with the subject and inter-
rogative forms in the preceding section the final V or
VC sequence occurs only if the pronoun is the head of
the subject phrase, and then it is optional. With the
pronouns presented here, however, a final vowel in the
<table>
<thead>
<tr>
<th></th>
<th>Non past, not vis. (p)</th>
<th>Past (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Interrog.</td>
<td>Interrogative</td>
</tr>
<tr>
<td>(unmarked)</td>
<td>(a)</td>
<td>(a)</td>
</tr>
<tr>
<td><strong>Singular:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote</td>
<td>(e)</td>
<td>e</td>
</tr>
<tr>
<td>(Neutral)</td>
<td>(a)</td>
<td>e</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual: personal</td>
<td>(n)</td>
<td>n a p</td>
</tr>
<tr>
<td></td>
<td>(a)</td>
<td>e</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Du-pl: non-personal(n)</td>
<td>(u)</td>
<td>n u p n u p a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plural personal</td>
<td>(yɔ)</td>
<td>y i p</td>
</tr>
<tr>
<td></td>
<td>(i)</td>
<td>y i k</td>
</tr>
</tbody>
</table>

Table II: 3rd person 'not visible' and 'past', Subject and Interrogative pronouns.
interrogative case is the interrogative case morph; thus interrogative designation is very marginal. (Functionally pitch indicates the contrast.) Chart presents the subject and interrogative case third person pronouns in {p} and {k}.

'Non-past' encompasses the present, future, and very recent past. 'Past' refers to the distant past or a recent past event not connected by the speaker with the time frame from within which he is speaking. Compare the following:

//ʔasūh ḍp laʔén méh, iŋ te tahây?// 'What work have you done today?'

//ʔasūh ḍk laʔén náʔ?// 'What work did you (du.) do?'

The visibility component refers to whether or not the referent is in the view of the speaker at the time of speaking. Compare the following:

//ʔuřék an ḍam hól cu.// 'My friend (vis.) is first,'

//ʔuřék āp hól cu.// 'My friend (not vis.) is first.'

{a} 'remote' occurs only in the single form āpi 'third singular remote, non past, not visible.' The meaning of this morpheme is unclear, but in at least some cases it indicates relative remoteness in contrast with //a// of {e} and {o}.

E.g. //ʔacih ʔap minēʔnē c// 'What is his name?' (Of a person not present).

//ʔacih āp minēʔnē meh?// 'What is your name?'

But āp also may refer to referents that are very remote.
E.g. /héŋ rólhaka ap, nə i kúy ap kasónře// 'But
he is just lying on his box (on the moon)'.

{hé·} 'each other' is a form which is distributed
with the possessive pronouns in their occurrence as
objects of transitive verbs and after the directional
locative {'ín}.

E.g.

//tá·phén hé· nun mínė· lí·peře.// 'The books are
flush to each other.' ([Flush with]-[reciprocal]
each-other they these book.)

//tá·p yin, nə {'ín hé}.// 'They are always together.'
([Flush with] they, they with each-other.)
The distribution of the personal pronouns from Table I is as follows.

**Subject pronouns** occur as the subject of non-interrogative independent clauses.

//haliyna hila: man.// 'Hang out the cloth.'
(Cause-wave-out cloth you.)

//hacatqen ek li:pefe cin.// 'I lost the book.'
(Cause-[be lost]-away-[involuntary action] it-[not-visible; past] I.)

//eta cin yih, et mik kuyaye.// 'Now we do not see the seashore.' (Now we oh!, not see seashore.)

**Interrogative pronouns** occur as the subject of interrogative clauses, which may be used either (1) interrogatively or (2) exclamatorily.

(1) //ha?en ac?// 'Am I late?' (Late-[involuntary] I.)

//sitih kan? :wevah ti::? am, te o?//
'How did you catch it? (How ability-[perfective]-insistently do you, to it?)

(2) //ir? :we ac ve: ta:rik.// 'How many men there are!' (How-[great number] they these men.)

**Subordinate pronouns** occur as the subject of subordinate clauses.
Possessive pronouns occur as the object of a (1) verb or (2) preposition, as (3) the possessor of a noun, or as (4) the subject of a subordinate pronoun.

(1) //vánnjén hiː?, l’am pó·p hiː?, inře·.//
   'Prepare betel leaves and our tobacco also.' ([Make betel quid us, roll tobacco our also.)

(2) //kaláh cin min, yíh 'ín meh.// 'I will try to come to you.' (Try I will, come to you.)

//acín ap min kumře·njeře, te víː?.//
   'Which of you will go?' (Which it-[visible, nor-past] will [one who goes]-away-self, of you?)
Emphatic pronouns occur as (1) the subject of non-interrogative independent clauses, as (2) an appositive subject, as (3) a predicate, and as (4) a demonstrative, following the noun it modifies. In its use as the clause subject, the emphatic pronoun, in contrast to the subject pronoun, indicates definiteness or certitude, and is thus usually used in narration of stories or past events.

(1) //líkla te havá·ng caʔə, pon latókketi nuk teʔaqú·ʔ.// 'They went up by a cobweb because the creepers were broken down.' ([Go-via]-up by cobweb they,
because-[it is that] break-[imperfective]-down they-[not visible, past] creeper.)

(2) //mékán cin, cúʔə.// 'I saw him myself.' (See-him 1, myself.)

(3) //cúʔə cin, téʔaminu, tem lí-peře.// 'I am the owner of the book.' (I I, who-owner, of-the book.)

(4) //halĩneře an ik haté-m aŋuʔə.// 'He writhed that night.' (Writhe-self he in-it-past night that.)

As has been mentioned, the third person 'not visible' and 'past' subject and interrogative pronouns are distinguished only when an interrogative form occurs as head of a subject phrase in an interrogative sentence, where the terminal V or VC is optional. Everywhere else the subject forms occur. Interrogative examples have been given. Examples of the subject pronouns, according to their function, are presented below.

Subject of independent clause

//ihih ek taháy.// 'He was just here? (Here he-[past, not visible] just.)

//asúh ap min, kahéʔ-te cu?// 'What shall I give?' (What it-[non-past] will, [what is given] my.)

//hahó-rhátuें nuk, té cu.// 'They have been driven in by me.' (Drive-in-[passive] they-[past], by me.)
// ët ihíh ap, cón?// 'Isn't John here?' (Not here he-[non-past], John.)

Demonstrative

// acín ap lumkúŋ ap élmé·ři.// 'Who is rattling the cupboard?' (Who it-[non-past] rattler it-[visible] cupboard.)

// pižánkú. 'cin, te ró·ke ap iskú·l yí·?// 'I'm surprised at how large your school is.' ([Be surprised] I, by [great size] it-[non-past, visible] school your.)

There are two examples of ak as a relative pronoun; in both examples the relative clause is descriptive of the subject itself, e.g.

// câtñén ak núa· cu, ak te sinřó·lué.// 'My bull which has horns is lost.' ([Be-lost]-[involuntary] it-[past, not visible] bull my, it-[past, not visible] of horn-have.)

// câtñén ak ha?ún cu, ak te lamřitéu.// 'My pig which has a tail is lost.'

830. There are a number of uninflected words which, when occurring before pronouns, regularly contract with them. The more aberrant forms are presented in Table III. There are in addition contractions with the following:

{?ín} 'in, to' plus a 3rd. sg. non-visible or past pronoun (i?ín has the allomorph //i// in this environment);

{tu} '(grammatical relator)' plus a 3rd. sg. non-
visible or past pronoun or a subordinate pronoun;
\{tø\} '(imperative)' plus a 1st person subordinate pronoun.

All of the above forms involve contiguity of the grammatical particle and the pronoun without intervening juncture with resultant morphophonemic sequences of schwa plus a vowel other than schwa, with either vowel preceding. In each instance the schwa is lost. A single exception is /tø,o/ (\{tø\} + \{o\}) in which loss of juncture follows glottal stop prothesis, a regular morphophonemic rule.

An additional pronominal contraction involves the contraction of \{ne + héq\} to //neγ//. \{ne\} is the third person subordinate pronoun substitute; \{héq\} is a verbal auxiliary, 'only'. The contraction involves the loss of the //hé// of \{héq\}, which might better be described as having an allomorph //η// in this position were it not for the plethora of contractions in the language.

Table III presents the phonemic shapes of the relatively aberrant pronominal contractions, which involve consonant and/or length loss, length addition, alternant forms, or infixation. In general, the rule applies that of adjacent vowels of which one is a schwa, the schwa is dropped. Note, however, that this does not pertain to \{pó·?\}. Of stems ending in h the
### Table III: Pronominal Contractions

<table>
<thead>
<tr>
<th>Subordinate Pronoun</th>
<th>(yé)</th>
<th>(hó)</th>
<th>(pó)</th>
<th>(gúh)</th>
<th>(rēh)</th>
<th>(pecc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg ec</td>
<td>yé:c</td>
<td>hó:c</td>
<td>poc</td>
<td>rúc</td>
<td>ró:c</td>
<td>pecc</td>
</tr>
<tr>
<td>2sg am</td>
<td>yém</td>
<td>hó:m</td>
<td>pom</td>
<td>rúm</td>
<td>ró:m</td>
<td>pecc</td>
</tr>
<tr>
<td>1du ay</td>
<td>yé:ay</td>
<td></td>
<td>pòːay</td>
<td>rá:y</td>
<td>ró:y</td>
<td>pecc</td>
</tr>
<tr>
<td>2du an</td>
<td>yé:an</td>
<td></td>
<td></td>
<td>rá:n</td>
<td></td>
<td>pecc</td>
</tr>
<tr>
<td>1pl ey</td>
<td>yé:y</td>
<td>hó:y</td>
<td></td>
<td>rú:y</td>
<td>ró:y</td>
<td>pecc</td>
</tr>
<tr>
<td>2pl ey</td>
<td>yé:y</td>
<td>hó:y</td>
<td>poy</td>
<td>rú:y</td>
<td>ró:y</td>
<td>pecc</td>
</tr>
<tr>
<td>3sg o+n</td>
<td></td>
<td></td>
<td>pòːon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3pl ca+n</td>
<td></td>
<td></td>
<td>póːcan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3*n</td>
<td>yé:n</td>
<td>hó:n</td>
<td>pon</td>
<td>rún</td>
<td>ré:n</td>
<td>pecc</td>
</tr>
</tbody>
</table>

*Undifferentiated as to number

Blank: combination does not occur  
- : not in data
h is lost. Additional statements are as follows.

The //n// of third person forms is an allomorph of {ne} 'subordinate third person', the statement being as follows:

ne - n

n occurs as a bound form
e.g. //pó•?can// 'because they...'
ne occurs as a free form
e.g. //yé• c, ne// 'if he...'

Contractions with {yé•} and {hó•} involve simply the loss of the initial a of the pronoun, e.g.
//hó•em// → /hó•m/ 'that you'
//yé•ay// → /yé•y/ 'if we'

In all of the contractions with {yé•} and {hó•} length is optionally (but usually) lost, with accompanying loss of stress, e.g.
/yé•m - yem/ 'if you...' /hó•n - hóin/ 'that they...'

In forms with adjacent short vowels, the second is stressed, i.e.
/yéay/ 'if we two...' /yeán/ 'if you two...'

The single {pó•} forms involve regular morphophonemic rules for adjacent segments, e.g.
//pó•?ay// → /pó•ay/ 'because we two...'

The alternant {pó•} forms have the shape //pó - pə// plus the subordinate pronoun, with regular loss of schwa. Historically the {pó•} contractions
probably developed from a special rule ə?ə → ə - ə, i.e., loss of ə and competition between the ə of {pó·ʔ} and the ə of the pronoun in the weak-stressed environment. However, the third person undifferentiated forms, which are clearly parallel, do not involve ə in the pronominal form and are not describable in the same terms. Thus the allomorphic statement as given is more appropriate.

Note that {pó·ʔ} has third person forms that are differentiated for number, along side the undifferentiated forms. The undifferentiated forms have either singular or plural reference.

{pəceə} contractions involve regular schwa loss and are aberrant only in that they involve infixation of the subordinate pronoun.

The third person undifferentiated forms of {ʔúh} and {řéh} both involve the loss of h before the following n, the {řéh} form also having vowel length. The other {řéh} and {ʔúh} forms involve loss of the final h plus contraction according to the rule that of two adjacent vowels which include a schwa the schwa is lost. The {řéh} contractions also all have compensatory lengthening.
900. Verbs are identified by their distribution in verbal syntactic constructions and by their occurrence in the morphological constructions presented in this chapter.

Stems are described according to composition and distribution. Compositionally defined stem classes are presented below; presentation of distributionally defined stem classes is deferred to the discussion of verb inflection.

910. Verb stem composition

Internal criteria define two types of stems: simple stems and derived stems.

911. Simple stems (S)

There are three types of simple stems: roots, compounds, and primary stem derivatives.

911.1. Stems which are identical to root morphemes.

Nearly all verb roots are of the shape CVČ or CVČVC. However there are a few roots of the shapes CVVC and CVČVČVC. Examples of monomorphemic verb roots are as follows:

\begin{itemize}
  \item \{si·p\} \text{ 'to grow'}
  \item \{ni·k\} \text{ 'to tie'}
  \item \{káhá·t\} \text{ 'to accomplish'}
  \item \{lēh\} \text{ 'to club'}
  \item \{cíp\} \text{ 'to be straight'}
  \item \{mín\} \text{ 'to germinate'}
\end{itemize}
\{sup\ęk\} 'to tiptoe'
\{va\ęk\} 'to grunt'

A very few bivalent roots occur as both noun and verb stems. All have the shape CVČ.

E.g.
\{lúl\} 'smoke, to smoke'
\{ řé·n\} 'foot, to go'

Note the following pairs of stems. (Cited phonemically)

<table>
<thead>
<tr>
<th>non-agentive</th>
<th>agentive</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>intransitive</td>
<td>transitive</td>
<td></td>
</tr>
<tr>
<td>caví·</td>
<td>cuví·</td>
<td>'to rotate, circle'</td>
</tr>
<tr>
<td>falál</td>
<td>filál</td>
<td>'to break'</td>
</tr>
<tr>
<td>kayín</td>
<td>kiyín</td>
<td>'to shake'</td>
</tr>
<tr>
<td>lavés</td>
<td>luvés</td>
<td>'to be bruised;'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bruise'</td>
</tr>
<tr>
<td>la'?óh</td>
<td>li'?óh</td>
<td>'to break'</td>
</tr>
<tr>
<td>paréh</td>
<td>piréh</td>
<td>'to crumble'</td>
</tr>
<tr>
<td>patéñ</td>
<td>pitéñ</td>
<td>'to sting, smart'</td>
</tr>
<tr>
<td>sarák</td>
<td>sirák</td>
<td>'to slide'</td>
</tr>
<tr>
<td>talú·k</td>
<td>tilú·k</td>
<td>'to overlap'</td>
</tr>
</tbody>
</table>

These stems are representative of a large class of stems having paired non-agentive / agentive forms, the non-agentive forms having /a/ as the first vowel, the agentive forms having /i/ or, before a labial, /u/ (recall that //i//→/u/ before a labial). Patterning with the above pairs in a few instances is the tonic syllable
occurring in isolation, suggesting segmentation of these forms into a CVC root plus a paired set of Ca/non-agentive - Ci/agentive prefixes.

E.g. compare /ʔóh/ 'be broken' to /laʔóh, liʔóh/ 'to break' (non-agentive, agentive respectively).

While segmentation of many or all of these forms may well be correct from a historical viewpoint, synchronically it leaves one with a plethora of uniquely occurring morphemes. An additional complication is the fact that a few roots occur with several "prefixes", requiring that each prefix be assigned a different meaning. It has not been possible to ascertain consistent meanings for the various prefix pairs, neither where they contrast with other prefixes or with zero, nor when all of the CVCVC stems having the same initial consonant are examined for a common semantic component.

The solution adopted here has been to segment only those forms where the initial consonant contrasts - either with another C or 0', this is described under "primary stem derivation". The remainder of the forms are considered to be monomorphemic transitive roots having the shape CiCVC, the /a/ of the non-agentive form being identified with the non-agentive {a} of //arís// 'to spill' (cf rás 'pour' Vt.) etc.

E.g.

{-a- liʔóh} → //liaʔóh// → /laʔóh/ 'to break (non-agentive)'

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(-a- sirák) → //siarâk// → /sarâk/ 'to slide (non-agentive)'

Roots which have allomorphy.

A. Morphemes having allomorphs that are mutually exclusive.

{ke·?} : ké·? ~ ké·? 'to take' (possibly ké?eř - before vowels, e.g. ké?eře
ké?eřen)

ké·? occurs with {-ah-} 'nominal', i.e. 
/kahé·?/ 'what is taken'

ké·? occurs elsewhere, e.g. /ké?e/

'be caught'

Parallel statements pertain to (vo·k) 'to bathe' and {vú·y} 'to be feverish'.

{vo·k} : vó·k ~ ?ó·k 'to bathe'

{vú·y} : vú·y ~ ?ú·y 'to be feverish'

?ó·k and ?ú·y occur with {-an-} 'instrument', i.e. /?anó·k/ 'bath water',
/?anú·y/ 'fever'

vó·k and vú·y occur elsewhere, e.g. 
/vamó·k/ 'bather', /vó·k/ 'to bathe',
/vú·y/ 'to be feverish'

{pahé·?} : pahé? - pá?e 'to fear'

pahé·? occurs before a vowel, e.g.
/pinhé·?ã/ 'the frightening',
/pahé?ekú·?/ 'be afraid'
páʔe occurs elsewhere, e.g. /tepáʔe/kúʔ/ 'one who is afraid'

{né·t} : né·t ∞ yé·t 'to be decorated'

yé·t occurs with {-an-} 'gerund',
i.e. /yané·te/ 'jewels'

né·t occurs elsewhere, e.g. /hané·t/ 'to decorate', /ináʔe·te/ 'the decorating'

{lák} : lák ∞ lók 'to go through, by way of'
lók occurs with {ta} 'nominal', i.e.
/talé·ka/ 'road'
lók occurs elsewhere, e.g. /lá·ka/ 'be
gone by way of', /lákā/ 'embark at, leave from'

B. Allomorphs completely overlapping in distribution.

1. Vowel length alternation.
   {lán} : lán ≠ lá·n 'to kill (python is agent)'

2. Vowel nasalization alternation.
   {tá·p} : tá·p ≠ tā·p 'to be flush, even with'
   {pá·p} : pá·p ≠ pā·p 'to deflate (tr.)'

3. Vowel quality alternation.
   {lafá} : lafá ≠ lafáy 'to have a flapshaped cut'
   {piré·y} : piré·y ≠ pirúy 'to mix up, dissolve'

   {sé·n} : sé·n ≠ sé·t 'to be very good, very nice'
   {kiří·p} : kiří·p ≠ tīří·p 'to wrestle'
   {talás} : talás ≠ takás 'to glide, slip'
911.2. Compound stems

Compound stems consist of two roots. There are few such stems; the following types occur.

a. Stems in which the first element is a verb root and the second is a noun root.

/təlro*?/ 'to order, request'; /təl/ 'to choose',
{rə?} 'voice, word'
/saþro*?/ 'to answer' ; /sáp/ 'to stab',
{rə?} 'voice, word'
/vi*?tit/ 'to mend'; /vi*?/ 'to make',
{tit} 'end'

b. Stems in which the first element is an adverbial particle and the second is a verb root. Only one such stem has been identified, i.e.

/hęŋqęh/ 'to remain'; /hęŋ/ 'only, just',
{ęŋ} 'to remain, stay'

c. A stem in which the first element is a noun and the second is unidentified, i.e.

/ňamtō*?/ to play'; /ňăm/ 'plaything', {tō*?}

911.3. Primary stem derivatives

Primary stem derivation is an innermost layer of derivation; it involves a root plus a derivational prefix of unique or limited occurrence. Such forms are all of a single phonological type: a CV prefix and a CVC root. The following examples are illustrative.
a. Examples involving a verb root.

{ŋá·c} 'be finished; already' /caŋá·c/ 'to clear up, disappear' ca- (?)
{tá·n} 'to press with palm of hand' /katá·n/ 'to iron, press' ka- (?)
{tál} 'to choose' /katál/ 'to distribute' ka- (perhaps connected with {ká} '(distributive)')

Note the following sets.

{lān} 'be rolled (as by waves on a beach)'
/pilān/ 'to roll (Vt)' pi- (?)
/milān/ 'to round (Vt)' mi- (?)
/tišān/ 'be rolled out, ground (Vt)' ti- (?)

{řāt} 'be tense, taut'
/kirāt/ 'to twitch, pulsate (Vt)' ki- (?)
/miřāt/ 'to release something taut (Vt)' mi- (?)
/tiřāt/ 'to bounce (Vt)' ti- (?)

See p.155 for a discussion of this problem.

b. Examples involving a noun root.

/kavók/ 'to hook' ka- {vók} 'fish hook'
/kiré·n/ 'to go afoot' ki- {ré·n} 'foot'
/haróh/ 'to sleep' ha- {róh} 'a night and a day'

c. Examples involving a directional.
Compare the following set of verbs to the corresponding directional verb suffix.
/kulín/'to go to the left as you face the sea' {l} 'up; to left facing sea'
/kuni'/ 'to go out to the el panam; emerge from womb' {n} 'out'
/kuhé·t/ 'to enter; to go inland to the village from the head coastal village' {hat} 'in'
/kufi'/ 'to go to the right as you face the sea' {t} 'to right facing sea; toward; down'

These forms are clearly segmentable, {ku-} being an intransitive verb deriving prefix, the stressed syllable consisting of the directional morphemes as indicated.

d. Example involving a numeral classifier.
/fatá·k/ 'to slap' fa- {tá·k} '(clf. with broad flat objects)'

912. Derived stems

Two stems are to be described, each having distinct distributions: the causative stem (CS), consisting of a simple stem plus {ha} 'causative', and the non-agentive stem (NA) consisting of a simple transitive stem plus {a₁} 'non-agentive'. These morphemes differ from those described under primary stem derivation in that they are clearly identifiable as morphemes and are evidenced in a large number of examples.
Complementary classes of stems occur with {ha} and {a₁} in the data; this is not surprising due to the limited distribution of {a₁} and the fact that it occurs exclusively with transitive stems, while {ha} occurs primarily with intransitive roots. (Transitive and intransitive stems are defined in section 930.) This complementation is probably a trivial fact.

911.1 Causative stem: {ha} + -S

The causative stem consists of a simple stem plus {ha}. 'causative'. {ha} has allomorphs as follows:

\[ (-m- \rightarrow mi- \rightarrow me-) \rightarrow (?\rightarrow ha-) \]

-\(m-\rightarrow mi-\rightarrow me\) occur with CVCVC stems

\(mi-\rightarrow me\) occur with stems beginning with a laryngeal; it is necessary to list the stems with which they occur. The following lists are thought to be complete for the corpus.

Stems occurring with \(mi-\)

harívló.n 'be sorrowful'
harin 'be black'
\(\up{\text{a}}\)káh 'to know'
\(\up{\text{a}}\)qú. 'be bitter'
\(\up{\text{u}}\)rén 'be startled'

SR: HV → Ø /mi_

E.g.

\(mi + \text{harin} \rightarrow //\text{mirin}\\text{//} // 'make black'\)
\(mi + \text{\(\up{\text{a}}\)qú} \rightarrow //\text{miqú}\\text{//} // 'make bitter'\)

Stems occurring with \(me-\)
isóh 'be white'
ufóv 'be cold'
ulóhtén 'know intimately'

E.g.
/mi'isóh/ 'to whiten'
/mu'ufóv/ 'to make cold'

-m- occurs with other CVCVC stems, e.g.

/sim'órkú/ 'shame', si'órkú/ 'be ashamed'

-∞ ha- occur elsewhere

- occurs with {an} 'instrument' and {in} 'gerund',

e.g.

/inká/ 'a float' (hakín/ 'to float')

/incá'pe/ 'piling' (hacáp/ 'to pile')

ha- occurs elsewhere, e.g.

/hará'c/ 'to heat', rá'c 'be hot'.

{ha} occurs with a very large number of stems, most of which are from the intransitive subclass of verbs and have the shape CVC; however it does occur with some noun and transitive verb stems and with a few stems of the shape CVCVC. With transitive verb stems {ha} has double causative force, i.e. it means to 'cause something to be done'. The following list of stems which occur with {ha} is exemplary but by no means complete.

Stems which occur with {ha} (Cited morphemically)

1. Transitive stems

fál 'run' ŋá 'eat'

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kiloq 'to cage'  rát 'slice crosswise'
lo't 'bend a wire' tá'y 'catch'
mik 'see'

2. Intransitive stems
cip 'be straight'  ró:l 'be lying down'
hök 'be cooked'  rön 'accompany'
kiřeq 'be big'  řil 'roll'
le'n 'be thin'  řêt 'tighten'
líy 'shake'  sáh 'be black'
rá·c 'be hot'  sifóŋkú 'be ashamed'
rák 'be level'  sí:p 'grow'
réy 'be weary'  táñ 'be angry'

3. Noun stems
kupah 'corpse' (caus.: 'to make dead')
mum 'dirt' (caus.: 'to make dirty')
yá·c 'poor' (caus.: 'to humble')

Examples:
//hanlík//  'to show'
//kimlón// → /kumlón/  'to cause to be caged'
//hasáh// → /'asáh/  'to blacken'
//hacíp//  'to straighten'
//hayá·c//  'to humble'
//haña·ʔ//  'to feed'
//kimřeq// → /kumřeq/  'to make big'

911.2 Non-agentive stem: {a₁} + S
The non-agentive stem consists of a simple stem
plus {a₁} 'non-agentive'.

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\{a_I\} occurs with a subclass of transitive stems, most of which have the shape CiCVC; however it does occur also with a few stems having the shape CVC. The following is a partial list of stems which may occur with \{a_I\} (Cited morphemically):

- fók 'split'
- pilán 'roll'
- kirúp 'smash'
- piré'y 'dissolve'
- kité·l 'swing'
- réh 'unstraddle'
- lí·c 'peel off'
- rás 'pour'
- likêk 'break'
- sí·c 'rub vigorously'
- liʔóh 'break'
- tihús 'perfume, scent'

Examples:

//laʔóh// → /'laʔóh/ 'be broken'
//afók// → /'afók/ 'be split'
//alí·c// → /'alí·c/ 'be peeled'
//karúp// → /'karúp/ 'be smashed'
The Deictic verb

{hu} and {han} are two infrequently occurring verbal prefixes which emphasize the nature of the action of the verb. The data allow only brief mention of these prefixes, which are distributed with all three stem classes.

Deictic verb: {han}+ S₁,₂,₃ {hu}

E.g.

//hutufɪt// 'by slinging' //hantanfɪte// 'by slinging'  
//husiɛ̃ō·le// 'by butting' //hansinɛ̃ō·le// 'by butting'  
//hurɪl// 'by crawling' //hanfɒh// 'by kicking'

CVCVC stems with {han} always have an //n// infix; this seems to be a euphonic segment of a reduplicative nature; it is not thought to be of grammatical significance. Some of the stems are extended by a schwa suffix, which remains unanalyzed. This may be the same problem as the schwa augment mentioned in the noun section. The available texts have insufficient examples to pursue the problem of schwa. No other suffixes may occur with Deictic verbs.

There are apparently limitations on the distribution of these prefixes; separate listings, which cannot be made from the available data, are required for all verbs.
E.g.

//hukafita ap.// 'He did it by flicking.' (By-flicking he.)

//hankanlícê ak, ne ké·?e e.// 'By putting his arm through he took it.' (By-[putting arm through] he, he take it.)

//hansó·ŋ an, ne sút ŋam ñám.// 'By kicking he played the ball.' (By-kicking he, he play the ball.)

//hulírá·ke cin.// 'I did it by splitting it.' (By-splitting I)

With respect to the inflectional derivational dichotomy, the Deictic verb seems to be intermediate. Stem derivation is nearly all prefixual in Nicobarese, while inflection is suffixual. The Deictic verb shares some properties of both types; it seems best to simply not try to categorize it in these terms.
Introduction to Verb Inflection

Verbs occur as stems in thirteen major inflectional constructions, each of which consists of a stem and one to three suffixes. Five of the constructions consist of a stem plus a single suffix, indicating deleterious effect, continuation of action, action sequence, negative absolute, and attribution, i.e., that the verb bears an attributive relationship to a following noun. The other seven constructions describe paradigms which are inflected for direction/aspect and which differ with respect to voice: reflexive, passive, possessive, stative, two intransitive and two active paradigms complete the set. The two intransitive paradigms consist of one of transitive stems, which have an incorporated object, and one of intransitive stems. The two active paradigms are not marked for active; they indicate respectively personal and non-personal referent of the verb, the referent being a direct object with transitive verbs; an indirect object with intransitive verbs.

There are two small classes of suffixes which may attach to fully inflected verbs. They are termed post-inflectional suffixes. One class consists of a single morpheme which requires the statement of special constructions; the other is a class of nouns whose structural relationship to the verbs is fully described by the regular tactic constructions.

Finally, the verb presentation closes with a discussion of a residual set of suffixes of infrequent or highly restricted distribution.
The constructional paradigms (Table IV) define three classes of stems: $S_1$, $S_2$, and $S_3$. Class 1 stems comprise derived causative stems and a class of simple transitive stems; as a whole this class is referred to as $V_t$ or $S_1$. Class 2 stems comprise derived non-agentive stems. The class is referred to as $V_{na}$ or $S_2$. Class 3 stems are all simple intransitive stems referred to as $V_i$ or $S_3$. A very few stems belong to more than one class.

Stems vary as to degree of freedom with respect to the suffixes; some stems occur freely in all constructions permissible to their stem class; at the other end of the scale some stems always occur with a single suffix configuration. In between these extremes are stems with varying combinatory possibilities - stems "frozen" at various points in the derivational process or having limited substitutional possibilities. In the last analysis, separate statements must be made for nearly every stem.

In the course of limited field work it was not possible to investigate individual stem suffixation as fully as one would like or as fully as is required for definitive analysis of the verb system. The description presented here is necessarily broad and subject to refinement.

Several of the constructions are diagnostic for stem class; in the absence of complete paradigms for
Constructions

<table>
<thead>
<tr>
<th>Stem Types</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transitive stems</td>
<td>Non-agentive stems</td>
<td>Intransitive stems</td>
</tr>
<tr>
<td>Personal referent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-personal referent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Reflexive passive</td>
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<td>X</td>
<td>X</td>
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<td>Possessive</td>
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<td>X</td>
</tr>
<tr>
<td>Intransitive locative</td>
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<td>X</td>
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<tr>
<td>Incorporated object</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stative</td>
<td>(X)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Continuative</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Attributive</td>
<td>(X)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sequential</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Note: (X) indicates that the occurrence of the stem type is very limited in the construction.

Table IV: Verb Inflection: Distribution of the stems in the constructions.
all stems, occurrence in any one of the constructions specific to a particular stem type is taken as evidence for classification of the stem. An additional criterion for stem classification was alluded to in connection with noun derivation, namely distribution and allomorphy of the gerund, {-in-}. Non-agentive stems do not occur with the gerund, while intransitive and transitive stems take different allomorphs. A further stem classing criterion is the adjective prefix, which occurs only with intransitive stems.

931. Thematic stem (TS)

The thematic stem (TS) consists of a stem plus one of the thematic suffixes. The thematic suffixes are a set of seven suffixes expressing direction or aspect, i.e. \{h\}, \{hst\}, \{k\}, \{l\}, \{n\}, \{q\}, \{t\}.

Stems of classes 2 and 3 do not occur with \{k\}.

Thus the statement of the thematic stem is as follows:

\[
\begin{align*}
\text{TS}_1 & \rightarrow S_1 + \text{thematic suffix} \\
\text{TS}_2 & \rightarrow S_2 + \text{thematic suffix} - \{k\} \\
\text{TS}_3 & \rightarrow S_3 + \text{thematic suffix} - \{k\}
\end{align*}
\]

Examples:

\[
\begin{align*}
\text{TS}_1: & //lēhk-// 'hit purposelessly' //hařill-// 'roll up' \\
\text{TS}_2: & //parú·ył-// 'become murky' //lařákñ-// 'be split' \\
\text{TS}_3: & //sí·pt-// 'grow down' //li·nh-// 'be angry'
\end{align*}
\]

Details of the thematic suffixes are as follows:

\{k\}, 'imperfective'
{k} indicates that the action is only partially accomplished, is only half-heartedly or not seriously done, is only touched upon, or is done unintentionally. It occurs only with S₁.

E.g.

//li·rke/ → /li·ka/ 'to cut a little'
//kité·lka// 'to be swung back and forth (for no reason)'
//ṭīŋkēře cin.// 'I burn myself accidentally.'

{h} 'reciprocal action'

The meaning of {h} is quite obscure. It is usually the thematic suffix employed when the object of a verb is {họ} 'each other'. In most transitive uses and in the Reflexive passive verb it appears to mean 'a plural subject acts with respect to each other', e.g.

//li·ńhēn hé· an, ay có·n.// 'John and I are angry with each other.'
//kařīphēn hé· nun minē· li·peře.// 'These books are pressed together. (lit. press each other together.)'
//hamu·lheře yin, na tikīkrō·ře.// 'They are singing a song gathered together.'

{h} with the passive {e₂} occurs with a number of verbs; its meaning is not clear, e.g.

//hāŋhūrën cin, té o.// 'I'm loved by him.'
(hā·ŋēn 'to love')
//cikhukú·' an ṣam sakú·'// 'The knife pains.'
   (cík 'to hurt' (V₁))

//harényu en ṣam máy·'// 'The sea is saline.'

In the latter two examples the verb indicates that the subject is emitting the quality which is expressed by the verb — as opposed to being affected by it. This may be ascribable to {h}; it is not clear.

{het} 'inward, toward the interior of the island'
   hé·t = hét - het
   hét occurs with {ku} '(intransitive verb deriving prefix)' i.e.
   //kuhé·t// 'to enter, go into'
   hét - hst occur elsewhere
   hét occurs non-finally
   hst occurs elsewhere

E.g.
   //si·phéKal// 'to be growing into'
   //hahó·rhéAatva// → /haʔb·hétva/ 'to be driven in'
   //silóthet// 'to prepare a food parcel and take it inland'
   //ʔasá·rhét// → /ʔasá·hét/ 'to pour into'

Two observations of interest pertain to the differing phonological shape of {het} as compared with the other thematic suffixes. The first is that, unlike the other thematic suffixes, {het} has a stressed allomorph which occurs as a verbal suffix. The usual pattern in the
language is for CVC syllables to have stress if they follow a stressed root; the //hât// allomorph is doubt­less a reflection of that pattern. The second observation is that {het} occurs with Ø allomorphs of {æ₃} 'personal referent', {æ₄} 'non-personal referent', {i} 'intransitive stem closing suffix' and {æ₆} 'reflexive stem extending suffix', suffixes which immediately follow the thematic suffixes in four of the verb constructions. These Ø allomorphs are doubtless related to the relatively longer phonological shape of {het} as compared with the other thematic suffixes.

{l, t, ŋ, q} form a distributional subclass of the thematic suffixes; they will be called 'directional suffixes' (D).

{l} 'upward; to the left when facing the sea; to increase in size or number (with ře)'

l ∞ lïŋ

lïŋ occurs with {ku-} '(intransitive verb deriving prefix)', i.e.

//kuliŋ// 'go to the left as you face the sea.'

l occurs elsewhere, e.g.

//si·ple// 'grow up'

//liřākle// 'split something' (involves upward motion)

//mânleŘe// 'be growing up; be growing in size or number'
//haté·mlə// 'go to the left facing sea at night'

\{t\} 'toward; downward; to the right as one faces the sea'

\(t \sim tí\cdot\sim ta\)

t\(a\) occurs with quantifier stems after \{qa\} 'incorporated object', e.g.

//lú·yqeta// 'do three (things) toward, down'

//haróhtúmqeta// 'do some (things) toward, down'

\(tí\cdot\sim\) occurs with \{ku-\} 'intransitive verb deriving prefix', i.e.

//kutí\cdot\sim// 'go to the right facing sea'

t\(a\) occurs elsewhere, e.g.

//ténheře// 'float toward (etc., reflexive)'

//hakíptən// 'teach (someone)'

//sälti// 'come down'

\{n\} 'outward; toward the seashore'

\(n \sim ní\cdot\sim\)

\(ní\cdot\sim\) occurs with \{ku-\} '(intransitive verb deriving prefix)', i.e.

//kuñí\cdot\sim// 'to go out to the əl panam (head village at the seashore)'

\(n\) occurs elsewhere, e.g.

//nínəře// 'to be growing out'

//kāhátnən// 'to put (someone) out'

//paréhkañi// 'to be accidentally broken out'

(non-agentive)
//sifóliə// 'to butt (something) out'
//cipni cin, kuñí.'// 'I'm going straight to the seashore.'

{ŋ} 'perfective'

{ŋ} indicates one of the following:
1. action is completed
2. the goal of the action of the verb is done away with — perhaps left behind, destroyed, or removed.
3. the action of the verb is directed inland to the jungle.

E.g.
/kahátqe ṅáʔáře cin./ 'I finished my dinner.'
/larakh'iyə an naam pakoñ.n./ 'The branch has accidentally split away'.
/cipqe cin, caru'y./ 'I'm going straight to the jungle.'

η = na = ie - i - ei

ie - i - ei occur with {ŋ} 'passive'
ie occurs after a laryngeal when {ŋ} is non-final, e.g.
//hacúʔiərén// → /hacúʔuyrén/ 'be cheated'
//ʔamáníərén// → /ʔamáhayrén/ 'do accidentally'

ei - i occurs after a laryngeal when {ŋ} is final, e.g.
//fóheiə// → /fóhoye f fóhoy/ 'be beaten'
//fóheiə// → /fóhiye/ 'be beaten'
//hóʔiə// → /hóʔowy f hóʔowy/ 'be reeled in'
i occurs elsewhere, e.g.

//halínirén// → /hali·nirén/ 'be deposited'
//kuntú·yirén// 'be deceived'
//ŋátíye f ŋáti/ → /ŋá·tiye f ŋá·ti/ 'be bound'
//fú·niye f fú·ni/ 'be split'

ŋa occurs word finally with {qa} 'incorporated object', e.g.

//lu·yaqə/ → /lu·yhaqə/ 'do three (things) up'
//fe·lqaqa/ → /fe·lhaqə/ 'to have killed (someone)'

ŋ occurs elsewhere, e.g.

//sikéhə// 'hot season'
//lařáknoře// 'be cracked'
//fe·lqən// 'to kill someone'
//hac·ŋə// 'to shorten'
//kitú·yaqən// → /kitú·yhaqən/ 'to deceive someone'

The Personal referent verb consists of a stem of class 1, with or without a thematic suffix, plus {əɔ} 'personal referent'. A few class 3 stems with the thematic suffix {h} 'reciprocal action' have also been found with {əɔ}.

Personal referent: $TS_2^1 + \{əɔ\}$

$S_3 + \{h\} + \{əɔ\}$
\( \{a_3\} \) 'personal referent' occurs only in this single construction; it has the following allomorphy:

\[
a \circ \in \in \emptyset
\]

\( \emptyset \) occurs with \{hat\} 'inward, to the interior', e.g.

- // håkhät\// 'wait for (someone) to enter'
- // náthet\// 'tie (someone) inside'

\( \emptyset \) occurs elsewhere with thematic stems, e.g.

- //tá'ñén\// 'to push (someone)'
- //léhlén\// 'to hit (someone) up'

\( a \) occurs elsewhere, e.g.

- //léhe\// \( \rightarrow \) /léhe/ 'hit (something)'
- //ñé·ke\// 'tie (something)'

A special phonological rule pertains to personal referent non-thematic stems followed by \{c\} '3rd person pronoun', i.e.

\[
\text{SR: } \{a_3\} + \{c\} \rightarrow //-án//
\]

that is, the //a// of the personal referent ending plus the //c// of the 3rd person pronoun result in the portmanteau verb suffix án, e.g.

\[
\{féle + c\} \rightarrow //félán// 'kill him'
\]

The Personal referent indicates that the verb has an object and that it is personal, i.e., a personal name, a personal pronoun, or \{hé·\} 'each other.' The object of stems of class 1 is direct; with class 3 stems it is indirect.
Examples:
with $S_1$

// né·ktén o cin, 'in có·n.// 'I tie him to John.'
(Tie him I, to John.)
// tí·nŋén tətmák an, cé·ms.// 'James sent Tətmak
away.' (Sent-away Tətmak he James.)
// fé·le có·n man!// 'Kill John!' (Kill John you!)
// mákə ca cin.// 'I see them.' (See them I.)

with $S_3$

// yáhhén ih an.// 'He came to us.' (Came us he.)
// línhén hé· an, ay có·n.// 'John and I are angry
with each other.' (Angry each other we, I-and
John.)

There are some instances of the Personal referent
verb occurring with the non-personal pronouns{e} 'it'
and {u} 'them', and with {hé} 'each other' when its
reference is non-personal. In several examples the
Personal referent verb clearly may be replaced by a Non-
personal referent verb. It appears that this is an area
in which the language is changing - from the occurrence
of the Personal referent verb exclusively with personal
pronouns, names, and {hé} 'each other' when its reference
is personal to its additional occurrence with any pro-
noun and {hé}, regardless of reference.

935. The Non-personal referent verb consists of a the-
matic stem of class 1, plus {ə₄} 'Non-personal refer-
ent'. As with the Personal referent verb a few class
3 stems with the thematic suffix \( \{h\} \) 'reciprocal action' have been found with \( \{a^4\} \).

Non-personal referent: \( TS_1 + \{a^4\} \)
\( S_3 + \{h\} + \{a^4\} \)

\( \{a^4\} \) 'non-personal referent, occurs only in this construction. It has the following allomorphy:
\[ \{a^4\} \rightarrow \emptyset \]

\( \emptyset \) occurs with \( \{het\} \) 'inward, to the interior', e.g.
//li?óhhet// 'break (something) in'
//cá·that// 'move (something) in'
\( \{a\} \) occurs elsewhere, e.g.
//hókṣe// 'to bail (something) out (away)'
//pirēhke// 'to crumble (something, incompletely)'

The Non-personal referent verb indicates that the action of the verb relates to an object that is non-personal; the object may or may not be expressed. With stems of class 1 the object is direct; with class 3 stems it is indirect. Class 3 stems are very infrequent in this construction.

Non-thematic stems are unsuffixed with non-personal objects; thus an unsuffixed stem serves as a non-personal referent verb in the tactic statements.
Examples:
with \( S_1 \)
//fálhet lí·peře cin, ĕl pati·.// 'I ran the book into the house.' (Run-in book I, in house.)
"Learn it by heart.'

(Learn it you, in-mind-your.)

'I hit the mosquito out.'

(Hit-out mosquito I.)

'I stab.' (Stab I.)

c.f. 'I bale water.' (Bale water I.)

with $S_3$

'The tree is near my house.' (Near house-my it the tree.)

Two constructional statements are required to present the Passive: one for stems of class 1 and a second for class 2 stems.

The Passive of class 1 stems consists of a stem, with or without a thematic suffix, plus the passive morpheme \{e\}.

\[
\text{Passive (S}_1\text{): } S_1 + \{e\}
\]

The Passive of class 2 stems consists of a stem plus a directional suffix or \{het\} 'inward' plus \{e\} 'passive'. When the directional suffix is \{t\} 'toward', 'down' or \{n\} 'out' the stem is extended by the suffix \{k\}.

\[
\text{Passive (S}_2\text{): } S_2 + \{k\} + \{t\} + \{e\}
\]
{ke} 'intransitive stem extending suffix', occurs only in this construction, e.g.

//latókksti// 'be broken down'
//sařólkeñi// 'be butted away'

{ø₅} 'passive', occurs only in the Passive verb and has allomorphy as follows:

ø = a = ø = øe = ve = u - u(e)

ø occurs finally with {η} 'perfective', e.g.

//ŋáti // → /ŋá·tiye /'be bound'
//fúqì / → /fú·qìye /'be split'

ø occurs non-finally with {q} 'perfective1', e.g.

//pala·ierén// → /pala?ayrén/ 'be injured'
//hacá·tirén// → /hacá·tirén/ 'be lost'

øe occurs with {k} 'imperfective', e.g.

//hayilka// 'be partially swollen'
//sönka// 'be partially bent'

øe occurs with {l} 'upward', e.g.

//flqlsqe// 'be burned'
//hañahleqa// 'be served'

ve occurs with {høt} 'inward', e.g.

//laõhhøtve// 'be broken into something'
//parõhhøtve// 'be crumbled into something'

u - u(e) occur with {t} 'toward, downward', and {ũ} 'outward'

u(e) occurs word finally, e.g.

//hahõ·ũne// → /haõ·ũne// 'be expelled'
//hahõ·ũn// → /haõ·ũn/ 'be expelled'

u occurs elsewhere, e.g.

//hakíhturén// 'be punished'
be open' 
occurs elsewhere, e.g.
'b e hit'
'be tied'
'be asked'

With stems of class 1 the Passive verb indicates that 
the grammatical subject is the object of the action of 
the verb.
E.g.
'This book is 
looked after by Jane.' (Look-imperfective-passive 
it this book, by Jane.) 
'They were served 
by their friends.' (Feed-passive they, by those 
friend-theirs.) 
'The (pl) elders were sent, to pull weeds of the 
garden.' (Send-perfective-passive those elders, 
they pull weeds, it-was garden their.) 
'I'm bound by the cord.' 
(Bind-passive I, by cord.) 

With class 2 stems the Passive verb indicates that 
the condition stated by the verb pertains to the subject 
and has been caused.
E.g.
'I'm giddy.' (Circle-up 
in head I.)
There is one example of a class 2 stem without a thematic suffix occurring with \( \{e_5\} \).

//lakúks tí·? cin, te pilîn.// 'I broke a bottle.'

(Break hand I, of bottle.)

There is one example of a stem from class 3 occurring as a stem in the S₂ Passive verb construction, i.e.

//ró·lkati ró·? cin, vé·?gênàŋ.// 'I frequently gossip.' (Many-toward word I, gossip.)

935. The Reflexive-passive verb consists of a thematic stem of any class or of a non-thematic stem of class 1, extended by \( \{e_6\} \) 'reflexive stem extending suffix', plus \( \{řč\} \) 'reflexive'.

 Reflexive passive: \( ^{TS_{1,2,3}} S_1 + \{e_6\} + \{řč\} \)

\( \{e_6\} \) 'reflexive stem extending suffix' occurs only in this construction.
The reflexive (ře) also occurs with nouns and is described under common noun suffixation.

The Reflexive-passive verb simply indicates that an action occurs; the agent and the goal are both incidental. Where indication of the agent is given the implication is that it is essentially irrelevant and probably is accidentally involved. Where the Reflexive passive verb occurs simply in a Verb + Subject clause with no specification as to agent or goal, the sense of the construction is reflexive, e.g.

//kafíteře cin.// 'I brush myself off.'
(Brush-self I.)

//mü・lhaře yin, ne řá・?// 'They eat together.' (Together-each other-self they eat.)

//hafíyeře cin, ěl kufít.// 'I'm shaking in the wind.' (Cause-shake-self I, in wind.)
If an agent is specified it is in a phrase which is
satellite to the clause nucleus; the clause subject is
the goal of the action, e.g.

//citlare an ṃam kasoq, te típ cu.// 'The box
is lifted up by me.' (Lift-up-self it the
box, by hand my.)

//lařákleře an ṃam pakcó'n, te kúp kufit.//
'The branch is broken by the wind.' (Break-
up-self it the branch, by face wind.)

The Reflexive passive of $S_2 + S_3$ verbs indicates
increment of action unless an agent is expressed, e.g.

//cíp teře cuk an ṃam ron có'n.// 'The fruit
is lowering its place.' (Short-down-self
place it the fruit.)

//parúyleře an ṃam máy.// 'The sea is getting
murky.' (Cloud-up-self it the sea.)

The suffix configurations teře and leře are also
found with numerators, where they are incremental
in meaning; they are described under numerator in-
flexion.

936. The Intransitive locative verb consists of a stem
of class 3 suffixed with a directional (D) or {het} 'in-
ward', and with {i} 'intransitive stem closing suffix'.
Intransitive locative: $S \_+ [\text{hat}] + \{i\}$

\{i\} 'intransitive stem closing suffix' occurs both in this construction and in the incorporated object verb. It has the following allomorphs:

\{i\} 'intransitive stem closing suffix'

\(i \in \emptyset\)

\(\emptyset\) occurs with \{\eta\} 'perfective' when it follows \{qa\} 'incorporated goal', and with \{hat\} 'inward, to the interior', e.g.

//fé·lqeqa// → /fé·lhaqa// 'to have killed (someone)'

//hé·mhat// 'flow in'

//tāŋhat// 'to reach in (i.e. arrive inland)'

\(i \in {t}\) occurs non-finally with \{t\} 'toward, down' e.g.

//śáltikú\*9 \in sáltekú\*9// 'to arrive at a place'

//kó\*9tikú\*9 \in kó\*9tekú\*9// 'to find'

\(i\) occurs elsewhere with \{t\} 'toward, down', and with \{ñ\} 'out', e.g.

//téhti// 'float toward'

//śálti// 'arrive (down to)'
//si·pňi// 'grow out'
//ŋátqéňi// → /ŋáthňi/ 'to tie something out'
a occurs elsewhere, e.g.
//lókqelè// → /lókhelè/ 'to stab (someone) up'
//máľe// 'to sprout up'
//cípqa// 'to go straight away (i.e. in a straight direction)'

The Intransitive locative verb indicates the direction in which an intransitive action occurs.
E.g.
//téhti an ŋam ká·?/, nē 'in cu.// 'The fish is floating to me.' (Float-toward it the fish, it to me.)
//hé·lhet an ŋam tahr·l.// 'The river is flowing in (i.e., backwashing).' (Stream-in it the river.)
//fêhlè an ŋam să·ň.// 'The rice is swelling up.' (Swell-up it the rice.)

937. The Incorporated object verb consists of a stem of class 1 suffixed with {qə} 'incorporated object' followed by a directional suffix (D) and {i} 'intransitive stem closing suffix.'

Incorporated object: $S_1 + \{qə\} + D + \{i\}$

{qə} 'incorporated object' indicates that the action of the stem carries over to an unstated object. It also occurs with quantifier stems.
SR: ə → a / _Ca

E.g.

/riná·ʔqanə/ → /riná·ʔqanə/ 'divorce'
/pó·yqata/ → /pó·yqata/ 'do many (things) to'

This paradigm expresses direction or aspect with respect to action relating to some unspecified object. The examples should help to clarify this meaning.

E.g.

/léhçele cin./ → /léhhele cin./ 'I hit (something) up'. (Hit-object-up I.)

/hahú·tqəŋa cin./ → /ʔahú·thaŋa cin./ 'I've caused the noosing (of something.)' (Cause-noose-object-[perfective] I.)

/hú·tqəŋa an, ne ʔác./ → /hú·thaŋa an, ne ʔác./ 'He already made a noose of it.' (Noose-object-[perfective] he, he already.)

938. The Possessive verb consists of a class 1 stem extended by a thematic suffix other than {h} 'reciprocal action' plus {uvə} 'possessive'.

Possessive: S₁ + [hæt] + {uvə}

{uvə} also occurs with nouns; it was described (along with its complicated allomorphy) under common noun derivation, e.g.

/hayûnŋeq/ → /hayûnŋuvə/ 'have something to hide';
/hayûŋeq/ 'to hide'
The Possessive verb is evidenced in only five examples of sentence length in the data. Forms with {t} 'toward, down' and {hat} 'inward, to the interior' are not in fact evidenced; however, the generalized statement above, which includes all thematic suffixes other than {h} 'reciprocal action', is made on the basis of other distributions of these suffixes. {h} may well occur here also, but as its distributions are often at variance with the other thematic suffixes it is never presumed to occur where it is not evidenced.

On the basis of the five examples of the Possessive verb its meaning is construed as 'to have to do' or 'to have done'. All five examples are presented. The forms are given phonemically, i.e.

/ʔət kahúlluve ʔəm, te ŋąʔaʔ/ 'Don't you have anything to cook?' (Not cook-up-have you, of food?)
/ʔət kahúlluve ʔəm, te ŋąʔaʔ/ 'Don't you have any cooked food?' (Not cook-[perfective]-have you, of food?)
/ʔəkphuveskúʔ an ʔam ʔinkúʔp./ 'The door has been opened.' (Patch-out-possessive-[face] it the door.)
/ʔəháʔlůve nun minéʔ hiláʔ./ 'These clothes have been caused to dry.' (Cause-dry-out-possessive they these clothes.)
have kuve cin. ’I have something to request’
(To-request-have I.)

939. The Stative verb consists of a stem of class 1, 2, or 3, or of a class 3 stem extended by {t} 'to, toward, down', plus {a2} 'stative'.

\[ \text{Stative: } S_{1,2,3} \sqrt{ } + \{a_2\} \]

*Only six stems of class 1 have been observed with \{a_2\}; they are as follows:
//harú·n// 'to borrow, lend' //hú·ʔ// 'to cry out, shout'
//hí·t// 'to suck breath in //tē·t// 'carry a child on sharply between teeth' hips'
//hūn// 'to wait for' //ʔiñíh// 'to sell'

This suffix was not explored during field work; hence it cannot be known whether the above mentioned limitation is an accident of the data or is a reflection of a true limitation and subclassing of class 1 stems.

{a_2} 'stative' occurs only in this one construction. It indicates (as does the construction) a condition which is descriptive of the subject; it cannot be stated to be a caused condition.

E.g.
//hĩña// 'be waiting' //ló·ra// 'be in crawling posi-
//hú·ʔa// 'be crying' (of snake)'
//sakóna// 'be bumpy' //cí·ʔta// 'be short'
//sílsa// 'arrive at'
The Continuative verb consists of a stem of any class plus {haka} 'continuative'

Continuative: S₁,2,3 + {haka}

The Continuative expresses continuance of an action or condition that began at sometime in the past and extends to some future time. It occurs only when the condition is subject to change - it is not used of intrinsic characteristics. It is restricted semantically to occurring with verbs which can be continuative in meaning as opposed to verbs expressing a single event fixed at a moment in time - such as verbs expressing striking, arriving, ending, etc.

E.g.
//sīkhaka an cóʾn, ne i sink̓ɪkə.// 'John is standing in the corner.' (Stand-continuous-he John, he in corner.)
The pencil is leaning against the book.' (Cause-slan-continuous it the pencil, it into the book.)
The octopus is in a black condition.' (Black-continuous it the octopus.)
The papaya is in a spotted condition.' (Spotted-continuous it the papaya.)

Compare

The goat is spotted.' (Spotted it the goat.)

If this example had the {haka} suffix it would indicate a temporary condition rather than an intrinsic characteristic.

The Attributive verb consists of a stem of any class plus {e7} 'attributive'.

Attributive: S₁,₂,₃ + {e7}

The Attributive indicates that the verb modifies a following noun; the relationship between the subject and verb phrase is one of possession.

I have a split pencil.' (Be-split-[attributive] pencil I.)

'I have a broken leg by John's action.' (Break-[attributive] leg I, by John.)

'I'm startled by the breaking of the bottle.' (Be astonished-[attributive] body I, by breaking the bottle.)
"ufo\u0178e kun\u0131\u00e7\u00e1\u0131 cin.\u002f\u002f 'I have cold feet.' (Cold-[attributive] feet I.)

942. The Sequential verb consists of a stem of any class plus \{h\e\} 'sequential'.

Sequential: \( S^{2,3} + \{h\e\} \)

\{h\e\} indicates that the action of the verb to which it is attached is completed before any subsequent action begins. The Sequential verb alone among the verb types does not require that its subject be stated.

E.g.

//t\u00e1\u00e7h\u00e9\u2013 ne i ha\n\o\u0131\u00e7\u00e1\u00e7\u0131, \u00e8\u00c1c \u2018il\u00e9\u2013 ha\?\u0131\u00e7\u00e9\u00f3\u0178e.// 'After arriving at Mus they were made to drink.'

(Arrive-after they at Mus, [and then] immediately [be made to drink].)

//cal\o\u0131\-'h\e\' te \u0103k m\u00e1\u00e7\u2013, \u00e8\u00c1c\u0140e\u0131\u0161\u00e7\u00e9l\u00e9\u00e7\u00e9\u00f3\u0178e.//

'When the chief came, then we worked.' (Arrive-after of the chief, then we work.)

//k\u00e1h\e\-'th\e\' k\u00e4h\u00e7\u00e1\u00e7\u00e1\u00e7\u00e1\u0131, \u00e8\u00c1c h\u00e1\u00e7\u00e1\u00f3\u0178e\u00f3\u0178e.// 'Immediately after bathing I walked around.' (Finish-after body I bathe, and [walk around]-imperfective-self.)

There are two other suffixes of apparently general distribution with verb stems: \{qara\} 'negative absolute', and \{qaq\en\} 'deleterious effect'. They are excluded from the preceding presentation because
they occur in such infrequent examples that only tentative statements may be given.

{qara} 'negative absolute' is attested only with class 3 stems; however, this may well be an artifact of the limited data.

943. Negative absolute: \( S_3 + \{\text{qara}\} \)

{qara} indicates that the action or condition expressed by the verb does not occur at all. The verb is always negated by \( \{\text{et}\} '\text{not}' \). Only two examples are found in the corpus, i.e.

//\text{"et har\textbf{á}h}qara cin.// → //\text{"et har\textbf{á}hhara} cin.// 'I didn't sleep at all.' (Not sleep-[at all] I.)

//\text{"et ūamt\textbf{ó}°qara} cin, vahe.r.// → //\text{"et ūamt\textbf{ó}°ara} cin, vahe.r.// 'I didn't play at all yesterday.' (Not play-[at all] I, yesterday.)

944. \{qaq\text{én}\} 'deleterious effect' is found only with stems of class 3. It indicates harmful or injurious results or condition.

Intensified effect: \( S_3 + \{\text{qaq\text{én}}\} \)

E.g.

//p\text{'ó}°\text{yqan\text{én}}// → //p\text{'ó}°\text{yhaqan\text{én}}// 'badly injured; greatly damaged'

//ma\text{r\textbf{ó}}°\text{°qan\text{én}}// → //ma\text{r\textbf{ó}}°\text{°qaq\text{én}}// 'do something for a long time (with injurious results).'

\{qaq\text{én}\} is attested in only a few examples; it might well have a broader distribution in a larger corpus.
Examples:

//kiféqaqén an, ne palá·eirén.// 'He has a bad injury.' (Big-injurious he, he is-injured.)

//pó·yqaqén 'anóhe ké·l an.// 'He has a very badly broken arm.' (Great-injurious broken arm he.)

//maʃó·qaqén an, ne kifé·neʃe.// 'He was gone a long time.' (Long-injurious he, he gone.)

{qara} and {qaqén} are excluded from tactic discussion because of lack of data. In general they seem to have the distribution of intransitive verbs ($V_i$).
950. Post-inflectional suffixation

The post-inflectional suffixes are suffixes which may occur attached to fully inflected stems. They fall into two classes: {rán} 'involuntary action', and a small class of nouns.

951. Stems with {rán} 'involuntary action'

{rán} occurs in immediate constituency with a number of verb stems as the terminal or semiterminal morpheme in the verb word. It is somewhat obscure in meaning. With intransitive and non-agentive stems it seems to indicate that the action expressed is not subject to voluntary control but is just the way things are. With causative stems this meaning is less clear but is probably still latently present.

{rán} has two allomorphs, as follows.

rán - én

én occurs after a consonant, e.g.

//'tánén//' → / tá·én/ 'to find'

//'hánén//' → / há·én/ 'to love'

rán occurs after a vowel, e.g.

//'kumrá·tkarén//' 'be hurried'

//'hacátirén//' → /hacá·tirén/ 'be lost'

{rán} is found with simple stems, thematic stems, and fully inflected passive verbs, as follows.
Simple stem \( (V_i) \)
Thematic stem \( (V_{t,na,i}) \) + \{rén\}
Passive verb \( (V_{t,na}) \)

Most of the stem + TS sequences appear to be derived stems. With only a few stems does more than one thematic suffix occur.

The simple intransitive stems which occur suffixed with \{rén\} are a different set from the intransitive stems which occur with a thematic suffix plus \{rén\}. Examples of stems belonging to this class are given below. The asterisked forms may occur without \{rén\}. These stems are distributed like intransitive stems and are considered a subclass of \(S_3\).

with TS:

\{cátη-\} 'be lost'  \{kíht-\} 'be in danger (toward)
\{yé·η-\} 'be wasted' \{xínη-\} 'be in danger (away)'

without TS:

\{táη-\} 'find'  \{hán-\} 'be in love with'
\{kó·?-\} 'be able' \{há·?-\} 'be late'

Transitive stems with \{rén\} all have bound thematic suffixes. The forms are active and function as Referential stems, occurring with either personal or non-personal referents; they are considered a subclass of \(S_1\). Transitive stems occurring with \{rén\} in the data are the following.

\(V_t:\)

\{hucátη-\} 'to lose' \{halžŋt-\} 'to allow'
There are two non-agentive stems in the data which occur with \( \{ \text{rén} \} \); both have bound thematic suffixes. They are considered a subclass of \( S_2 \).

I.e.

\( \{ \text{rén} \} \) 'do accidentally' \( \{ \text{palá} \} \) 'be injured'

Thematic transitive and non-agentive stems with \( \{ \text{rén} \} \) have corresponding passives. In no other instance does \( \{ \text{rén} \} \) occur with passive verbs. \( \{ \text{rén} \} \) was usually given by the informants as optional with these passive verbs. Passive suffixation of stems with \( \{ \text{rén} \} \) is identical to that of thematic stems of class 1, i.e.

\[ T_3 + \{\text{ej} \} + \{ \text{rén} \} \]

E.g.

//halánkarén// 'be cured'
//hakíhturén// 'be tortured'
//palá\-\?i\-\text{rén}// 'be injured'

Reflexive forms of the \( V_4 \) thematic stems + \( \{ \text{rén} \} \) are formed by the addition of \( \{ \text{ře} \} \) 'reflexive' to the stem, following \( \{ \text{rén} \} \), e.g.

//halánkěnřé// 'cure oneself'
//haláŋtěnřé// 'permit oneself'

952. Stems with suffixed nouns

In some instances of the regular tactic sequence.
VP + N' (sec. 3310) the juncture separating the verb and the noun is dropped; the noun occurs as a verb suffix. Diachronically, this appears to be a change which the language is undergoing at the present time. In some instances the composite form has a highly idiosyncratic meaning; in others the stem does not occur without the attached noun. The composite form appears to be a kind of secondarily derived verb: secondary because the "derivational affix", i.e., the noun, is attached to the fully inflected form. Structurally, however, the forms are fully described by the regular verb phrase constructions. In all instances the noun involved pertains to a part of the body.

E.g.

//ké-9skú?// 'give' ([ké-?]) 'take, bring', {s7}
'(attributive)', {kú-?} 'face'.

//siró-ŋkú?// 'be ashamed' ([siró-ŋ] does not occur; {kú-?} 'face')

//vé-ølekuy// 'pray for', {vé-?} 'speak'. {l} 'up', {s4} 'non-personal referent)', {kúy} 'head, top'.

When the nominal suffix begins with a vowel, the juncture is replaced by ?, e.g.

{akáha + əlló-n} → //akáha?əlló-n// 'to know (a fact)' {akáh} 'know', {s7} 'attributive',

//əlló-n// 'insides (of a person)

//kuňáha?əlmát// 'to hate' ({kuňáh} 'be unpleasant tasting', //əlmát// 'eyeball')
Minor Verbal Suffixes

The minor verbal suffixes presented below share the characteristic that they are either of extremely limited distribution or of very infrequent occurrence. Some additionally are of quite obscure meaning.

1. Suffixes of very restricted distribution.

\{me\} and \{hec\} are presented together because they both have been observed only with the one stem \{rőη\} 'to still be doing, engaged in'. They seem to add the idea 'while'. rőηhec is a predicate, rőηme a predicate auxiliary.

E.g.

//rőηhec řě·n cin, fě·l.// 'I'm still running.'
//rőηme fě·l cin.// 'I'm still running.'
//pořó· aŋùh?e, ne hát, ŋac sān aŋáh?e, ne rőηme el camámře.// 'Although it is light he is still in bed.'

//rőηhec rën cin, vě·ʔékũ· lĩ·poře.// 'I'm still reading.'

Whitehead lists the suffix \{hec\}, which is not in my data. He gives the meaning 'a verbal affix denoting continuance of action or state. c.f. haka; hak.' This is perhaps the same morpheme as \{hec\}, above.

\{řěn\}, of obscure meaning and use, is seen in the derivation of //kό·ʔeřěn// 'be able' from \{kό·ʔ-\} 'be able'. Note the following examples.
"/kó·ʔeřèn ɡin ɲáč, vô·k./ 'You can bathe now.'
(Can you now bathe.)

"...ɲáč kó·ʔeřèn eře měhʔə, 'et ŋá·teló·n, tó·cu,
kó·? tú·klén měh./ '...and you would not be
able to think that I could pull you up.' (...and
can would you, not-think, that I, can pull-up
you.)

{řə} is seen in only the following example.

"/ké·ʔeře əp kanú·t cu man, i kúy mí·s./ 'Go and
get my comb on the table.' (Get the comb my you,
on top table.)

Whitehead corroborates these forms and suggests that
the ř is a phonological variant of {t} 'down, toward'.
This may well be the case.

2. The following suffixes all occur elsewhere as
noun roots or numeral suffixes.

{řit} as a noun root means 'tail, end'; it occurs
suffixed to a simple, passive, or non-personal referent
verb and indicates that the event or person named follows
some other event or person.

"/rókhoře ró·? in sěh, ʔunó·cřit ək ʔinlé·n./ 'We
all said "boo" after the lecture.' (All-together
say we boo, after-end it-was lecture.)

"/tímeřit cin, te ɲam píheře./ 'I'm followed by
my wife.' (Follow-after I, by the wife.)
(tít) with both numerals and verbs, indicates that something is the 'remains, what is left'.

E.g.

//lú·ytít nup kúk cá·?·//. 'Three units of coconut remain.' (Three-remain these nuts remnant.)
//cá·ctít limón an qíh.// 'This is the remains of a squeezed lemon.' (Squeeze-remain lemon it this.)

The meaning of {tít} is obscure in the following example.

//vi·tít qíh ?inrá· cin.// 'I'm mending the umbrella.'

(Make-remain this umbrella I.)

Whitehead considers this occurrence of {tít} as a separate morpheme, meaning that 'something has been renewed'.

{váh} as a noun refers to a wound or perhaps death. As a verb suffix it connotes coersion or relentless pursuance – perhaps to the point of death. It occurs with non-personal referent verbs.

E.g.

//lí·ŋøváh o cin, ne hiyó·y.// 'I force him to drink'
(Force-away-insistently him I, he drink.)

//ʔaki·ŋøváh ep tiks·nsí·ʔ cin.// 'I'm out to get a dictionary.' (i.e. I'm determined to have one)
( [Determined to get]-(perfective)-insistant the dictionary I.)
1000. The Interrogative

Eight of the twelve interrogatives are an interlocking set of forms which share morphemic composition. The "class" is essentially a semantic one, with only some of the forms sharing distributions. It is convenient to present them together along with their statements of distribution, to describe their morphemic structure and to facilitate reference. Tactically, they fall into four structural classes; they are presented according to the class-defining criteria.

1. Predicate interrogatives: forms which occur in predicate position.
   (a) Forms occurring both with or without a following noun:
       
       sitín  'How'
       ḍasū̀h  'What'
       isuh  'Where'
       iró.  'How long'

   (b) Forms not occurring with a following:
       
       INR
       ḍacín  'Who'
       ehé  'When'

   These two interrogative distributions parallel those of non-referential verbs when they occur in predicational position; they might be considered as
verbal interrogatives, i.e., as occurring as the head of the VR and VNR constructions, respectively. But as N' is optional with VNR but obligatory here with INR, and as the interrogatives are not distributed in the satellite construction, this analysis is rejected.

E.g.
(a) //sitih ti? ap ne fe'lan?// 'How did he beat him?'
//tetmak, isuh sy ahéh?// 'Not-water, where shall we search?'

(b) //acih ap min kife'negier tay?// 'Which of you will go?'
//ehé em ve'ekú? níh lípe'negier?// 'When are you going to want this book?'

2. Forms occurring as NIP', i.e. as a nominal or verbal possessor, e.g.
yíh 'where, in (from) what direction'
cíh 'who'
E.g. //iyé yíh em?// 'Where do you stay?' (stay where you)
//sahák cíh anq nqh ká?', nqh?// 'Who caught this fish?' ([What is caught] who it this fish, this.)

3. Numerator question word, i.e.
?á'm 'How many'
iró'k- 'How big' (The affixed forms are discussed under quantifiers, sec. 620.)
\{'ám\} is distributed as a numeral, \{'iró·k-\} as a numeral plus classifier, e.g.

//\{'ám\} taka yip tařík, ël \{'uróho\}// 'How many men are in the room? (i.e., 'what quantity')

4. A single question particle of unique distribution, i.e.

\{yóh\} 'Which, what'

Distribution

(a) as object of verb, e.g.

//akí·r \{yóh\} ëm méh?ë?// 'What are you after?'

(b) in the unique construction which follows.

Three of the interrogatives, \{isúh\}, \{yíh\}, and \{yóh\}, occur in the following idiomatic phrasal construction:

Subordinate pronoun + Interrogative

The construction is a minimal sentence.

E.g.

//ëm isúh?// 'Where?' (with respect to you)
//ne yóh?// 'Why?' (with respect to him)

\{yíh\} is only found in one example, i.e.

//ap yíh?// 'Which?'

A subordinate pronoun + \{yóh\} may occur as a member of IR, i.e., predicationally and optionally before N'; the pronoun of the \{yóh\} phrase agrees with that of the subject.
E.g.

\texttt{//ap y\textil{\textasciitilde}h ap t\textil{\textasciitilde}r\textil{\textasciitilde}k r\textil{\textasciitilde}\textil{\textasciitilde} meh//} 'Which man were you speaking about?'

Interrogative derivation involves the following morphemes.

Derivational prefixes:

\{\texttt{\textasciitilde}in\} 'locative' (allomorph //i// occurs here)

(Sec. )

\{a\} '(concrete reference)'

The distribution of the prefixes defines two classes of roots.

A. \{he\} 'when' (subordinate conjunction, sec. )

\{s\u{\textasciitilde}uh\} 'what'

\{r\textil{\textasciitilde}\textil{\textasciitilde}\textil{\textasciitilde}\} 'length'

\{r\textil{\textasciitilde}k\} 'size'

B. \{c\textil{\textasciitilde}i\textil{\textasciitilde}h\} 'who'

The constructional statements are as follows.

1. \{\texttt{\textasciitilde}in\} + A

SR: //i// \rightarrow //V_{1}// \_hV_{1}"

E.g.

\texttt{//is\textil{\textasciitilde}uh//} 'where'

\texttt{//eh\textil{\textasciitilde}s//} 'when'
2. \( \{?a\} + \llbracket \text{súh} \rrbracket \)

I.e.

//\(\text{?acín} //\) 'who'

//\(\text{?asúh} //\) 'what'
2000. Minor Form Classes

The minor form classes comprise nineteen small classes, many of which consist of a single member and all but three of which are uninflected particles. The non-particle classes described here include the adjective, the temporal locative, and the demonstrative locative. The adjective is a derived form consisting of a particle plus a stem of any of several classes. The temporal locatives only turn up as particles in my data; Whitehead presents them in a number of suffixed forms, most of which appear to be verbal suffixes. The demonstrative locatives are a small class of roots which may occur derivationally with a locative prefix and inflectionally with a deictic suffix. Their distribution and use are similar to those of the temporal locatives, hence their inclusion with the minor form classes.

The statement of distribution of each of the classes in this section is presented along with the description of the forms, obviating the need of including them in the tactic statements of Chapter III, thus greatly simplifying the presentation there.
(Sheet missing)
2010. The grammatical relator

\{.te\}'(grammatical relator)' introduces words, clauses, and phrases of a modificational nature. Specifically, it introduces the adjective, which is described below, and (1) the respectual satellite, and (2) the indirect statement, both of which are related in an expansional or modificational way to the predication.

E.g.

(1) //l5·cən cin, te ṇam có·n.// 'I run past the tree.' ([Run past]-away I, of the tree.)
(2) //ʔakåh 16·n cin, tó o min, ne yih.// 'I know that he will come.' (Know [do mind] I, that he will, he come.)

2020. The adjective

The adjective is a phrasal construction consisting of \{te\} 'grammatical relator' plus or minus \{ʔet\}'negative', plus a verb, a numeral, or the quotational \{ŋə\}.

\[
\text{Adj: } + \{\text{te}\} ± \{\text{ʔet}\} + \left[ \begin{array}{c}
\text{Verb} \\
\{\text{ŋə}\}
\end{array} \right]
\]

When \{te\} and \{ʔet\} 'negative' occur in sequence they frequently contract to //tət//; i.e., the glottal stop and one of the schwas are dropped. As with \{ʔet\} \{tə\} or //tət// plus a word beginning with a stressed syllable usually do not occur with intervening juncture and are written as a single word, e.g.

//tətkəs·ʔ// 'unable'; //tələ·n// 'good'
On the basis of the available data it has not been possible to determine the function of the inflectional suffixes with verbs in the adjective construction. Neither has it been possible to determine whether all the suffixed forms of each verb may occur freely as adjectives, or whether, at the other extreme, a single configuration is used with each verb as the only adjective type. The data are suggestive that in fact there is some freedom of occurrence of the various verb forms in the adjective construction, but that there are limitations of a highly idiosyncratic nature, requiring that very specific statements be made — statements which the available data do not allow. It may be said in general that no examples are found in the adjective construction of verbs having the personal referent, non-personal referent, or possessive suffixes. This is an area requiring additional data and study.

Examples of adjectives:

//têpêkle// 'springing' (intransitive locative)
//têsûkteře// 'picked up' (passive)
//têsâh// 'black'
//têrâ·?êkû·?// 'lowland' (kû·?) 'face, surface'
//tê tafû·ltêtê// 'six more' (incremental numeral)
//têhêŋ// 'one'
//têŋe// 'which is thus'

Note: the numeral adjective is distinguished as Adj_n due to its slightly different tactic distribution.
The demonstrative adjective {ŋam} 'the' is a non-locative deictic adjective. In its occurrence as the subject expansion of a third person non-past visible pronoun, i.e. {an} 'he' or {nun} 'they', {ŋam} occurs essentially as a semantically empty position holder if the noun is intangible and abstract.

//kiŋŋ an ŋam nákeló:n c./ 'His generosity is great'

//máke an ŋam pinhé:ʔekú:ʔ/ 'The fear is apparent'

When a concrete noun follows {ŋam} the latter is redundant in that the preceding //an// '3rd. sg. vis. pres.' also marks singularity and visibility, e.g.

//kápe cu an ŋam ?ám./ 'The dog bit me'

//pàlán an ŋam pilán./ 'The bottle is rolling'

Additional examples:

//kasóh ŋam có:n cin./ 'I slip-knot-tied the log'

//ké·ʔte ŋam mú:ŋeɾc./ 'Bring the club'

//haŋún ŋam ŋi:ʔ, ne kú:c./ 'Train the child to write'
Adverb

An adverb is a word which occupies the final tactic position of the phrasal predicator construction. The class includes the demonstrative locatives and the following three morphemes.

\{hé·k\} 'again'
\{sín\} 'for a moment, previously'
\{tako·\} 'very' (predicate emphatic)

E.g.

//tá·c hé·k yik tařík.// 'The men planted again.'
(Plant again those-past men.)
//káŋ takó·? an.// 'He is very old.'
//ható·?eře sín cá?e, ne ké·?eře laʔó·ti.// 'First of all they raced to the opposite side.' ([Go to opposite side]-reflexive first-of-all they, they face-to Laʔó·ti.)

\{hé·k\} also occurs in one example in which it appears to be a simple predicate followed by a subject phrase, i.e. //hé·k mé· yá·c tařík, neŋ katú·yarén./ 'Again those poor men rushed out in vain.' (Again those poor man, they-only [be in vain].)

Temporal locatives

The temporal locatives are a class of six words which locate the predication in time, i.e.

\{amóh\} 'last night'
\{kuržć\} 'tomorrow'
\{misi·?\} 'long ago'
\{taháy\} 'just now'
{təŋamún} 'today'
{vahé·r} 'yesterday'

{təŋamún} is a derivative, consisting of the distal demonstrative pronoun /qamúh/ 'that' plus the prefixed adjective morpheme {tə}.

The temporal locatives are distributed as follows:
1. predicationally,
2. after the demonstrative adjective, {ŋam} 'the', in locative phrases,
3. after the predicational nucleus or, optionally, clause semi-finally, either preceding or following an optionally present demonstrative locative.

When occurring after a predicational nucleus which has as its subject an expanded 3rd person 'not-visible' or 'past' pronoun, the temporal locative occurs before the expansion.

(1) //vahé·r an, ne ké·ʔtu.// 'It was bought yesterday. (Yesterday it, it bought.)
(2) //hő· kaláh cin, hé·k kú·c ekses·m, i ŋam təŋamúh.// 'I want to try to take the exam this time.' (Want try I, again write exam, in the now.)
(3) //héŋ taka ək misi· tafí·si.// 'Once there was a widow. (One [person] she was long-ago widow. P + Sub + x + Sexp.)
I'll be told by John tomorrow.' (Say-[passive]-ear I, by John, tomorrow.)
'I already ate just now.' (Already-face I, just-now, eat.)

In its use as a predicate, \{vahé-\} occurs as a stem in VP, i.e., before a noun, e.g.
'The mango was bought yesterday.' (Yesterday-[attributive] buying it the mango.)

Whitehead presents various suffixed forms in his dictionary; they are presented here in the likelihood that they would turn up in a larger corpus. An indication of what the analysis of the suffixual construction might be is also given.

-aten 'from-onward' is given with \{améh\}, \{teñamuh\} and \{misi-\}. The suffix looks like the directional \{t\} 'toward, down' plus \{rén\} 'involuntary action; the schwa is unaccounted for.

-hañen is given with \{teñamuh\}, where it seems to be my \{qañén\} 'deleterious effect', and with \{vahé-\} where the meaning is 'from yesterday'; this does not seem to be the same as \{qañén\} and is unaccounted for.

\{huríc\} is presented with three suffix configurations, as follows: hurícleñc 'the coming of the morrow' (looks
like the Incremental quantifier sequence, sec. 634 );

hurɨcəñit (pertains to leaving tomorrow; looks like {η} 'away, [perfective]' plus {ə} 'non-personal referent' plus {ɨt}, the minor verbal suffix which indicates that something follows something else); hurɨca 'tomorrow' (/a/ looks like the stative {a₂}; its use is not clear from the data.)

2060. Demonstrative locatives

The demonstrative locatives are a class of forms which are identified by both morphological and tactic criteria. Morphologically, they occur with {a} 'specificative', a morpheme which also occurs with the demonstrative pronouns. Tactically, they are distributed like locative phrases; their specific distribution is given below. Semantically, as a class the forms locate the action of the predication in space.

The demonstrative locative roots (DL) are as follows:

{hîh} 'here'
{mûh} 'there'

The DLs are optionally but usually prefixed with //i/, which is probably an allomorph of {in} 'in, at, to', e.g.

//hîh - ihîh// 'here'
//mûh - imûh// → /mûh - ?umûn/ 'there'

The demonstrative locatives are distributed as follows.
1. Predicationally.
2. As adverbs, i.e. following, and in immediate constituency with, a predicate.
3. Clause finally, in immediate constituency with the clause. (i.e., as a clause satellite.)
4. In one example, before the expansion of a 3rd person 'past' pronoun subject. This is a distribution they share uniquely with the temporal locatives.

Derivatives occur with the prefixes {el} 'in', and {lǎ·ʔ} '(classifier with paired body parts)'. The derived forms occur too infrequently for a definitive statement on distribution; however, they are found in distributions 2 and 3, above.

The four forms are as follows (note the unstressed allomorph //la// of {lǎ·ʔ}):

//ɛlmůh; elhǐh// 'over in there; in here'
//lǎmůh; lǎhǐh// 'on that side; on this side'

The emphatic morpheme {?a} '(specificative)' occurs with the demonstrative locatives and their derivatives, as it does with the demonstrative pronouns, when the speaker is pointing to or emphatically singling out the location.

\[
\text{DL derivatives} + \{?a\}
\]
Examples of use of demonstrative locatives.

1) //ihih cin.// 'Here I come.'
2) //iyi hih cin.// 'I live here.' (Live here I.)
3) //ucere man, imuh.// → //ucere man, umuh.// 'Sit down there.' (Sit-down-reflexive you, there.)
4) //hen taka ek imuh tafi si.// 'There is one widow.' (One [classifier: people] she-was there widow.)

A form similar in shape and distribution to the demonstrative locatives is {ia} 'next, last, there'. It occurs clause finally and adjectivally and locates the action in time as well as in space.

E.g.

//ik ia ciqet fanenje an.// 'The conception was last month.' (In was last month conception it.)
//ucere man, ia.// 'Sit down next to me.' (Sit-[perfective]-self you, next.)
The directional locatives

The directional locatives are two forms which pertain to the direction or location of the action or condition. Their distributions are similar but not identical.

{el} 'inside, into, in the midst of', in contrast to the general directional-locational focusing morpheme {in}, very specifically pertains to the spatial or metaphorical locus 'in, inside, into'.

E.g.

//súktērē an, ne el mák.// 'He fell into the water.' (Fall-down-self he, he in water.)

//elkú·yu an có·n, ne el iskū·l.// 'John is clever in school.' (Intelligence-have he John, he in school.)

{el} occurs as the first morpheme in many derivatives; //elkú·y// 'head, skull' (in-top), is one example.

//elkatōh// 'under' is another derivative with {el}: a derived locative. //katōh// 'below' is not attested elsewhere. The distribution of //elkatōh// is identical to that of {el}.

E.g.

//elkatōh ap có·n// 'under the tree'

{in} expresses location, direction, or accompaniment. It is translated as 'in, on, at, by, from,
with, of, to'. It has the following allomorphy.

\[ ?\text{in} \text{-} ?\text{i} \]

\[ ?\text{in} \] occurs with proper animate nouns, possessive pronouns, and \{řε\} 'reflexive', e.g.

//\text{?in}ο// 'with him'
//\text{?in}řε// 'to oneself'
//\text{?in} có・n// 'to John'

\[ \text{i} \] occurs elsewhere, e.g.

//\text{i} káha có・n// 'to the side of the ship'
//\text{i} ηam lí・psřε// 'in the book'

\{\text{in}\} is distributed as follows:

1. As the introducer to the locative phrase, e.g.

   //\text{i} kuyá・ya// 'by the seashore'

2. With the possessive suffix \{uve\} as a predicate meaning 'have', e.g.

   //hô・ ?\text{in}u cin, té ε// 'I want to have it.'
   (\text{want have I, of it.})

2050. Modal particles

The modal particles express the likelihood of the occurrence of an event. The class consists of four forms which typically occur after the clause subject. They may, however, precede the subject if it is an emphatic
pronoun. The members of the class are as follows:

{\text{min}} 'will' (future) is distributionally idiosyncratic in that in passive sentences it may occur after either the subject or the agent.

A derivative of {\text{min}} is //\text{mine}//, which has the same distribution as {\text{min}} and seems to indicate a greater degree of certitude on the part of the speaker as to the occurrence of the future event. Its meaning is not entirely clear.

//\text{asúh ap la?én mếh míne, ip hañáp}// 'What will you do this evening? (What it-\text{[non-past]} doing your will-\text{[definite]}, in-\text{[non-past]} evening.)

//\text{hasí-nqæ }\text{?insi-n cin míne}// 'I will (definitely) put up the stabalizing beams.' (Fit-\text{[perfective]} beams I will-\text{[definite]}).

//\text{hasí-nqæ }\text{?insi-n cin min.}// 'I will put up the stabalizing beams (probably).'

//\text{akáhelo-n cin, tê o min, ne yíh}// 'I know that he will come.' (Know I, that he will, he come.)

{\text{ñin}} 'might' (potential) indicates that an action or condition might occur.

//\text{vé-ñunáq cin, tê cé-n, tê lú-si ñin, ne yíh, ne ihíh}// 'I'm told by Jane that Lucy might come here.' (Say-out-\text{[passive]}-ear I, by Jane, that Lucy might; she come, she here.)
"Oh! How foolish we are to toll for the moon; if it is eclipse, because it might be swallowed by the python." (Oh! No knowledge our, we only toll-out the moon, if it it eclipse, because it might, it swallow-down-[passive] by-the-[non-past] python.)

{laŷ} (intentive) indicates that the speaker intends to accomplish an action; it implies desire to do so.

"What are you going to do tomorrow?" (What it-[non-past] intend do you, tomorrow.)

I wish to come to you." (Want come I intend, to you.)

{eře} 'would' (conditional) indicates that the action is contingent on some other condition or action. If both the condition and conditioned clauses occur, {eře} occurs with the one which is stated first; it optionally occurs also with the second.

'I would have done it if I were there.' (Do I would of it, if-I there.)

If you
had only half as much brain as you have beard
you would not have thought that I would pull
you up.' (If you would better only half know-
ledge, at size these hair-face-your, then able-
[involuntary] would you, not [be thought]-
mind that I, able pull-up you.)

2090. Subordinate conjunctions

The subordinate conjunctions are a class of four
forms which occur in the initial tactic position of the
subordinate clause; they are as follows.

{hé·} 'when'
{hó·} 'so that' (homophonous with {hó·} 'want to')
{pó·} 'because'
{yé·} 'if'

E.g.
//?ú·chaka cin, hé· meh min, lēptekú·? ?inkú·p.//
'I will be sitting when you close the door.'
(Sit-[continuative] I, when you will close-down-
face door.)

//hēq ke kalú·y noq yí·?e, hō· yí·?, ?et lanán.//
'Each of you take three, so that you won't be
burdened down.' (Only each three [classifier:
long object] you, [so that] you not weighted.)

//qati·yin vé· te ?akáha tařik, yé·n pořó· ne
kapáh.// 'Thus it is for good men, even though
they are dead.' (Thus they these which good
men, if-they although they dead.)
{hé‘} 'when' also occurs as the introducer to the
durative phrase, e.g.

//máñ·?qañën misí·?, i pú·, hé· yik má·misí·?, hēŋ
taka ek te ?akāha tařik.// 'Long ago in Car
Nicobar, during the time of the ancestors, there
was a certain good man.' (Long-[deleterious
effect] ago, in [Car Nicobar], during those
ancestors, one [classifier: people] he-was of
good man.)

2100. Predicate auxiliaries

The predicate auxiliaries occur as the first element
of the phrasal predicator, after the optional connective.
Three predicate auxiliary morphemes have been identified,
as follows:

{hō‘} 'want to'
{hēŋ} 'only, simply' (Recall that the subordinate
pronoun {ne} plus {hēŋ} contract to //ŋēŋ//)
//röŋme// 'still' (The derivation is described in
sec. 960 ).

E.g.

//ŋōthō‘ harōŋ cin.// 'I don't want to sleep.'
//mili·cēn an qōn nī·?, nē hō‘ i yēŋē.// 'The
child is whining to be with his parents.'
(whine-[involuntary] he this child, he want
with parent-self.)
//cūŋ ?ītki an, nēŋ hēŋ tak.// 'He went to Itki
alone.' ([Go to] ītki he, he-only one [classifier: people])

//hēŋ īl cin, ihih.// 'I'm not yet here.' (Only [not be] I, here.)

//rōnme vō-k cin.// 'I'm still bathing.'

2110. The distributive

{kē} '[distributive]' indicates that the action or condition of the predicate pertains severally to each member of a plural subject. It occurs immediately before the predicate of a phrasal predicator, having been attested with verbs and numerals.

//kē rōktikū-ʔe nun minē- kinlaŋpá-.// 'The holes are of various sizes.' (Each [be size]-to-face-self they these hole.)

//hēŋ kē kalū-y noq yī-ʔe, hō-ʔ yī-ʔe, ʔet laŋán.//

'Each of you take only three of them so that you won't be burdened.' (Only each three [classifier: long objects] you, so you not burden.)

2120. Connectives

There are two connectives, each having differing distributions and requiring separate statements.

{ŋac} 'and' indicates action sequence, that the event mentioned occurs next and happens at once. It is very frequent in narrative texts. Distributionally, it occurs either in the first tactic position in the
clause or, alternately, as a subject substitute, in which case the clause subject is identical to that of the preceding clause. In this latter position it has a stressed allomorph, //ŋác//; it may be followed by a subject expansion.

E.g.

//ŋác hē· ca, ne kāhā·terō·?, ne tikikrō·ʔrē...//
'And when they finished singing a song...'
(And when they, they finish-voice, they sing-self...)

//yō·nle ŋác, aŋ tekrē·n.// 'Industrious then climbed up.' (Climb up then, she Industrious.)

//tū·ktēn ɔ ŋác, ne i rōŋ havē·ŋe.// 'She then pulled her down from the cobweb.' (Pull-down her then, she from strand cobweb.)

//cē·ro kalrē·n ŋác tekrē·n.// 'Industrious was then stiff legged.' (Stiff leg then Industrious.)

{peři} 'but', is an alternate or adversative correlator; it puts the clause with which it occurs into contrast with the preceding clause or sentence.

Distributionally {peři} is found after the predicate. Specifically, it occurs in the data following verbs; its position with respect to adverbs, which also follow verbs, cannot be determined from the data.

{peři} has a stressed allomorph, //peřih//, which occurs in macrosegment-final position.
E.g.

//pořó· cin hakāptén o te hisā·p, sînŋeře peři
anäch‘e, ne ‘athāví·?// ’Although I taught him
math, as yet he doesn’t know.’ (Although I teach
him of sum, yet-[perfective]-[reflexive] however
he, he not-know.)

//cé·re kalché‘n ṇac anäch‘e, irūheře‘n peřih, ne cūh
mát ṇam ciné·t// ’She was then lame, but con­
tinuing, she went to the moon.’ (Stiff legged
and she, continue-[by foot] but, she [go to]
face the moon.)

2130. Coordinators

{inře·} ’and, also’ coordinates words or phrases of
the same grammatical class; it occurs at the end of the
series.

E.g.

//ña·? an, kú·c an, vé‘kú· lí·peře inře·// ’He
eats, writes, and reads.’ (Eat he, write he,
read book and.)

//kalú·cte mák cin, ne i tú·t, i ‘sk inře·// ’I
mix water with milk and coconut milk.’ (Mix­
to water I, it with milk, with [coconut milk]
and.)

{ná·?} ’(dual coordinator)’ and {hé·} ’(plural coor­
dinator)’ occur before the proper animate nouns in a
series to be coordinated. {ná·?} occurs before each of
two nouns in a series; \{hé·\} occurs before each of three or more, e.g.

//ná·' frét, ná·' lívin// 'Fred and Livingstone'

//hé· có·n, hé· mé·ři, hé· lú·si// 'John, Mary and Lucy.'

Ordinarily in sequences of three or more names the \{hé·\} coordinator occurs only with the first, with the final noun followed by \{inře·\} 'and, also', e.g.

//hé· có·n, mé·ři, lú·si inře·// 'John, Mary, and Lucy.'

2140. \{?et\} negation

Word-level negation is accomplished by the occurrence of \{?et\} '(negative)' before the word to be negated. It occurs with verbs, predicate auxiliaries, nouns, demonstrative adverbs, numerals, and the locative.

When \{?et\} occurs before a word beginning with a stressed syllable the intervening juncture is dropped. In such instances \{?et\} is written as a prefix.

E.g.

with nouns

//?etlí·pəřeųe// 'have no book'

//?etłó·nuę// 'want nothing'

with verbs

//?etví·?tu// 'not fitted'

//?et kahúlŋue// 'to not have cooked'
with predicate auxiliaries

//?əthɛ·//  'not want to'

with numerals

//?əthɛŋə//  'not a single'

with demonstrative adverbs

//?ət imûh//  'not there'

with the locative

//?ət?ín//  'not with'

2150. The Quotational particle

{ŋə} '[quotational]' indicates that what is said is a direct quote; it occurs in an explanatory clause either preceding or following the quote, occurring either predicationally or adjectivally.

{ŋə} has the allomorph //ŋəh// when occurring with macrosegmental stress.

E.g.

//hàŋ ek ró·? cin, te ŋëh, "fålŋěr man".// 'I heard a voice saying "Run".' (Hear the-was voice I, which thus, "Run-away-self you").

//"tulán! tulán!" ngə anáŋ?ə, ne hû·?a.// 'Python! python!' he said, crying out.' (Python! python! said he, he [cry out] [stative].)

//lęktén an, ne tə?ókə, miné·?òe, ŋam təŋe manâŋ, "tə?ókə".// 'Therefore it is called tə?ókə, which means, "which is drunk".' (Therefore, it, it tə?ókə, name, the which thus interpret, ["which is drunk"].)
2160. Action referents

The action referents are a class of three forms which are defined by their unique distribution in the respectual satellite. Each is a term referring to a part of the body; it indicates that the action of the verb is accomplished—probably by the said body part. The forms are as follows.

\{kú·?\} 'face, surface; do by hand'
\{ré·n\} 'foot; do by foot'
\{tí·?\} is historically a noun meaning 'hand' but now is found with that meaning only in derived forms; it never itself occurs in the noun phrase. As a free form \{tí·?\} means 'do by hand'.

2170. The obligational \{pecε\}

\{pecε\} is a particle of unique distribution, occurring in immediate constituency with the subject of an Independent clause. The subject is always a subordinate pronoun and is infixed in \{pecε\} after the initial CV; c.f. the discussion of pronominal contractions, sec.

\{pecε\} expresses obligation, necessity, or command; it gives emphasis to a request. Its most frequent distribution is with the subject of imperative clauses.

E.g.

//lɛk hih pɛmɛco.// 'Stop by sometime.' ([Go-via] here you-[obligational].)
The predicational particles are morphemes which are identified by their sole distribution as simple predicates. Four such forms have been identified, one of which is derived from one of the others. The forms are as follows.

{poro*} 'although, even though'
{?úh} '(negative imperative) Don't!' 
{řeh} '(negative interrogative)'
//řeh?e//: '(negative emphatic)'; //řeh?e// often is used simply as a negative affirmative: 'to not be'

{řeh} has the following allomorphy.

řeh = hěh
řeh = hěh occurs with {?.?e} 'emphatic', i.e.
//řeh?e - hěh?e//
řeh occurs elsewhere.

//řeh?e// 'negative emphatic', consists of {řeh} +{?.?e}. {?.?e} 'emphatic' is distributed elsewhere with pronouns.

Recall that {?úh} and {řeh} contract with following pronouns.

A clause which has {poro*} as predicate always has a predicate satellite expansion and is coordinated with an independent clause, usually one with a form of {sín} 'yet, nevertheless' (V₁) as its predicate.
E.g.

//pořó· aqúh?e, ne kumráh, sínqə́ře cúʔe, ac

kiřé·nərə́.// 'Although it is raining, yet
I went. (Although it, it rain, yet I, I went.)
2190. Exclamations

Exclamations are identified by their distribution in fragmentary sentences, in which there is always an emphatic stress. Semantically they fall into two categories: vocatives and expressions of surprise.

Vocatives:

- 'Sick 'em!' (said to dogs)
- 'Here!' (archaic; used in giving something)
- 'Let me see it!'
- 'Hey there!' (said to ask if anyone is present)
- 'Go!'
- 'Wait!'
- 'Now!' (especially referring to going)
- 'Now!'
- 'Here goat!'
- 'Here, take it!'

{/yêh} may modify a verb, in which case the verb has the emphatic stress. This shows that the strong stress is an intonational rather than morphemic feature, e.g. yêh mëk! 'Hey look!'

Additional examples of vocative exclamations:

/côh/ ké-te nam kuhnâk./ 'Let me see it! Give (me) the razor.'

{/âh/ ké'e nîn savôn man./ 'Here! Take this soap.'
Exclamations expressing surprise

hēh  'Oh!' (startled)
//kapāh cin.// 'lit) I died!' (expresses great surprise and displeasure; comparable to 'Oh my God!')
māh  'Oh!' (startled)
sēh  'Boo!'
vāc  'Gone!' (said if a bird suddenly gets away. c.f. vāc 'at once, immediately')
yēŋ  'Oh!' (expresses surprise at great quantity)
?aik, ?akram  'Good!', 'I told you so!'
?az, z'  'How lovely!, Oh!'
?eh  'Oh no!' (expresses astonishment or dismay)
?ēk  'Ouch!'

Examples

/aïz/: tevā·yēn'an ŋōh kūn ŋī·?/ 'Oh! The child is pretty.'
/yēŋ/: nā·hā ŋam ŋī·?, nē fē·le/ 'Oh! The child is being beaten.'
CHAPTER THREE

TACTICS

3000. The tactic description presented here should perhaps be termed a characterization rather than a description. It simply is not possible from the data to give a detailed analysis. An attempt rather is made to somewhat informally present the lower level constructions and the major tactic units within which they are distributed. The description begins with the mid-level constructions, i.e., the clause, proceeds to the sentence, and concludes with the phrase.

3100. The clause

The clause consists minimally of a predicational nucleus; it may be expanded by a modal and one or more satellites. Two types of clauses occur in contrastive structure differing with respect to word order and the presence or absence of various introducers; they are Independent and Dependent clauses.

3110. The Independent clause (IC) is summarized by the following statement.

IC: + Pred. nucl. ± Modal ± Satellites

Pred. nucl.: + Predicat or + Independent subject

Abbreviations:
Pred. nucl. = predicational nucleus  Conn. = connective
Pred. aux. = predicate auxiliary
The clausal constituents which are not coterminous with a single morphological class are described as follows.

P111. Predicators are of two types: phrasal and simple.

Phrasal predicator:

\[ \text{\dag Conn. \dag Pred. aux. \dag \{k\} + Predicate}_p \]

Predicate \(_p^p\):
- verb phrase
- locative phrase
- numeral phrase

Simple predicator:

Predicate \(_s^1\):
- demonstrative locative
- demonstrative pronoun
- noun phrase
- possessive noun or locative
- durative phrase
- \{\(\epsilon\)\} phrase

Predicate \(_s^2\):
- temporal locative
- emphatic pronoun
- predicational particle
- adverbial numeral
- interrogative phrase

Note: A predicational nucleus having an adverbial numeral or a predicational particle as predicate obligates the occurrence of a satellite; such a predicational nucleus functions essentially as an introducer, the major predicational comment occurring in the
satellite.

Restricted predicates occur only in predicate position. Unrestricted predicates may also occur in the predicational satellite.

3112. The Independent Subject is of two types: simple and bipartite.

Simple subject:  
- Emphatic pronoun  
  \{pace\} '(obligational)'  
  + Subordinate pronoun  
  Proper noun

A bipartite subject consists of a subject nucleus plus an optional expansion.

Bipartite subject:  
+ Nucleus ± Expansion

Nucleus:  
- Subject pronoun  
- Interrogative pronoun

Expansion:  
- NPs  
  - Proper noun  
  - Emphatic pronoun  
  - Demonstrative pronoun

Subscript 1 in the expansion tags the morphemes which must agree with the subject pronoun as to person, number, and/or animate/inanimate.

When the expansion is a proper noun it is set off phonologically by comma juncture, e.g.
//laqán an, có·n.// 'John is heavy.'

Interrogative pronouns have not been observed with demonstrative pronoun expansion.

The subject is frequently omitted in requests or commands.
E.g.

//kápan!// 'Stab him!'  
//ké·ʔte kanú·c cu.// 'Give me a pen.'

3.11.3. Satellites

Satellites are of two types: predicational and respectual. They may co-occur, as may a sequence of more than one of a particular type.

Predicational satellites are phrasal constructions consisting of an optional subordinate pronoun plus an unrestricted predicate. The satellite adds predicational comment to one of the substantive elements of the predicational nucleus. The subordinate pronoun designates the subject of the satellite. Its pronominal reference is to either the subject or object of the predicational nucleus, which is being expanded by the satellite. The subordinate pronoun is clarificational in use, usually being omitted if the relationship of the satellite to the clause is clear. When the subject is a third person, however, the subordinate pronoun is only rarely omitted.
E.g.

//yó·kla ᵙác, ᵙam ᵉǎm, (ne) iʔúk o.// 'The dog
climbed up on his back.' ({ne} 'he' refers to the noun of the subject expansion, i.e. {ám} 'dog')

//kasále meh cin, em tissekæ kuy nih mák.//
'I dare you to jump across this well.' ({em} 'you' [subordinate] refers to {meh} 'you' [possessive].)

The relationship between the predicate of the nucleus and the satellite remains to be worked out. There may well be co-occurrence restrictions between the tactic units which may occur in the predicational nucleus and the predicational satellite. There are no sentences, for example, having a locative phrase both in the predicate nucleus and in the predicational satellite. Verb phrases, however, frequently co-occur, e.g. //hakápta fé·n mé· hólfe min, frét, ne kirím.// 'Fred, teach your friends to dance.'

It is probable that whatever restrictions do obtain are semantic rather than structural.

3.13.2 Respectual satellites are phrasal constructions consisting of {te} '(grammatical relator)' plus a noun phrase, a numeral phrase, or an action referent phrase. The respectual satellite is clarificational in nature; it adds information of a "with respect to" nature - as to agent, object, reason, etc. In any particular example its translation is dependent on its function.

The action referent phrase, referred to above,
occurs only in the resPeCTual satellite; it consists of an action referent plus a noun phrase (NP'). It is restricted in distribution with respect to the type of predicator which occurs in the predicational nucleus, occurring only with clauses having verbal predicators that are neither attributive verbs of stem class 3 nor passive verbs of stem class 1. Examples of resPeCTual satellites are as follows.

//LaRākketi an qam pakco'n, te kū? kufāt.//
'The branch has been broken down by the wind.'

//Pātān cin, te ti? có'n, nefōne cu.// 'I'm smarting due to John's whipping me.' (Smart I, by hand John, he whip me.)

//Hēn taka ek misi? tafisi, te fē'n manāk kū'n.//
'Once there was a widow who had four children.'

//Tu'y elkūyē aj, vami-rō?, te tumlāt.//
'Word-maker threw dirt on her head.'

//Ti·gēn yin te ūpī, ne lāktēn nūp rōn o.//
'They get money through its fruit.' (Obtain they of money, they through these fruit it.)

There is clearly a great deal more work to be done in the analysis of the satellite constructions. There quite possibly are subtypes which need to be identified; and co-occurrence restrictions to be stated; it has simply not been possible to carry the analysis beyond the present point.
3120. The Dependent clause is summarized by the following statement.

\[
\text{DC: } + \text{Subordinate conjunction} + \text{Dependent subject} + \text{Modal} + \text{Predicate satellite} + \text{satellites.}
\]

The dependent subject consists of a possessive pronoun or a subject noun phrase.

The Dependent clause is distinguished from the Independent clause by three differences: (1) the presence of the subordinate conjunction, (2) the occurrence of the subordinate pronoun, rather than a subject pronoun, in the subject position, and (3) the obligatory occurrence of a predicate satellite.

The subject of the predicate satellite always agrees with the Dependent subject as to person and number.

Viewing the relationship between the Dependent and Independent clauses dynamically, the IC predicator is replaced by the subordinate conjunction, the subject is in the possessive rather than the subject case, and the predicator is expressed as a clause satellite. Note the following examples.

\[
\text{IC: } //\text{lô·k an ñam máy.}// \quad '\text{The sea is calm.}'
\]

\[
\text{DC: } //\text{hê· ñam máy, nê lô·k.}// \quad '...\text{when the sea is calm.}'
\]

\[
\text{IC: } //\text{háŋ rô·? ca an, nê sô·?}// \quad '\text{He neglects hearing them.}'
\]
DC: //yē· o na só·?, ne hāŋ rō·? ca.// 'If he neglects hearing them...'
IC: //mātŋe ay min.// 'We will steal away.'
DC: //hō· há·? min ay mātŋe.// 'So that we will steal away.'

3130. Indirect clause

The Indirect clause (Ind. C) is a variation of the subordinate clause in that the reflexive {rē} is the dependent subject when the subject of the independent and indirect clauses are the same. The Indirect clause is introduced by {tə}, '(grammatical relator)'.

E.g.

//vé·rē naŋ cō·n, té cu min, nac umū.// 'Tell John that I will be there.'
3200. Only brief statements can be made about the sentence. It consists minimally of an Independent clause, which may optionally be extended by one or more Dependent clauses or by an Indirect clause. Dependent clauses may either precede or follow the Independent clause; a single DC is attested preceding the IC; only two are attested after it. The following formulas summarize these statements.

\[
S = + IC \pm DC \pm DC
\]
\[
+ DC + IC
\]
\[
+ IC \pm Ind.C
\]

These statements are in no way meant to be exhaustive; there are certainly other sentence types that occur. But the data do not allow that the analysis proceed beyond this point.

Examples of the above sentence types are as follows.

+IC + DC + DC: //et akáhaló:n cin, yé:o, ne yíh, yé:o ne ráh?e: // 'I don't know whether he will come or not.'

+ DC + IC: //yé:ay káhétí:n há: nanop min, nac yíh.// 'If we finish dinner, we will come.'

+ IC + Ind.C: //kó:teku: cá:a, te o, ne kucí:ke rón.// 'They found that it's fruit was tasty.'
Phrasal constructions comprise verb, locative, durative, noun, interrogative, and numeral phrases.

Verb phrase

The verb phrase defines two tactic classes of the inflected verb constructions, as follows.

VR: Personal referent verb; Non-personal referent verb; Referential verb with \( \{'n\} \)

VNR: All other verb constructions, and unsuffixed non-agentive and intransitive stems.

The verb phrase is comprised of three phrasal constructions, i.e.

\[
\begin{align*}
VP_1 & : \text{VR} + \text{NP} \\
VP_2 & : \text{VR} + \text{N}' + \text{NP}' \\
VP_3 & : \text{VNR} + \text{N}'
\end{align*}
\]

The relationship between VR and NP or N' is objective; that between VNR and N' is attributive.

N' is a subclass of nouns which is defined by the above constructional statements and by the transformational relationship which obtains between types VP_1 and VP_2 to type VP_3. Types VP_1 and VP_2 are always active clauses; their passives are, respectively, VP_3 where VP_3 is VNR, and VP_3 where it is VNR + N'. Note the following examples.

\[
\begin{align*}
VP_1 & \quad \text{mák yam li\-pe\-řt cin. 'I see the book'.} \\
\text{VR} & \quad \text{NP} \\
& \quad \text{S}
\end{align*}
\]
Its passive:

\[ \text{VP}_2: \text{VNR} \quad \text{míke an ṣam lí-peře, to cu.} \]

\[ \text{VR} \quad \text{S} \quad \text{Agt} \]

'The book is seen by me.'

\[ \text{VP}_2 \quad \text{vé-níe nãŋ cu có-n} \quad \text{'John tells me.'} \]

\[ \text{VR} \quad \text{N'} \quad \text{IP'} \quad \text{S} \]

Its passive:

\[ \text{VP}_2: \text{VNR} + \text{N'} \quad \text{vé-níe nãŋ cin, te có-n} \]

\[ \text{VNR} \quad \text{N'} \quad \text{S} \quad \text{Agt} \]

'I'm told by John.'

The verb type in \( \text{VP}_2 \) is not restricted to the passive; virtually every type of non-referential verb except the Incorporated goal construction has been found in the construction \( \text{VNR} + \text{N'} \). But in every example but one in the data \( \text{N'} \) is a descriptive attribute of the clause subject - such as a body part or emotion, of animate subjects, or a part or description, of inanimate objects - which could in some other grammatical construction be formally possessed by the subject. The single exception: //káhí-te lí-peře cin.// 'My books are all taken.' (Attributive verb, \( \text{N'} \), subject; lí-peře may be formally possessed but is not, of course, a part of the subject.)

There are two morphemes that are not nouns that are distributed as \( \text{N'} \) morphemes and are classed with them here for the sake of simplicity: \{tí-\} 'hand' and \{réng\} 'doing'.
{tí·?} is a member of the action referent class and is described in that section. As a free form {tí·?} means 'doing by hand', e.g. //h린	í·? o cin.// 'I'm waiting for him (to do it) by hand.' (Wait [do-by-hand] him I.)

{rén·2} is found only after VNR; it refers to 'doing' in general, e.g. //rŏnghec rën cin, [hăn̕h-teɾe].// 'I'm still listening.' (Still doing I, [listening].)

Special comments are in order regarding NP of VP₁. The fully expanded noun phrase has seven positions. However, there is evidence that the object noun phrase, found in VP₁, is limited to four positions, as per the first example below. There are no examples of adjective-noun sequences occurring as verb objects; either the noun or the adjective is transposed to post-subject position, of an Independent clause, as per the second example. The data do not allow that the position of the transposition be fixed with respect to the modals of the Independent clause nor at all with respect to the Dependent clause.

Examples of the verb phrases are as follows. They are presented in full sentence contexts; the verb phrase occurs initially in each example below and is separated from the rest of the sentence by a space.
VP₁: //mák né· pitó·ttíñ híné·ke cu man.// 'See these marks of my binding.' (See these scar-remains binding my you.)
//ké·'te temanúl man lí·peře, ?ín cu.// 'Give me the yellow book.' (Give yellow you book, to me.)
//harún ne sanó·y ña·m cehćó·n man.// 'Singe the bird's feathers.' (Singe hair the bird you.)

VP₂: //hacíp mátře man ně·cke č.// Examine it carefully.' (Make-straight eye-self you examine it.)
//hamákhe mát có·n cin, te lí·peře.// 'I'm showing John the book.' (Cause-see eye John I, of book.)

VP₃; VR + N¹: //tάŋka ḋóy an ɲón có·n, te cehćó·n//
'Ocasionally the tree is perched by birds.' (Perch branch it the tree, by bird.)
//huří·ɲe kána an ɲám có·n// 'The tree trunk is black.' (Black trunk it the tree.)
//miřít káře ?úk an ɲíh lí·peře.// 'The cover of this book is rough carved.' ([Rough carved] book it this book.)

VR: //siřolé cin, te nuš.// 'I'm butted by the bull. (Butted I, by bull.)
//lařák an ɲám ká·nú·c.// 'The pencil is split. (Split it the pencil.)
3320. Locative phrases

Both of the locative morphemes, {©ín} and {el}, occur as phrasal introducers. The {©ín} phrase is much more frequent and more broadly distributed; it is referred to as the "locative phrase", while the {el} phrase is termed simply the "{el} phrase".

3321. The {©ín} phrase consists of the directional locative {©ín} 'in, to' plus either a noun phrase or a demonstrative locative.

\[ LP: \{©ín\} + [NP] \]

The locative phrase focuses the locus or direction of the condition or action in space or time. When locative phrases expressing both spatial and temporal location occur with the same clause, the spatial locative precedes. Recall that {©ín} plus third person 'not-visible' and 'past' pronouns contract.

E.g.

//ik haté.m// 'in the night'
//i kýu țam lí.peře// 'on the book'
//©ín meh// 'to me'
//i nuk xinlôŋe la?énře// 'to their work at the fence'

3322. The {el} phrase consists essentially of {el} plus a noun phrase; noun phrases which are attested are all quite brief, but probably the full noun phrase is possible after {el}, i.e.
\{el\} phrase: \{el\} + NP

E.g.

//el kuy̞o·ke// 'in the basket'
//el máy// 'in the sea'
//el haté·m// 'in the evening'
//el nay// 'in the hole'
//el gam mané·ŋe// 'in the hole'

3330. Durative phrase

The durative phrase consists of \{ḥe\·\} 'while, when', plus an \{el\} phrase or, probably, a noun phrase of a restricted nature; only one example is attested of \{ḥe\·\} with a following noun.

E.g.

//ḥe· lané·l// 'during the (time of) plenty'
//ḥe· el y̞̣ sə tavú·y// 'on a summer day' (when in great heat)

3340. Noun phrase

Three constructional statements define the noun phrase; each is presented in turn.

Special symbols:

\(N_c\) = common noun; \(D\) = demonstrative pronoun
\(N_p\) = proper noun; \(D' = D\), 3rd pers. not-vis. & past pron.
\(P_p\) = poss. pron.; \(P'_p = P_p\), \{ṛe\} 'self', \{ḥe\·\} 'each other'
(Recall that \{ṛe\} occurs suffixed to a preceding noun)

\(NP:\ [+ [\dagger N_c P \dagger NP'] \]

\(N_c P:\ [+ D' \dagger Adj + N_c \]

\(NP':\ [+ N_p, + N_c P + P'_p \]

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Theoretically, the fully expanded noun phrase could contain seven words, i.e.

+ D + Adj + Nc + D + Adj + Nc + P

This formula is a generalization from the patterns that are found; it generates phrases such as the following, which could surely occur but are not in fact attested:

//nup tohacá·pe lí·peře ak tekuló·?ue ní·? cu//
'The piled books of my stupid child' (The piled book the stupid child my)

In the data the noun phrase rarely contains more than four words, e.g.

+ D + Adj + Nc + P

Examples of some of the possibilities generated by the constructional statement are as follows:

D + Adj + Nc: //vé· tstkó·? tařik// 'These unable people'

D + Nc + D + Adj + Nc: //né· mahú·ve nihn tecó·c panám// 'These waves of this troubled land'

Nc + Np: //patí·? hařvé·// 'Harvey's house'

Nc + D + Nc + ře: //kinpáhe ek mé·mře// 'dying of one's brother'

Nc + Pp: //hól cu// 'my friend'

D + Nc + Nc: //vé· tarókheře tařik// 'all men'
(These all men)

Nc + Nc + ře: //likán yŋŋeře// 'one's parents neck'
(neck parent-own)
A second noun phrase is distributed in the subject phrase. It is a less fully expanded phrase, as follows.

$$NP_s: + \left\{ \begin{array}{c}
\begin{array}{c}
\pm \left[ \pm D_1 + N_c \right] \pm P_p \\
\pm N_c P
\end{array}
\end{array} \right. $$

Morphemes tagged with subscript 1 must agree in number, person, and/or animate/inanimate with the subject pronoun, with which $NP_s$ occurs as an expansion.

Note: when $NP_s$ is $N_c P$ which is occurring as the expansion of a 3rd. person non-past visible pronoun subject, i.e. {an} or {nun}, {ηam} is obligatory.

E.g.

//'ynteš an ɳam hól cu.//' 'My friend came to me.'

But *//'ynteš an hól cu.//' may not occur.

Other examples of $NP_s$:

E.g.

Adj + $N_c$: //hēŋ taka ək təʔakāhe tařik.// 'There was a good man.'

D + $N_c$ + $P_p$: //liŋá·lhaka nun né· fá·lén cu.// 'My sins are revealed to you.'

There is one example of a noun phrase containing a numeral adjective; the noun is classified. The formula for the phrase found is as follows.

$$NP_n: + D + Adj_n + Clf + N_c$$
I.e.

//mē·ŋe en ŋīh tēhēŋ miʁ·kə cō·n.// 'The log is hollow.'

Additional data would probably allow integrating this phrase type into the NP formula.

335\(Q\) Interrogative phrase

The interrogative phrase consists of a predicate interrogative, IR, plus an optional noun, i.e.

Interrogative phrase: IR \(\pm N\)

E.g.

//sitīh tī·ʔ ap, ne fēlān?// 'How did he beat him?'

//ʔacīh ap lūmkūŋ ap ɛlmē·fi?// 'Who is rattling the cupboard?'

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3360. Numeral phrase

The numeral phrase comprises three phrasal constructions as follows.

Symbols used:

Num: Unaffixed numerator  Clf: Classifier

N_{ucl}: Unclassified noun  N_{cl}: Classified noun

IOQ: Incorporated object quantifier

\[\text{Num}_1: \begin{cases}
\text{Num} + \text{Clf} + N_{cl} \\
\text{Attributive numeral} + N_{ucl}
\end{cases}\]

Numeral phrase 1 is bipartite, with separate statements for classified and unclassified nouns. The two statements have the same distribution.

E.g.

//?á·m manák kú·n em?// 'How many children do you have?'
//né·t miká·ce uhé·? an.// 'It has two eggs.'
//né·te sinřó·l anřah?e.// 'He had two horns.'

\[\text{Num}_2: + \begin{cases}
\text{IOQ} \\
\text{Qualifier quantifier} + N \\
\text{Incremental quantifier}
\end{cases}\]

The nouns occurring in this construction may be of a limited class; most examples are of numerable nouns referring to a time span.
In this construction the classifier refers either to the subject noun or to a noun which may be present in an optional satellite of the clause.

E.g.

//lú·y tak yin vé·ní·ʔ, ihíh.// 'The three children are here.'

//ʔá·mqəl nóŋ em, ví·ʔ cök?// 'How many arrows have you made?' ([How many] [Classifier: long narrow objects] you, make arrow?)

//né·ʔ sumkáµ cin, ?ahík.// 'I fasted four days.'

//fé·nhet cin, főhe.// 'I'm beaten four times.'

//hényqōn mité·m cin, ēl má·y.// 'I was out at sea one night.'

//sámtít nun.// 'Ten remain.'

//fé·nteře sumkáµ cin, kapáh.// 'I will die in four days.'
Appendix I

The occurrences of unstressed /i, a, e, u/ which are found in the data are shown in the following charts. Syllables which are the result of metathesis or vowel harmony are not included. * indicates the form so occurring is a particle.

\[
\begin{array}{cccccccccccc}
\mathcal{C}_1 \mathcal{C}_2 \\
p & t & c & k & m & n & \ddot{n} & \eta & l & \dddot{r} & v & y & \dddot{h} \\
p & X & X & X & X & X & X & X & X & X & X & X & X \\
t & X & X & X & X & X & X & X & X & X & X & X & X \\
c & X & X & X & X & X & X & X & X & X & X & X & X \\
k & X & X & X & X & X & X & X & X & X & X & X & X \\
m & X & X & X & X & X & X & X & X & X & X & X & X \\
n & X & X & X & X & X & X & X & X & X & X & X & X \\
\ddot{n} & X & X & X & X & X & X & X & X & X & X & X & X \\
\eta & X & X & X & X & X & X & X & X & X & X & X & X \\
f & X & X & X & X & X & X & X & X & X & X & X & X \\
s & X & X & X & X & X & X & X & X & X & X & X & X \\
l & X & X & X & X & X & X & X & X & X & X & X & X \\
\dddot{r} & X & X & X & X & X & X & X & X & X & X & X & X \\
y & X & X & X & X & X & X & X & X & X & X & X & X \\
\dddot{h} & X & X & X & X & X & X & X & X & X & X & X & X \\
\end{array}
\]

Distribution of unstressed /a/
Distribution of unstressed /i/
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<th>h</th>
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Distribution of unstressed /e/
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