MONO GRAMMAR

Submitted in Partial Satisfaction
of the Requirements for the
Degree of Doctor of Philosophy

by

Sydney MacDonald Lamb

Completed December, 1957
University of California
MONO GRAMMAR

Submitted in Partial Satisfaction of the Requirements for the Degree of Doctor of Philosophy

by

Sydney MacDonald Lamb

Completed December, 1957
University of California
PREFACE

This description is based upon material contained in field notes and tape recordings which were obtained in the vicinity of North Fork (Madera County), California, during the summers of 1953 and 1954. Material on other Mono dialects and on Paviotso (Northern Paiute), which serves as the primary basis for the statements of article 3 of the introduction, was obtained in the field during the same summers. Some of the data was checked and amplified during another visit to North Fork during the latter part of January, 1955. These field trips were made possible by the Survey of California Indian Languages, Department of Linguistics, University of California, Berkeley, whose generous assistance is hereby gratefully acknowledged.

The great preponderance of my corpus was provided by Mrs. Lucy Kinsman, an intelligent elderly lady who has witnessed the breakdown of her native culture with great sorrow. Her interest in this linguistic project, and her cooperativeness, patience, and enthusiasm, have rendered me exceedingly grateful for the part she has played in helping to make available a description of her language. I am grateful.
also to the other North Fork informants who have supplemented
the data provided by Mrs. Kinsman: Annie Wenz, Susan Johnson,
Louie Carmen, Hausen Lavell, and Joe Kinsman (Lucy Kinsman's
husband). Two former North Fork residents now living in
the San Francisco Bay area, Mrs. Elizabeth Bethel and Mrs.
Daisy Coleman, have given me some helpful additional data
from time to time. Also deeply appreciated is the assist-
tance of Mrs. Rosalie Bethel of North Fork, who served as an
able interpreter during my work with Mrs. Kinsman, Mrs. Wenz,
and Mrs. Johnson.

The members of the committee which has supervised this
work, Madison Beeler, Murray R. Emeneau, and Mary R. Haas,
have graciously offered valuable advice and encouragement.
To them, and particularly to Professor Haas, the chairman of
the committee, who has generously given of her time to dis-
cuss problems and to suggest improvements in style, organi-
zation, and other matters, I owe my hearty thanks.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Preface</th>
<th>Page 2</th>
</tr>
</thead>
</table>

## INTRODUCTION

<table>
<thead>
<tr>
<th>1</th>
<th>Conceptual Framework</th>
<th>Page 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The Scope of the Description</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Mono Dialects</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Early Bibliography</td>
<td>17</td>
</tr>
</tbody>
</table>

## CHAPTER ONE - PHONOLOGY

<table>
<thead>
<tr>
<th>101</th>
<th>General Remarks</th>
<th>Page 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Inventory of Phonemes</td>
<td>20</td>
</tr>
<tr>
<td>103</td>
<td>Phoneme Classes</td>
<td>21</td>
</tr>
<tr>
<td>104</td>
<td>Segmental, Suprasegmental, Sequence</td>
<td>22</td>
</tr>
<tr>
<td>105</td>
<td>The Syllable</td>
<td>22</td>
</tr>
<tr>
<td>106</td>
<td>Arrangements of Phonemes</td>
<td>23</td>
</tr>
<tr>
<td>107</td>
<td>Stress</td>
<td>24</td>
</tr>
<tr>
<td>108</td>
<td>Notation</td>
<td>28</td>
</tr>
<tr>
<td>110</td>
<td>Obstruents</td>
<td>29</td>
</tr>
<tr>
<td>120</td>
<td>Resonants</td>
<td>48</td>
</tr>
<tr>
<td>130</td>
<td>Glottals</td>
<td>58</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>140</td>
<td>Vowels</td>
<td>64</td>
</tr>
<tr>
<td>150</td>
<td>Junctures</td>
<td>72</td>
</tr>
<tr>
<td>160</td>
<td>Suprasegmental Phonemes</td>
<td>79</td>
</tr>
<tr>
<td>170</td>
<td>Anomalous Phonemes</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER TWO - MORPHOPHONEMICS</strong></td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>Orientation</td>
<td>88</td>
</tr>
<tr>
<td>202</td>
<td>Inventory of Morphophonemes</td>
<td>89</td>
</tr>
<tr>
<td>203</td>
<td>Morphophoneme Classes</td>
<td>89</td>
</tr>
<tr>
<td>204</td>
<td>Notations</td>
<td>90</td>
</tr>
<tr>
<td>210</td>
<td>Oral Consonant Morphophonemics</td>
<td>92</td>
</tr>
<tr>
<td>220</td>
<td>Glottal Morphophonemics</td>
<td>102</td>
</tr>
<tr>
<td>230</td>
<td>Vowel Morphophonemics</td>
<td>113</td>
</tr>
<tr>
<td>240</td>
<td>Reduplication</td>
<td>123</td>
</tr>
<tr>
<td>250</td>
<td>Juncture Morphophonemics</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER THREE - MORPHEME CLASSES</strong></td>
<td></td>
</tr>
<tr>
<td>301</td>
<td>Introductory</td>
<td>126</td>
</tr>
<tr>
<td>302</td>
<td>Orientation</td>
<td>126</td>
</tr>
<tr>
<td>303</td>
<td>Morpheme Class Labels</td>
<td>127</td>
</tr>
<tr>
<td>304</td>
<td>Notations</td>
<td>135</td>
</tr>
<tr>
<td>310</td>
<td>Nominal Elements</td>
<td>137</td>
</tr>
<tr>
<td>320</td>
<td>Pronominal Elements</td>
<td>174</td>
</tr>
<tr>
<td>330</td>
<td>Substantival Suffixes</td>
<td>194</td>
</tr>
<tr>
<td>340</td>
<td>Locative Elements</td>
<td>205</td>
</tr>
</tbody>
</table>
Chapter Four - Morpheme Arrangements

401  Introductory
402  Orientation
403  Distribution Classes
404  Notations
410  Noun Stems
420  Pronominal Forms
430  Substantive Expressions
440  Locative Expressions
450  Miscellaneous Forms
460  Verb Stems
470  Verbal Expressions
480  Indicative Expressions
490  Non-indicative Frustums
INTRODUCTION

1. Northfork Mono is here described in terms of a framework of three structural levels containing discrete, precisely definable elements, plus two peripheral levels, which relate the linguistic structure to the extralinguistic phenomena of nature and society. The levels, listed in order, are: phonetic, phonemic, morphophonemic, morphemic, and semantic. The three middle levels (whose names end in -emic) are the structural levels. Any utterance or text has, of course, simultaneous existence on each of the five levels, but its nature on each of the levels (as ascribed by the grammarian during the analysis for the sake of a simple description) differs from that on each of the other levels. The various elements and combinations of elements which are set up on each of the structural levels, as a result of abstraction based on comparison and analysis of many utterances, are endowed with a separate existence by the analyst. Such an element or combination of elements on a given level may be spoken of as the representation on that level of that portion of an utterance or set of utterances which it accounts for. It will also be spoken of as representing on that level an element or combination of elements of another
level which accounts for the same portion of an utterance or set of utterances. For the sake of variety, the word 'realization' is sometimes used instead of 'representation', in the second sense.

a. The primary element on the phonemic level is the phoneme. A phoneme is one element of that set of elements which most economically accounts for all of the speech sounds falling within the scope delimited by the analyst (as in article 2 below). It is not a class of segmented portions of expression substance, but a single element of expression form, which accounts for certain features of the phonetic substance. The representations of a phoneme on the phonetic level may be called its allophones. Phonemes and combinations of phonemes are identified as having existence on the phonemic level by being enclosed in /.../.

b. On the morphemic level, the primary unit is the morpheme, a unit of content form, which is arrived at by the conventional methods familiar to linguistic scientists. The method of symbolizing morphemes is described below.

c. The morphophoneme is the primary unit of the morphophonemic level, and is identified as existing on that level by enclosure in //...//. The morphophonemes are set up to account for: (1) recurrent (i.e. for more than one morpheme) alternations among phonemes in alternate phonemic
representations of morphemes (except where part of the alternation coincides with an alternation of this type, and the remainder involves free variation with the alternants included in the former, as is the case with the noun roots mentioned below); (2) phonemes which undergo no alternation in phonemic representations of morphemes; (3) non-recurrent alternations involving more than one combination of morphemes which are not capable of being described in terms of alternate morphophonemic representations of morphemes, where the morphophonemes involved would be of types (1) and/or (2). Type (2) is necessary for the sake of fulfilling the requirement that all of the phonemic material be accounted for on the morphophonemic level. Other types of alternation among the phonemic representations of morphemes are described in terms of alternate morphophonemic representations of these morphemes. These alternate representations will be called allomorphs. Allomorphs thus have their existence on the morphophonemic level, not on the phonemic level as in most previous linguistic descriptions.

An example of type (3) is provided by the Northfork morphophoneme //N//, which occurs in an allomorph of a single morpheme, and therefore covers a non-recurrent alternation. This is the objective morpheme (337), which may be symbolized (according to the device described in d below) as <\text{No}> nO 'obj.'. There are several morphemes which have (as their
morphophonemic representations) freely varying allomorphs differing by the presence or absence at their end, of the morphophoneme //r// (227), for example //ciwijahnu//-
//ciwijahnu'//, a masculine name. The morpheme <Na> no 'obj.', when occurring after morphemes whose morphophonemic representations, or morphs, end in //v// (204), is realized phonemically as /na/. It is realized as /aa/ after morphemes whose morphs end in //r// (without the free variation).

Thus we have /pihkui'aa/ (2278) representing the combination of <Na> with <pihkui'> //pihkui'//, another masculine name.

For the combination of <Sa> with //ciwijahnu//-
//ciwijahnu'/// we find /ciwijahnuma/-/ciwijahnu'aa/ in free variation.

The selection of /na/ or /aa/ as the representation of <Na> depends upon its morphophonemic environment, not upon its morphemic environment. To avoid mixing of levels, with the concomitant danger of circularity, it is necessary that the representations of an element of a given level be defined in terms of its environments on that same level. Thus it is necessary that <Na> have a single morphophonemic representation in the morphophonemic environments //r// and //v//.

To say that <Na> has the freely varying allomorphs //aa//-
//na// when occurring after <ciwijahnu()> would be to imply the possible occurrence of *//ciwijahnu'aa// and *//ciwijahnu'na//, neither of which occurs. <Sa> is given a single morphophonemic representation //Na// by the setting up of the morphophoneme //N//, even though the alternation covered by it
does not occur in the representations of any other morphemes. (The morphophoneme /\n/ cannot be used since it is set up to account for occurrences of /\n/ which do not participate in this alternation.)

On the other hand, no economy is gained by this device if only one combination of morphemes is involved, since freely varying portmanteau morphs can be set up for this single combination. This type of situation is illustrated by the combination 〈\yn nί〉, with its freely varying portmanteau representations 〈\ymhnih//////ɛyh// in some environments (322b).

d. Each of the structural elements has as its properties a specific definable relationship to the adjoining levels and a distribution in relation to other elements of the same level. The phonemes and morphophonemes of Northfork are small enough in number to be kept track of easily, and they can be most conveniently symbolized by single letters of the alphabet and similar symbols. The morphemes, however, are so numerous that it is generally advisable to cite them by indication of each of their three properties. This is done as follows:

(1) An indication of the morphophonemic representation is given first, enclosed in <...>. This is considered the fundamental, or simple, symbolization of the morpheme. If the morpheme has more than one morphophonemic
representation, one of them (or some other convenient symbolization, such as <iwiwahmu(‘)> is given.

(2) This is followed by the symbol indicating distribution class membership (305), without any enclosure.

(3) Following this, wherever feasible, is an indication of the basic semantic representation or meaning, enclosed in '...'.

A few morphemes of a special type have zero content and unique distribution. These are called the tactic junctions (397). They are symbolized merely by their morphophonemic representations, enclosed in <...>.

e. The relationships of the various structural elements are indicated in the table below.

<table>
<thead>
<tr>
<th>Level</th>
<th>Primary Element</th>
<th>Secondary Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semantic</td>
<td></td>
<td>(Allo)sème</td>
</tr>
<tr>
<td>Morphemic</td>
<td>Morpheme</td>
<td></td>
</tr>
<tr>
<td>Morphophonemic</td>
<td>Morphophoneme</td>
<td>(Allo)morph</td>
</tr>
<tr>
<td>Phonemic</td>
<td>Phoneme</td>
<td>(Allo)morphophone</td>
</tr>
<tr>
<td>Phonetic</td>
<td></td>
<td>(Allo)phone</td>
</tr>
</tbody>
</table>

Since the phonemic realizations of morphophonemes are usually phonemes (i.e. morphophones and phonemes usually coincide), and since these realizations are for the most part described symbolically (204b), it has not been found
necessary to make use of the terms 'morphophone' and 'allomorphophone'.

2. Each idiolect has its own structure, which differs in some details even from very closely related ones. It has been decided to describe a single linguistic structure rather than to attempt a composite description covering several dialects or several varieties of one dialect. Accordingly, the description is based on the speech of Lucy Kinsman plus that part of the material obtained from other informants which is consistent with the patterns of Lucy Kinsman's speech. In two or three places, comments on patterns of other speakers which fall outside this scope are included.

Since there is little variation of importance in the Northfork area, the structure here described can be assumed to be adequately representative of the Northfork subdialect of Mono, even though it does not necessarily coincide in all details with that of other Northfork speakers. Thus the phenomena described will be referred to as phenomena of Northfork Mono (or of Northfork).

It has not been considered profitable to account for every vocal sound emitted by the informants on the levels of linguistic structure. Some of the speech sounds have been accounted for by 'anomalous phonemes', which are not
considered part of the standard phonemic system, and are not accounted for in the description of the higher levels. The reasons for the exclusion of these sounds from the standard phonemic system are given in 170. For similar reasons, other vocal sounds too trivial to mention have been excluded altogether from the description. The junctures and the supra-segmental phonemes have not been described in complete detail with regard to their phonetic realizations; and the supra-segmental phonemes and the infrequently occurring juncture /ˌ/ have not been accounted for on the morphophonemic, morphemic, and semantic levels. Not all of the Northfork morphemes are represented in the corpus which served as the basis for this description, and the morphemes have not been thoroughly described with regard to their semantic representations. Aside from these limitations, all of the material on each of the three structural levels and two peripheral levels has been accounted for on the adjoining levels.

3. The Mono or Monachi language was formerly spoken, in several dialects, in that part of the foothill area of the western slope of the Sierra Nevada which is drained by the San Joaquin, Kings, and Kaweah rivers, and in the area directly to the East of the southern Sierra Nevada. There still survive perhaps a few score speakers scattered throughout this territory, representing to some degree most of the
former dialects. On the basis of similarities and differences in their reflection of the Proto-Mono phonemic system, the various speech-forms can be classified into three superdialects, comprising seven dialects, five of which can be further divided into subdialects. The Northwestern Mono superdialect contains the San Joaquin and Kings dialects, each of which has two subdialects separated by the rivers. Northeastern Mono is spoken in three dialects, two of them in the northern part of the area drained by the Owens River, the third across the White Mountains to the east, in Deep Springs and Fish Lake Valleys. Southern Mono spans the Sierra Nevada, with one dialect extending from Big Pine southward to Owens Lake, the other in the area drained by the Kaweah River. It is safe to say that mutual intelligibility prevailed between any two points in the area, although a good deal of difficulty in understanding could be encountered between speakers from widely separated points. Speakers of the South Owens Valley dialect, for example, miss a great deal in attempting to understand recorded texts from the San Joaquin dialect. In the give-and-take of face-to-face conversation, however, it is very likely that a high degree of mutual understanding would be achieved rapidly.

Although resemblances between the dialects are, of course, greatest between those belonging to the same superdialect, there is also great similarity (1) between the
San Joaquin dialect and that of Long Valley and Benton in the northernmost part of the Owens River drainage, and (2) between the Deep Springs dialect (Deep Springs and Fish Lake Valley) and that of the southern Owens Valley. The Deep Springs dialect preserves most faithfully the phonemes of Proto-Mono.

The San Joaquin dialect consists of the Auberry sub-dialect, on the south side of the river, and the Northfork sub-dialect, on the north side. The Northfork area is thus at the northwestern corner of the Mono territory. It borders on the territory of the Chukchansi Yokuts, to the west, and that of the Southern Sierra Miwok, to the north.

The closest linguistic relative of Mono is the Paviotso or Northern Paiute language, whose area extends northward from the watershed divide between the headwaters of the Owens River and Mono Lake basin. The speech of the Bannock Indians of Fort Hall Reservation in Idaho, whose territory was surrounded by that of the Shoshonis, represents a dialect of Paviotso which differs only very slightly from the Paviotso of Oregon and northern Nevada. Paviotso resembles Mono strongly in lexicon, very strongly in phonology, but it differs rather surprisingly from Mono in many features of grammatical structure. Mono and Paviotso comprise one of the three subdivisions of the Numic or Plateau Shoshonean family, which in turn belongs to the Utoaztekan stock.
4. No grammatical description of Mono has ever appeared in print, but a few lists of vocabulary items, recorded with varying degrees of proficiency, have from time to time been published. The earliest of these, recorded by Oscar Loew in 1875, was published by Gatschet (1879), as number 12 ("Pa-Uta of California"). Other vocabulary lists have been published by Kroeber (1907), Steward (1933, 1938), and Driver (1937). Additional lexical items are to be found in publications of Gayton (1930, 1948), Gifford (1922, 1923, 1932), and Steward (1934, 1936).

Driver, Harold E.
1937 Culture Element Distributions: VI, Southern Sierra Nevada, UC-AR 1:2.

Gatschet, Albert S.
1879 Classification into Seven Linguistic Stocks of Western Indian Dialects Contained in Forty Vocabularies, U.S. Geographical Surveys West of the 100th Meridian, 7.403-85. (Washington).

Gayton, A.H.
1948 Yokuts and Western Mono Ethnography II: Northern Foothill Yokuts and Western Mono, UC-AR 10:2.

Gifford, E.W.
1922 Californian Kinship Terminologies, UC-PAAE 18.

1932  The Northfork Mono, UC-PAAE 31:2.
Kroeber, A.L.

1907  Shoshonean Dialects of California, UC-PAAE 4:3.
Steward, Julian H.

1933  Ethnography of the Owens Valley Paiute, UC-PAAE 33:3.

1934  Two Paiute Autobiographies, UC-PAAE 33:5.

1936  Myths of the Owens Valley Paiute, UC-PAAE 34:5.

1938  Basin-Plateau Aboriginal Sociopolitical Groups, BAE-B 120.
CHAPTER ONE

PHONOLOGY

101. The phonetic system of Northfork Mono is simple in terms of its inventory of consonants and vowels, and in the combinations of consonants and vowels which occur, but it possesses fairly complicated patterns of junctural and intonational phenomena. Noteworthy features of the system are: (1) voicing is entirely non-distinctive throughout the roster of phonemes, and all of the phonemes except /s x ʔ/ have voiced and voiceless allophones; (2) the "word-juncture" /+/ is in general quite clearly marked by stress and by articulatory allophones of the consonants and vowels; (3) there is a systematic stress pattern and a very elaborate intonational apparatus, although no stress phonemes nor phonemic pitch levels are necessary to describe the prosody; and (4) some of the consonants have a wide variety of phonetic representations. A pervading feature of the system, which might be considered a constant for the language rather than assigned to the list of properties of any phoneme or class of phonemes, is the weak articulation of consonants in intervocalic position as opposed to strong articulation initially and in clusters.
102. Most of the speech sounds occurring in the Northfork corpus are accounted for by what will be referred to as the standard phonemes. Certain other sounds, for reasons given in section 170, are considered to be external to the standard phonemic system. They are accounted for by what will be called the anomalous phonemes. These are treated briefly in 170 and are ignored throughout the rest of the grammar.

The standard phonemes are given in the tables below.

**Direct Phonemes:**

<table>
<thead>
<tr>
<th>Front-Groove</th>
<th>Plain Front</th>
<th>Plain Back</th>
<th>Back-Labial</th>
<th>Plain Labial</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>c</td>
<td>t</td>
<td>k</td>
<td>q</td>
<td>kw</td>
</tr>
<tr>
<td>Spirants</td>
<td>s</td>
<td></td>
<td>x</td>
<td></td>
<td>h</td>
</tr>
<tr>
<td>Nasals</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td>m</td>
</tr>
<tr>
<td>Semivowels</td>
<td>j</td>
<td></td>
<td></td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>High Vowels</td>
<td>i</td>
<td>y</td>
<td></td>
<td></td>
<td>u</td>
</tr>
<tr>
<td>Low Vowels</td>
<td>e</td>
<td>a</td>
<td></td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

**Indirect Phonemes:**

Junctures +

Suprasegmental Phonemes ( )

The symbol / is used to represent pause, or the absence of any linguistic phenomena. It is not considered a phoneme, but it occasionally functions as a significant
factor in an environment. It occurs only after junctures
and before the beginning of utterances.

103. The standard phonemes may be divided into two main
groups: direct phonemes, those which represent phonetic
events describable in terms of definite (but variable) man-
ner and position of sound-production; and indirect phonemes,
those which represent phonetic events describable in terms
of their effect on the production of the direct phonemes.
These classes are defined for Northfork by the listing of
their members in 102. The classes of standard direct pho-
nemes designated by the terms stop, spirant, nasal, semi-
vowel, high vowel, low vowel, front-groove, plain front,
plain back, back-labial, plain labial, and glottal are de-
 fined by the table of 102. More inclusive classes are as
follows:

Obstruents: spirants plus stops, except glottals
Resonants: semivowels plus nasals
Consonants: obstruents plus resonants plus glottals
Vowels: high vowels plus low vowels
Front: front-groove plus plain front
Back: plain back plus back-labial
Labial: back-labial plus plain labial
Oral: front plus back plus labial (i.e. all except
    glottal)
The following cover-symbols will be used to designate any members of the following classes of direct phonemes:

- V - vowel
- T - oral stop
- H - glottal
- C - consonant
- N - nasal
- f - juncture or #
- X - obstruent
- J - semivowel
- † - + and .

104. While all of the phonemes have a certain amount of scope (i.e. overlapping with adjacent phonemes with regard to their phonetic representations), it is decidedly limited in the case of the direct phonemes, so that these may be regarded as segmental phonemes, and thus represented in the phonemic writing system as segments. Although the scope of the juncture phonemes is somewhat wider, they too can economically be represented orthographically as segments. An utterance or any continuous portion of an utterance, viewed from the standpoint of the phonemic level and represented by a sequence of phonemic symbols, together with any accompanying phonemic symbols not written segmentally (i.e. supper-segmental phonemes) will be called a sequence of phonemes.

105. The sequences of direct phonemes of any Northfork utterance may be divided into syllables each of which is one of a limited number of types. A syllable which is not followed by /♯/ is one of the following types: CV, CVH, CVV, CVVH (and rarely CVVn). A syllable which is followed by
/ə/ is one of the following types: CV, CVH (uncommon), CVV, CVHC (uncommon), CVVHC (uncommon). All syllables begin in a single consonant (and /ə/ is always followed by a single C or by #). Consonant clusters (except the rare /nt/) always have /h/ as the first member, never have more than two members, and are either ambisyllabic or at the end of a syllable which precedes /ə/.

106. A phonemic word may be defined as a sequence of phonemes occurring between two junctures, or between # and a juncture. The types of sequences which occur as phonemic words are strictly limited in their composition. Except in definable environments involving following phonemes, all words end in /V/ (i.e. /ə/ is usually preceded by /V/). Words ending in /C/ have alternate forms, occurring outside these environments, which end in /V/. A word may contain any number of syllables from one up to about a dozen. One-syllable words consist only of the syllable type CVV (aside from the types CVHC, CVVHC, which have two-syllable alternants).

A phoneme (always a consonant) which occurs immediately after /ə/ will be said to be occurring initially. A phoneme occurring before /ə/ will be said to be occurring finally. A phoneme (always a consonant) occurring immediately between two vowels will be said to be occurring intervocally.
Any consonant may occur initially; any vowel may occur finally. Every consonant except /m s x/ occurs intervocalically. The consonant clusters which occur are: /hc ht hk hq hkw hqw hp hs hx hn hm hj hw m n o j w/ and rarely /nt/ (e.g., /teenentu'nu/ 'store'). The vowel clusters which occur are: /ii iy uu ee aa oo yi ui ei ai oi/, and, in a single word (/"ea"a/, an interjection), /ea/. That is, any vowel may be followed by itself or by /i/.

Examples of word types of one and two syllables are:

/nyy/ 'I' /nana/ 'man' /naana/ 'men'
/tyhpi/ 'stone' /paahpi/ 'blood' /"iwoo/ 'my head'
/maiwai/ 'will be' /"ahkwoo/ 'his head'
/"aikhwoo/ 'their heads'

107. Stress is an automatic feature of Northfork; its positions of occurrence are determined by configurations of consonants, vowels, and junctures.

a. Except under the conditions stated in 107b, c, the position of stress is determined as follows: for words ending in /V/, the syllable which contains the next-to-last /V/ in the word is stressed; for words ending in /C/, the last syllable is stressed. The occurrence of stress on syllables preceding the last stressed syllable of a word is determined in a similar manner: the syllable containing the second /V/ before the last stressed syllable of the word is stressed (if there is one); the syllable containing the second /V/
before such a stressed syllable is stressed; etc. Thus the incidence of stress on a given word may be predicted by counting backwards from the end of the word.

b. If the first syllable of a word does not meet the above conditions for being stressed, nor those of 107c, it nevertheless has a weak degree of stress.

c. Under certain conditions, stress may occur on the third syllable preceding a stressed syllable, with the intervening two syllables unstressed. (Except under these conditions, stress is on either the first or the second syllable preceding a stressed syllable.) There are no occurrences, however, of stress on the third syllable from the end of a word, with the intervening syllables unstressed. The conditions are as follows: (1) each of the three syllables preceding the stressed syllable must contain a single /V/ (not /VV/); (2) the vowel of the second preceding syllable must be identical to the vowel of at least one of the adjoining syllables; (3) the /C/ preceding the second preceding /V/ must be immediately preceded by /V/ (not by /C/); (4) the /C/ preceding the third preceding /V/ must be preceded by /C/ or by /ʃ/ (but not by /V/). (In the following examples, phonemic writing is used, except that stress, which is not phonemic, is indicated.)

/'acahɔm ynumu'hihti./ keeps turning it over.
/šuwaž, kwinunu'hihti./ is dizzy.
/qohtoh, tanah'i'goihti./ (pl.) remained standing.
/nahtah, kwininta'hyhy./ (several snakes) coiled up.
cf. /ñahtah, kwininta'htah./ (several snakes) are
coiled up.

not /nahn, tahkwinintahtah./ (condition 3)

/šuwaž, hihti./ fell (long distance).
cf. /šuwaž, cahi'hyhy./ falling (long distance).

not /šuwaž, cahi'hyhy./ (condition 4)

/šuwaž, waž, hima./ its act of falling.
cf. /puhit, waž, hyhy./ has become green.

not /puhit, waž, hyhy./ (condition 2)

d. There are four degrees of stress. Strong stress occurs on the last stressed syllable before /,/, unless the suprasegmental phoneme /θ/ (161) occurs on a preceding syllable; and with /θ/. Intermediate stress occurs on any other syllable which is determined as stressed by the conditions of 107a,c. Weak stress (unmarked in the examples above) occurs on initial syllables which do not meet the conditions of 107a,c for being stressed (107b). Any other syllable is unstressed.

e. A stress unit may be defined as a sequence of phonemes consisting of one to three syllables within the same (phonemic) word such that (1) the first of these syllables and
only the first one is stressed; and (2) there is either a following juncture or a following stressed syllable. From this definition, the definition of syllable (105), and the conditions for the occurrence of stress, it follows that every direct phoneme belongs to one and only one stress unit, and that any utterance (except one which is interrupted in the middle of a syllable) consists of a series of stress units (plus intervening and/or accompanying indirect phonemes). A syllable which has weak stress (107b) is always followed immediately by one with intermediate or strong stress (since if the following syllable were unstressed, the initial one would have intermediate or strong stress). Such a syllable constitutes a special type of stress unit, which may be called a weak stress unit. Weak stress units contain only one /V/. All other stress units may be called full stress units. They contain at least two vowels (unless they end in /C/ which is followed by /ʃ/) and never more than three; they may consist of one or two syllables, or, where the conditions of 107c apply, of three. The possible types (all of which occur) are: CVV(H), CVGV(II), CVGCV(H), CVVCV(II), CVVHCV(II), CVCVGV(II), CVGVCV(II), CVHG, CVVH (the last two occur only before /ʃ/).

Except where certain junctural phenomena (e.g. 15la(2)) intervene, the duration of the different types of full stress units is approximately the same at equal rates of speed of
speaking. Thus a /VV/ sequence is longer in a CVV stress unit than in a CVVCV one (under equivalent conditions). Under equivalent conditions, each vowel in a CVVCV stress unit has about 2/3 the duration of a vowel occurring in a CVCV stress unit.

The tendency to maintain equal duration of successive stress units, with equal time intervals between the onset of successive stresses, gives everyday monophonic speech a rhythmic quality of the type that ungifted English speakers can achieve only by reciting poetry.

106. In the description of the phonemes, reference is made to the occurrences of a phoneme in a particular environment or set of environments by means of the following notational device: the phoneme in question is written at the left of /; at the right of / is given the environment, with the position of the phoneme in the environment indicated by _ . For example, x/y-z is to be read, "the class consisting of those occurrences of /x/ which are preceded by /y/ and followed by /z/", or, "/x/ when preceded by /y/ and followed by /z/". Parentheses enclosing a symbol denote that the phoneme represented by that symbol may be either present or absent in the position indicated. For example, w/x-(y)z includes both w/x-z and w/x-yz .
110. The obstruents /c t k q kw qw p s x/ all occur after /f/ and /h/, and are fortis and voiceless in these environments. The oral spirants /s x/ never occur in any other environment, and are, with the exception of /a/, the only phonemes which do not occur both voiced and voiceless. (In some Mono dialects /s/ occurs after vowels, as a lenis spirant, usually voiced.) The oral stops /c t k q kw qw p/ occur also after vowels, where they are very lenis (often not completely stopped), and voiced except when followed by /V./, where they are facultatively voiceless, along with the following vowel.

/syjeepeci./

coward.

/\o1\e\=p\o./

my tongue.

The /hX/ clusters are similar in their articulation to X/ʃ/, differing from them only in length and, in the case of the stops, in that they are commonly preaspirated (see 131). (Note that /h/ is not always realized as a glottal spirant.) A /hX/ cluster is about twice as long as a single intervocalic consonant, at equivalent rates of speed, while X/ʃ/ is about the same length as or slightly longer than a single intervocalic /ʃ/.

The fortis-voiceless allophones of the oral stops, when followed by a voiced vowel, are usually weakly aspirated,
but there are occasional occurrences of fairly strong aspiration or, especially in the case of /t p/, lack of aspiration. The variation between aspiration and lack of it appears not to be conditioned either by stress or by the quality of the following vowel, but to be free, with a statistical predominance in favor of aspiration. The predominance is nearly absolute in the case of /c/, very marked for /k q kw qw/, and slight for /t p/, whose unaspirated occurrences are almost as frequent as aspirated ones. Aspiration of /k q kw qw/ often takes the form of a weak velar spirant.

/ciinpaʔa./  bird.
/tyhpi./  rock.
/kuna./  wood.
/qatuʔu./  no.
/ʔahkwoo./  his head.
/qwenaʔa./  far away.
/peaʔpi./  blood.

III. /c/. Like the other oral stops, /c/ occurs after /z/; /h/, and /V/. It is always followed by /V/. It is generally represented phonetically by an apico-dental stop with apico-alveolar groove spirant release. The lenis allophones (c/V-V), however, sometimes occur without the stop component.
\(c/\text{-h}\) and \(c/\text{-f}\) are always fortis and voiceless, and are almost always weakly aspirated, occasionally rather strongly aspirated. \(/c/\) is the only oral stop whose fortis allophones practically never occur unaspirated.

\(c/V-V\) is very lenis and is voiced whenever the following vowel is voiced, but is usually voiceless if the following vowel is voiceless (110). When voiceless, it still contrasts clearly with \(hs/V-V\), even when its stop component fails to take place, as it is shorter and much more lenis.

\(c/\text{-f}\) is pronounced with the tip of the tongue touching the back of the teeth, as in the case of \(/t\ n\)/, regardless of the quality of the following vowel. After a back vowel /\(yu\ a\ c/\), /c/ and /ho/ have this same position, unlike /\(t\ ht\ n\ hn\)/.

\(/\text{oiihpa}^\text{a}.\)/ bird.
\(/\text{cawui.}\)/ good.
\(/\text{acaanihtu.}\)/ bad.
\(/\text{ihuhi}^\text{i}^\text{i}.\)/ my mother's mother, daughter's child.

When /c/ and /ho/ follow a front vowel, the tongue is somewhat farther forward (having the same position as /\(t\ ht\ n\ hn\)/ in the same environments), with the point of the tongue extending to between the teeth.

\(/\text{ioiho}^\text{uhkahn}^\text{uhmu}.\)/ my index finger.
If the stop component does not occur for c/V-V, it is a blade-alveolar lenis spirant, slightly farther forward after front vowels than after back vowels (i.e. with the spirant component in the same position as it is when the stop component occurs). (Note that it contrasts in position with s/V-V in those dialects which have the latter, as the latter is always post-alveolar, like /hs/ in Northfork. In dialects which have s/V-V, however, there seems to be a greater tendency for the stop component to occur.)

112. /t/. /t/ occurs after /h/, /n/, and /v/, and is usually followed by /v/, although it may be followed by /+/ or /-/ under special circumstances (237). It is always articulated by the apex, and involves closure or near closure. The point of articulation and precise manner of articulation are functions of the environment.

/t/- and t/\- are always fortis and voiceless stops and are usually weakly aspirated, occasionally strongly aspirated, often unaspirated. Unaspirated occurrences are almost as common as aspirated ones. When followed by /-/ or /+/ instead of by /v/, /t/ is unreleased.

/t/-V is very lenis, usually not a stop, and is voiced whenever the following vowel is voiced, but is often voiceless if the following vowel is voiceless (110).

/t/- is pronounced with the tip of the tongue touching the back of the upper teeth, like /o n/ in the same
environment.

/ˈtɪl/  
tea.

/ˈtɑlɪpɪ/  
rock.

/toʊhpə/  
cloud.

Somewhat farther forward are /t/ and /ht/ after front vowels, regardless of the quality of the following vowel, with the tongue well against the back of the upper teeth, the point extending to between the teeth. Intervocalic /t/ in this position is usually represented by a lenis slit spirant, similar to /θ/ of English, but it often has momentary closure preceded and followed by friction.

/ˈhɪtɪl/  
cat.

/ˈitəwə/  
my teeth.

When following a back vowel and preceding a front vowel, /t/ and /ht/ are alveolar. t/V-V in this position is either a lenis slit spirant or a weak stop preceded and followed by friction; there is a somewhat greater tendency for closure to occur than in the farthest front position (i.e. after front vowel). There is often a suggestion of "r-like" quality.

/ˈjawahmati/  
a feminine name

(Looy Kinsman)

/ˈʃetŋpi/  
his shoulder.

Between back vowels, /t/ and /ht/ are post-alveolar.

In this position, t/V-V is usually a flap-r, often with a
slight spirantal quality. Occasionally two flaps occur in rapid succession, very occasionally more than two.

/tatap/. the sun.

/pahtahqai/. raccoon.

The four positions of /t ht n hm/, according to the environments in which they occur, are represented in the table below; the numbers 1 to 4 represent positions from front to back. (Position 4* may be farther back than 4, as suggested by the clearly perceptible difference in position of /j/ in these environments, and the general parallelism of positional allophony of /t/ and /j/.)

following vowel

<table>
<thead>
<tr>
<th>i</th>
<th>e</th>
<th>y</th>
<th>a</th>
<th>u</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>e</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>y</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>g</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4*</td>
<td>4*</td>
</tr>
<tr>
<td>u</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>o</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4*</td>
<td>4*</td>
</tr>
</tbody>
</table>

113. /k/. /k/ occurs after /p/, /h/, and /ν/, and is nearly always (237) followed by /ν/ (any /ν/ except /o/). It is a stop or lenis spirant, and is articulated by the
dorsum, with the point of articulation determined by the environment. It is in overlapping distribution with /q/; both phonemes occur before /a/, only /k/ before /i y u/, only /q/ before /o/.

/k/ and /h/ are always fortis and voiceless stops, and are usually weakly aspirated, occasionally rather strongly aspirated, occasionally unaspirated.

/k/-V-V is very lenis, usually not stopped, and is voiced whenever the following vowel is voiced, but is usually voiceless if the following vowel is voiceless (110). In position 4 (see below), it is always or nearly always a spirant, while in the other three positions it frequently has weak momentaneous closure preceded and followed by lenis velar friction.

Four positions of /k/ and /hk/ have been distinguished and are here labeled by the numbers 1 2 3 4 representing the positions from front to back. Position 1 is about the same as the position of English /k/ in key. Position 3 is close to that of English /k/ in took, and position 2 is about midway between 1 and 3. Position 4 is somewhat farther back than 3, and is farther back than any allophone of English /k/. /k/ and /hk/ have about the same position in the same environment, except that position 4 tends to be slightly farther back for /k/-V-V than for /hk/-V-V. /k/ is perhaps slightly farther back than /hk/ also in the environments
u-1 and o-1. The environments in which the various positions occur are indicated in the table below. /k/ and /hk/ do not occur o-u (231), -o, nor before /a/ when following /e/ or a low vowel. The shaded area in the table denotes those environments in which /q/ occurs. Squares which have both shading and a number represent the only environments in which the contrast k:q exists. Although k/o-e has not been found, its occurrence would not be inconsistent with the patterns of the system. There is apparently some difference between the positions of some of the allophonic sets given here with the same number, especially in the case of those given as position 3, but the differences are too slight to have been consistently perceived, so they are not mentioned. /k hk/ occur before /e/ after /a e/ only for /k/ which is initial in the phonemic representation of a noun root, e.g. /kejhiši/ 'sp. flower, and its seeds', /kehejjiši/ (distributive), /ahkejhiši/ 'his/her ...'. Aside from <kejhiši>, only one other root has been found whose phonemic representation begins in /ke/, namely <keewi> Nf 'olam shell'. (There is only one noun root, <qety> Nf- '(abalone shell)' (317m), which has a phonemic representation beginning in /qe/.)
### Table: Following Vowel

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>y</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>u</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>e</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>a</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>o</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Position 1:

- /kitiːʔiː/  
  - cat.
- /ʔikitiiʔiː/  
  - my cat.
- /ʔehkipə/  
  - acorn mush.
- /nopikei/  
  - house-having.
- /ʔikawai/  
  - will enter.

#### Position 2:

- /ʔyhkitiiʔiː/  
  - thy cat.
- /takitiːʔiː/  
  - our cat.
- /ʔejihiː/  
  - sp. flower.
- /ʔehkeejihiː/  
  - sp. flower, distributive.
- /ʔahkeewiː/  
  - his clam shell.

#### Position 3:

- /ʔjuːkiʔwa/  
  - fem. name.
- /ʔoki/  
  - right.
- /kyhkykei/  
  - foot-having.
/əciwutuhkykaa./
/əceehkyhti./
takyhky./
/əspanoohkykaa./
/əikuwa./
/hyjeekku./

Position 4:
/kuna./
/əykuwa./
puhkukei./
/əahkuwa./
/əcihcoukahti./

go stir it for her!
held it for him.
our feet.
go haul water for him!
my husband.
has recovered (from
illness).

/əciwutuhkykaa./
/əceehkyhti./
takyhky./
/əspanoohkykaa./
/əikuwa./
/hyjeekku./

Position 4:
/kuna./
/əykuwa./
puhkukei./
/əahkuwa./
/əcihcoukahti./

wood.
thy husband.
dog-having.
her husband.
pointed at it.

114. /q/. /q/ occurs after /ʔ/, /h/, and /v/, and is always followed by a low vowel /ə a o/. It is a postvelar stop or lenis spirant, depending on the environment. It is in overlapping distribution with /k/ (113).

q/ʔ- and q/h- are always fortis and voiceless stops, and are usually weakly aspirated, occasionally somewhat strongly aspirated, rarely unaspirated. The aspiration usually takes the form of a weak postvelar spirant.

q/v-v is a lenis postvelar spirant, voiced whenever the following vowel is voiced, but usually voiceless or voiceless-becoming-voiceless if the following vowel is
voiceless (/\u0110\u0151\u0110\u0102\u0132\u0111/). When voiceless, it contrasts clearly with /\u0110\u0151\u0110\u0102\u0132\u0111/, as it is shorter and much more lenis.

There is little variation in the position of /\u0101\u0132/; it is always postvelar, almost but not quite as far back as Arabic /\u0101/. The lenis /\u0101/ is slightly farther back than the fortis /\u0101/ and /\u0101\u0132\u0111/, and /\u0101/ and /\u0101\u0132\u0111/ are slightly farther forward after /\u0101/ than otherwise. The front vowels /\u0101\u0132\u0102/ are centralized before /\u0101\u0132\u0111/.

/qawaaaju\u0102\u0111/ horse.
/qawaaaju\u0102\u0111/ my horse.
/yhqaawaaaju\u0102\u0111/ thy horse.
/nahqaqa\u0102\u0102/ ear-having.
/ahqaqa\u0102\u0111\u0102\u0102/ strawberries.
/qo\u0102\u0102qahmahti\u0102/ has a stomach-ache.

The environments in which /\u0101/ and /\u0101\u0132/ occur are indicated in the chart of 113. With two exceptions, /\u0101\u0132\u0111/ occur before /\u0102/ after a high vowel only for /\u0101/ initial in the representation of a noun or verb stem. The two exceptions are: /tyqaqho/ 'rope', /pahnyqaahpy/ 'the Coast Range'. Only two forms have been found in which /\u0101/ or /\u0101\u0132/ occurs after a high vowel and before /\u0102/: /tyqee\u0102\u0102/ 'ap. plant (whose greens were eaten)', /puhiqety/ representing <puhi qety> Nf 'abalone shell' (312,317m). <qety> is the only noun root known whose representation begins in /\u0101\u0132/.

Only one verb root has been found which has /\u0101\u0132/ initial in
its phonemic representation: <qete>, occurring in <cah qete

'hi>/cah qete to drag noisily' (396,371d,242).

115. /kw/. /kw/ occurs after /¼/, /h/, and /V/; and is always followed by /V/ (any /V/ except /u/). It is realized as a stop or lenis spirant articulated by the dorsum, accompanied and followed by lip-rounding. It is in overlapping distribution with /qu/; both phonemes occur before /e a/ after high vowel or high vowel plus /h/; only /kw/ occurs before /l y o/, only /qu/ before /e a/ after /¼/ or low vowel or low vowel plus /h/. Neither /kw/ nor /qu/ occurs before /u/, and /kw/ occurs before /o/ only as the phonemic representation of u//h— (213). (/u// does not occur in the environment /h-u//.) Except for the form /suhkwa'ni/ 'cute', /kw kw/ do not occur after /u o/ in representations of single morphemes. /kw/ and /qu/ are both relatively infrequent in occurrence.

kw/¼- and kw/h- are always fortis and voiceless and are almost always aspirated, the labial release being voiceless at its beginning.

kw/V-V is very lenis, is usually a spirant rather than a stop, but occasionally has momentary closure. It is voiced whenever the following /V/ is voiced but may be voiceless if the following /V/ is voiceless (110).

Unlike /k/, /kw/ has little variation in position of articulation. In all environments except /-o/ (where it is
always preceded by /h/, its position is about the same as position 3 of /k/ (113). When followed by /o/, its position is the same as position 4 of /k/. In the table which follows, a number is given for each environment in which /kw/ and/or /hkw/ occur. Shading indicates the environments in which /qw hqw/ occur. Small squares in certain spaces indicate environments in which the occurrence of /kw hkw/ and/or /qw hqw/ is limited. Blanks indicate environments in which neither /kw hkw/ nor /qw hqw/ occur.

following vowel

<table>
<thead>
<tr>
<th></th>
<th>i</th>
<th>y</th>
<th>u</th>
<th>e</th>
<th>a</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td>prev</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>prev</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>y</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prev</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>y</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ing</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>u</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ing</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ing</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ing</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

/kwi^nna^n a./
eagle.
/
/atyyhkiityhy./
talking to him.
/muhkwi^n u./
elephant.
/
/a^n ekwihti./
smelled it.
/pahkw/. 
/fish.
/
/hwkykoi./
olitoris-having.
/əlkwyky./  my clitoris.
/cyhkwytə./  vigorously.
/puhkwycyhpkihti./  is blinking.
/əehkwy./  ground squirrel.
/əahkwvyky./  her clitoris.
/niikwehci./  our (excl.) grey hair.
/əykwochi./  thy grey hair.
/əhupijatuhkwee./  in his singing.
/taihkwaqahna./  what we (incl.) said.
/əykwqaqahna./  what thou saidst.
/əakuuhkwalti./  will bury him.
/niikwoo./  our (excl.) heads.
/əykwwoo./  thy head.
/əahkwoo./  his/her head.
/wohlkwono./  burden baskets here and there.

116. /qw/. /qw/ occurs after /ʃ/, /h/, and /v/, and is always followed by /a/ or /a/. It is a post-velar stop or lenis spirant, accompanied and followed by lip-rounding. It is in overlapping distribution with /kw/ (115).

qw/ʃ- and qw/h- are fortis and voiceless stops, and are almost always aspirated, usually weakly, the labial release being voiceless at its beginning.
qw/V–V is a labialized lenis post-velar spirant, voiced whenever the following vowel is voiced, but usually voiceless if the following /V/ is voiceless (110).

There is no important variation in the position of articulation of /qw/, except that the lenis allophones tend to be slightly further back than the fortis ones, as in the case of /q/. The position is the same as that of /q/ (114).

The environments in which /qw/ occurs are indicated by the shaded area in the chart of 115. /qw/ occurs after high vowel or high vowel plus /h/ only when it is initial in the representation of a morpheme.

/qwena?a./ far.
/taihqwena?a/hsu./ far from us (incl.).
/"yhqwena?a./ far from thee.
/"nohqwena?a./ very far.
/niihqwaahmahque./ beyond us (excl.).
/qwanykii./ nine.
/"yhqwaahmahque./ beyond thee.
/kuhqwapuhpukihti./ is boiling.
/"aceehquahti./ will hold it.
/"ahqwqaahna./ what he said.
/toqohqua./ rattlesnake.

117. /p/. /p/ occurs after /ʃ/, /h/, and /V/, and is usually followed by /V/, although it may be followed by /ʃ/.
under special circumstances (237). It is a bilabial stop or spirant.

\( p/\hat{t}^- \) and \( p/h^- \) are realized as fortis and voiceless stops, and are usually weakly aspirated, occasionally rather strongly aspirated, often unaspirated. Unaspirated occurrences are almost as common as aspirated ones. In the uncommon instances in which \( p/h^- \) is followed by \( /\hat{t}/ \) instead of by \( /V/ \), it is unreleased, except when \( /m/ \) immediately follows the juncture, in which case it is nasally released.

\( p/V-V \) is very lenis, and is usually a spirant, although momentary closure frequently takes place. It is voiced whenever the following \( /V/ \) is voiced but is often voiceless or voiced-becoming-voiceless if the following \( /V/ \) is voiceless (110).

No variation in the position of articulation of \( /p/ \) has been noticed.

\[
\begin{align*}
/pahii/ & \quad \text{three.} \\
/naapahi/ & \quad \text{six.}
\end{align*}
\]

110. \( /s/ \). \( /s/ \) occurs only after \( /\hat{t}/ \) and \( /h/ \), and is always followed by \( /V/ \). It is a fortis, voiceless alveolar groove spirant. (Voice lenis \( /s/ \) occurs intervocalically in some Mono dialects, corresponding to \( /ha/ \) of Northfork.) Aside from the difference in tongue-position in some intervocalic environments, \( /ha/ \) differs from \( s/\hat{t}^- \) only in that it is slightly longer (110).
/s/ is always postalveolar, but it is articulated with two different parts of the tongue, depending on the environment. /s/ is apico-postalveolar, regardless of the quality of the following vowel.

/syhmey/  one.
/saahsi/i/  ap. mushroom.
/silja/a/  saddle.
/socojape/  ant.

After back vowels, /hs/ is apico-postalveolar, as initially, regardless of the quality of the following vowel. In this respect it is somewhat unlike /t n/ (112,123).

/qohso/  fire.
/suuhsi/i/  Susie.
/*ynsono/  thy lungs.

After front vowels /i e/, the tongue position is forward, as for /t n/, but contact is made between the front of the tongue and the posterior edge of the alveolar ridge, rather than with the apex. Again, the quality of the following vowel makes no appreciable difference upon the position of articulation.

/*ihsono/  my lungs.
/*ishihi/  my guts.
/*ihsa/a/  coyote.
/*ehsipanakityhy/  grey.

In sequences of the type /svsT/ and /svs/ the vowel is usually voiceless, and, if it is a high vowel /i y u/,
the tongue usually remains in contact with the alveolar ridge during its articulation (see 140).

119. /x/. Like /s/, /x/ occurs only after /ʃ/ and /h/, and is always followed by /v/. It is a fortis, voiceless postvelar spirant. The phonemic sequence /hx/ represents a long fortis spirant. There is no appreciable variation in the position of its articulation, it being always postvelar, like /q qw/. Unlike /q qw/ (which have /k kw/ as counterparts), it has no counterpart in the prevelar and midvelar positions. It never occurs in any of the environments from which /q/ is excluded (113, 114), being always followed by a low vowel. Moreover, /hx/ is preceded by a low vowel everywhere except: (1) where /x/ is initial in a morpheme-representation and a preceding high vowel belongs to the representation of another morpheme, e.g. /sihxaahmu'u/ 'my cup'; (2) in the form /tuhxoo'noho/ which, although uttered by the informant, was said to be a Yokuts word not used in Mono.

/x/ is a rare phoneme, easily the least common of the direct phonemes, occurring with less frequency than other consonants even in the class of environments to which it is limited. Of the 25 morphemes in whose representations it has been found, six are place names, six are personal names, at least four are imitative elements, one of which contains an anomalous phoneme (171). The following is a complete
list of the forms containing /x/ which have been found in the corpus, written morphophonemically, with distribution class symbols (303). Those which always occur in conjunction with another morph are given with it, separated from it by a space.

//aahyahaٍxa ~ wū // L (a place name) (347,397b)
//wncahxahna ~ wū // 'at Hanzanita Lake' (place name)
//soo•ja•ahxeni ~ wū // L (place name)
//pajahxehna ~ wū // L (place name)
//meehmeehxaٍa ~ paah // L (place name)
//ponoohxoٍo// Nf ~ (place name)
//wa•na•mahxahtٍi// Nf ~ (feminine name)
//jawaahxati// Nf ~ (Lucy Kinsman's name)
//oo•mo•ohxati// Nf ~ (feminine name)
//pojoohxati// Nf ~ (feminine name)
//kiveehnehxo// Nf ~ (feminine name)
//xaahnaihni// Nf ~ 'Caroline' (feminine name)
//aa•wohxα// Nf 'gills'
/xootο// I (sound of snoring)
//xaiʔi// I (cry of the blue-fronted jay)
//wohxo// I (imitative sound occurring in a myth)
//xorrrohto// I (imitative sound occurring in a myth)

(171)
//oo•nohxai hna ñ // Nf 'sp. bird'
//seehxajuu // Nf 'white-oak mushroom'
120 Resonants

120. The resonants /j v n m/ all occur after /ʃ/ and /n/, and are fortis in these environments, like the obstruents. All of them except /m/ (cf. 216) occur after /v/ and are, again like the obstruents, more weakly articulated here than in in other environments. Unlike the obstruents, the resonants also occur after /ʔ/, where they are fortis. With the exception of /n/, which under special circumstances (239) may be followed by /ʃ/, the resonants are always followed by /v/.

All of the resonants (like all of the phonemes except /s x θ/) occur both voiced and voiceless. They are generally voiced; but in the environment /ʔ-V,ʃ/ they are voiceless, along with the vowel. The clusters /hj hw/, which occur only rarely, begin voiceless and usually end voiced; but they may be voiceless throughout if followed by /s/.
lizard.
our (incl.) pimples.
apple(s).
entirely.
elderberry.
my aunt.
my aunt (dim).

The clusters /hn hm/ are, at equivalent rates of speed, about twice as long as a single intervocalic consonant. In initial position, the nasals are as long as or slightly longer than intervocalic consonants, while the semivowels are about the same length as C/V–V.

/majamahqahuna./ (161)
maybe each-other-telling-that-obj.
Maybe they are talking about that.

121. /j/. /j/ occurs after /ť/, /ń/, and /ńv/, and is always followed by /ńv/. With the exception of the form /keajihsi/ 'sp. flower, and its seeds' (cf. 113), it has not been found followed by /ń/. It is a frontal semivowel, closely resembling English /y/ except in its farthest back position.

When occurring after /ť/, /ń/, or /ńv/, /j/ is more strongly articulated than when after /ńv/; but the difference is less readily perceptible than in the case of /ń/ and /ńń/.
\(j/-V\) tends to have wider aperture and more relaxed articulation than in other environments; the difference is very slight, and is only a relative one: in careless speech the degree of aperture is greater and the strength of articulation less, even for the fortis allophones. It is probably correct to state, however, that under equivalent conditions of speed and clarity there is a perceptible difference between \(j/-V\) and \(j/-V^+\).

/poipoi\ta\+jaqahti./ Poipoi is crying.
/taijaqahtytyhy./ making us cry.

/j/ has positional allophones corresponding to those of /t n/ (see 112) with regard to the general tongue position, differing from them only in that the apex does not make contact with the teeth or alveolar ridge, and in that the front is raised. When it is preceded and followed by /a o/, the tongue is slightly farther back than otherwise for /j/ between back vowels, and in this position, the apex is raised as well as the front, and often produces slight friction between itself and the alveolar ridge. Thus there are five positions to be distinguished, as follows: 1, after front vowel; 2, after /f/; 3, after back vowel before front vowel; 4, between back vowels except when both the preceding and following vowels are /a o/; 5, between /a o/.

/wija./ (1) (black oak) acorn.
/jaqahti./ (2) cried.
/wo\+ajeetyhy./ (3) has measles.
/myjy./ (4) gopher.
/qawaajuju./ (4) horse.
/paja./ (5) water.
/pojo./ (5) road.

In the articulation of /Hj/ clusters (which occur only after /V/) the tongue position is the same as for intervocalic /j/. The tongue reaches this position either at the same time as the onset of the glottal articulation or very slightly thereafter, and there is often (especially when the glottal is /?/) a glide toward that position before the onset of the glottal articulation. The /hj/ sequence has been found in the representations of only two morphemes: <hupuhja>, <pohja> (see examples below); it does not occur at morpheme boundaries. This cluster begins with glottal friction, which is followed in rapid succession by glottal friction plus voiceless fronto-palatal friction, then voiceless fronto-palatal friction alone, then voiced fronto-palatal semivowel. The length of this sequence is equivalent to that of other consonant clusters of Northfork, namely about twice as long as a single intervocalic consonant. The /?j/ cluster, which has the same length, begins with glottal stop accompanied by the same tongue position which /j/ would have in this environment if the /?/ were not present, followed by a semivowel in that position. (On voicing in clusters, see 120.)

/hupuhja./ elderberry.
/tycipohjatyhy./ stringing things (e.g. fish) on a stick.
/poqo*ja./ lizard.
/qahmihsu*ju./ trousers.
/qahmihsu*jukei./ having trousers.

.122. /w/. /w/ occurs after /f/, /u/, and /V/, and is always followed by /V/. It does not occur in the environment /u-u/ (215b), and is followed by /u/ only under the following circumstances: (1) when it represents //m// (216), e.g. /"iwupi./ //imupih // 'my nose.' (224b); (2) in the locative suffix /wu/ //wū// (231b, 347) which occurs in certain place names (and is of Yokuts origin); (3) in the masculine name /pahnaawu*u// /pahnaawu*// (227); (4) in the qualitative adverb /cawu/ 'good'. It is realized as a semivowel articulated by rounding of the lips and raising of the dorsum. In the speech of Annie Wenz (but not that of Lucy Kinsman) the sequence /ywy/ sometimes occurs without the labial component of /w/.

When occurring after /f/ or /u/, /w/ is more strongly articulated than when after /V/; but, as in the case of /j/, the difference is less readily perceptible than it is for /n T/. w/V–V tends to have wider aperture (of both the labial and dorsal components) and more relaxed articulation than w/f–V . The difference is very slight, and is only relative; in careless speech the degree of aperture is
greater and the strength of articulation less even for w/ʔ-V. It is probably correct to state, however, that under equivalent conditions of speed and clarity of pronunciation, there is a perceptible difference between w/V-V and w/Vʔ-V.

\[
/\text{hiihpaatai}+\text{wa}^*\text{ahnai}+\text{aiwaqatyhy}/
\]

What is Wa^*annai telling them?

The contrasts /uwi/; /ui/ and /owi/; /oi/ are relatively slight, since there is a tendency for an intrusive w-like glide in /ui oi/ in slow speech. At the same rate of speed, however, w/u-1 and w/o-1 are fairly strongly articulated, though they may practically disappear in fast speech. The contrast is perhaps most clearly marked by stress. In /uwi owi/ the two vowels are differently stressed, whereas in /ui oi/ the vowels share strong or intermediate stress (107). (In the following examples, strong and intermediate stresses are marked, even though they are not phonemic.)

\[
/\text{poih}^*\text{poi}/\quad \text{Poipoi. (masc. name)}
\]

\[
/\text{no}^*\text{wi}^*\text{jaht1}/\quad \text{moved away (to another dwelling-place)}.
\]

\[
/\text{no}^*\text{wija}^*\text{tyhy}/\quad \text{moving away.}
\]

\[
/\text{uui}^*\text{uih}^*\text{na}^*\text{a}/\quad \text{roadrunner.}
\]

\[
/\text{juwi}^*\text{tyhy}/\quad \text{warm.}
\]

\[
/\text{ju}^*\text{wihy}/\quad \text{has become warm.}
\]

There is little important variation in the position of the lips for /w/ in different environments; but there is variation in the position of the dorsum, the difference
between w/i-i and w/a-a, for example, being clearly noticeable in this respect; the tongue is farther forward in the former. Detailed observations of the differences in tongue position have not been made.

/kwiwihi/  north.

/ʔinawa/  my father.

In /Hw/ clusters the w-position of the lips and tongue is reached at about the same time as the onset of the glottal articulation, and there is sometimes a glide toward this position before the glottal articulation begins. This glide appears to occur less frequently than the corresponding phenomenon in the case of /j/. The /hw/ cluster occurs only in the representations of three morphemes (<pahwa>, <pihwi>, <qwatyyhwi>) and at the boundary of one combination (<wooh wooh>). This cluster has some glottal friction at its beginning, usually voiceless, overlapping with the semivowel, which usually becomes voiced before the beginning of the following vowel (120). The length of the stretch represented by /hw/ is equivalent to that of other consonant clusters of Northfork, i.e. about twice as long as a single intervocalic consonant. The /w/ cluster, which has the same length and occurs in the representations of some 15 morphemes or more as well as at some morpheme boundaries, begins with glottal stop accompanied by the tongue and lip position of /w/; this is followed by a semivowel in that
position, which is generally voiced except before /n./ (120).

/CEPTION.
/pihwi*i./
/aqwatyyhwihti./
/woohnwoohna*apy./
/hawwyhkhihti./
/he*wi*ihti./
/tawuhma*pi*wa./

my aunt.
sp. flower.
belched.
Sequoia gigantea.
light (in weight).
is limping.
our (incl.) pimples.

123. /n/. /n/ occurs after /s/, /l/, and /v/, and is almost always followed by /v/, but can be followed by /n/ or /n/ (239). It is an apical nasal, the point of contact of the apex being determined by the environment.

n/s- and n/l- are fortis, n/v-v lenis. The difference is more clearly and consistently perceptible than for the semivowels, but less so than for /t/, where voicing usually plays an added part in making the distinction. n/s- is usually slightly longer than n/v-, but not as long as /hn/.

/mani*ihi+na*ineehpa*ityhy./

That's what they are saying.

/nwyhkwa*na*ineehni./ we (excl.) said.

The various positions at which the apex makes contact for /n ln/, according to the environment, are the same as for /t ht/ (112).
/nopinihtu./
2 1
house-like.

/mani?ihi./
3
like that.

/nana./
2 4
man.

/hn/ is the phonemic representation of a long fortis
apical nasal (about twice as long as n/⁻V⁻). /h/ here has
no glottal articulation but (as with /hs hx hm/) is marked
only by the length and tenseness of the oral articulation.
/hn/ is voiced throughout except when followed by /व.़#,/
where it begins voiced, ends voiceless.

/əhnh̃aŋa/. his/her ear.

/əhpiŋ̃tyhna/. his/her arrival.

In the cluster /ⁿ/ there is glottal closure taking
place at about the same time as the apical closure (which
has the same position as if /ño/ were not present). The
apical closure often does not take place until slightly
later than the glottal, but sometimes precedes it very
slightly. The glottal release is followed by an apical
nasal, which is voiced unless the sequence /व.़#/ follows,
in which case it is voiceless, along with the following /व/.
The length of the stretch represented by /ⁿ/ is about twice
that of a single intervocalic consonant.

/ⁿaahpaⁿi/. apple(s).

/hoⁿopi/. bat.
In the sequences /өn+/, and /өn/, which occur only rarely (cf. 239), the glottis remains closed for a somewhat longer time than in /өn/ which is followed by /V/, and the tongue seems to move to position 2 (postdental) during the articulation of the nasal.

/caiqoөн+nohapityhy./ bluejay sitting on its eggs.

124. /м/. /м/ occurs after /ф/ and /л/, but (like /s x/) never after /V/ (216). It is always followed by /V/. It is a bilabial nasal, usually voiced.

It is always fortis, as it never occurs in the environments where lenis allophones of consonants occur (namely after /V/). м/ф— is usually slightly longer than a single intervocalic consonant, but not as long as /hm/. No variation in the position of articulation of /м/ has been noted.

/hm/ is the phonemic representation of a long fortis bilabial nasal (about twice as long as G/V—V ). /h/ here has no glottal articulation but (as with /hn hs hx/) is marked only by the length and tenseness of the oral articulation. Like /hm/, /hm/ is voiced throughout except when followed by /V.#/, where it begins voiced and ends voiceless.

/jyhmymaʊna./ acorn soup.

/nyhməy./ person, Indian.
In the /ɔm/ cluster, there is glottal closure taking place at about the same time as the bilabial closure. The bilabial closure often does not take place until slightly later than the glottal, but sometimes precedes it very slightly. The glottal closure is followed by a bilabial nasal, which is voiced except when this occurrence of /m/ is followed by /n/, in which case it is voiceless along with the following vowel. The length of the stretch represented by /ɔm/ is about twice that of a single intervocalic consonant under equivalent conditions.

/ɔmmeɔni./ masc. name.
/ɔmanhoɔmi./ buy it!

130 Glottals

130. The glottals /h ɔ/ are always preceded by /f/ or /v/, and are generally followed by /v/ or /c/, but the sequences /h n/ (225d) and /ɔ+/ (227b, 238) have also been noted. Of the consonants, any except /h ɔ/ may follow /h/, while only the resonants occur after /ɔ/. Except for a few isolated occurrences of /nt/, all consonant clusters in Northfork have /h/ or /ɔ/ as the first member.

In /v/v-v the mouth tends to stay in the position of the preceding vowel during the glottal articulation, especially when the following /v/ is stressed. As a result, there is
often a slight w-like glide after /i/ which follows /u o/ and precedes a stressed non-labial vowel and, less often, a slight palatal glide after /u/ which follows /i/ and precedes a stressed back vowel. These glides are much shorter and less prominent than the semivowels in the sequences /hjV/ and /hmV/; there is further difference where the glottal is /h/, as h/V-V is generally voiced.

/hupuŋihti./ dove. (verb)
pohihta. skunk.
/ŋiμuŋiŋi. my maternal grandmother.

The members of consonant clusters (except the rare /nt/) tend to be more simultaneous than successive in their articulation, though the length of a cluster is nevertheless about twice that of C/V-V. The clusters /hj hw/ begin with glottal friction and end with voiced semivowels, with an intermediate zone in which features of the two members overlap. In the clusters which have /ŋ/ as the first member /ŋn ʔn ʔj ʔw/, the articulation of the second member begins at about the same time as that of the /ŋ/, but continues after the glottal release. In /hʔ/ there is usually pre-aspiration of the stop, a feature assignable to /h/ in these environments, but this often fails to take place. The fortis and voiceless quality and the long duration of the stop are also taken to be functions of the /h/, and they occur simultaneously with the realization of the stop phoneme.
In the remaining clusters /hm hn hs hx/, the articulation of the two members in entirely simultaneous, the function of /h/ here being limited to the fortis quality and length of articulation of the sound represented by the other member of the cluster.

/"ipahwa./ my aunt.
/poqo"ja./ lizard.
/wi"me"ni./ masc. name.
/wynyhpv./ tree.
/maahnho./ there.

131. /h/. /h/ occurs after /t/ and /v/, and may be followed by any direct phoneme (103) except /h v/. Under special circumstances (225c,d) it can be followed by /j/ or /v/ (152, 153), but it is ordinarily followed only by direct phonemes. /h/ is classed as a glottal since some of its allophones have glottal articulation, and because it patterns with /v/. In some environments, however, /h/ has no glottal articulation.

/h/t/ is a fortis glottal spirant. It is sometimes voiced throughout if the preceding juncture phoneme is immediately preceded by a vowel. Otherwise it begins voiceless, but usually becomes voiced almost immediately. Initial /h/ is accompanied by the vocalism (first voiceless, then voiced) of the following /v/.
Intervocalic /h/, where the following /V/ is not followed by /ʠ/, is a lenis glottal spirant, usually voiced throughout, but occasionally partially voiceless. It seems usually to be accompanied by the vocalism of the preceding /V/ if the following /V/ is stressed (see 130), and often also if the following /V/ is not stressed. More often, if the following /V/ is unstressed, the vocalism accompanying /h/ is predominantly that of the following vowel; i.e. the transition (if the vowels are different) takes place near the beginning of the /h/.

In the sequences /hV+/ the /h/ and /V/ are pronounced together, as a voiceless vowel accompanied by glottal friction. The combination is often voiced at its beginning (i.e. voiced vowel accompanied by voiced glottal friction), and occasionally is voiced throughout if followed by /ʔ/ which is immediately followed by /ɬ/ (rather than by /ɬ/).

/ʔiţawyha./ my chin.
/qohsooʔmoho. Southern Sierra Miwok.
/qohsooʔmoho+kihmaht'i/ Miwoks are coming.

The clusters /hɬ/ begin with voiceless glottal friction accompanied by transition from the quality of the preceding /V/ to that of the semivowel. After the speech organs have reached the position of the semivowel, the glottal friction ceases and the semivowel becomes voiced and is immediately released to the position of the following /V/. (For examples see 121, 122.)
The /hT/ clusters are realized as long fortis voiceless stops, usually preaspirated. The length, fortis quality, and preaspiration are functions of /h/ in this environment. The preaspiration takes the form of a spirant of very wide aperture in the position of the stop. However, it is not always present; its presence or absence seems to be a matter of free variation, since checking fails to reveal any conditioning factors, either in the position of the stop, the quality of the preceding vowel, or the position of the syllables involved with regard to conditions determining stress. In all environments, presence of preaspiration is two to three times as frequent as absence of same.

The clusters /hs hx/ are long, fortis, and voiceless, and are never preaspirated. /hn hm/ are long, fortis, and usually voiced (123, 124). In these four clusters /h/ is represented only by the length and fortis quality of the articulation represented by the other member.

A further property of /h/, when followed by /V/ or /X/, is that the pitch of the preceding vowel is slightly lower than before other consonants, other conditions of the environment being equal. Before /hJ/, however, the pitch of vowels is the same as before consonants other than /h/. (It has not been determined whether the pitch of a vowel is lower before h/~j/.)
132. /ʊ/. /ʊ/ occurs after /ɻ/ and /ɤ/, and may be followed by vowels and resonants or, under special circumstances (227b, 233), by /ɹ/.

Unlike /ɾ/, /ʊ/ is always glottal in its articulation. It is usually realized as a glottal stop, but sometimes, when initial or intervocalic, it is realized as constriction of the glottis which approximates complete closure but fails to achieve it completely. The occurrence of constriction rather than complete closure seems to be more frequent in the environment /v-V/ than elsewhere; and the following /v/ in this sequence is usually accompanied by glottal stricture. /ʊ/V-V/ is occasionally somewhat longer than other intervocalic consonants.

/ʊʰpo./  cooking basket.
/hahkwisa*ityhy./  sneezing.
/wowaa./  Chukohansi Yokuts.
/wowaa+kihmahti./  Chukohansi are coming.

In the clusters in which /ʊ/ occurs /ʊ j w n m/ there is a tendency for the articulation of the resonant to begin at about the same time as that of the /ʊ/. The articulation of the resonant always continues after the release of the /ʊ/. In /ʊ j w/ there is often a glide toward the position of the semivowel before the glottal closure takes place. This is more common for /ʊ j/ than for /ʊ w/.

/wiʔmeʔni./  masc. name.
/haʔwohcaʔa./  fox.
/ʔahqahgoʔjo./  strawberries.

The sequence /ʔ+ʔ/ (227b, 238) is realized as a long glottal stop, generally held long enough to be equivalent in length to sequences of the type /ʔv+C/ (where /C/ is other than /ʔ/). The /ʔ/ is marked by the same phenomena which would be present in the sequence /ʔv+C/ (107, 151), except that its effect on the (non-existent) preceding vowel is absent.

/ipohsoʔʔapunih1i./  my partner sees it.

140 Vowels

140. The vowels /i y u e a o/ occur after consonants and may be followed by /ʔ/ or by any /C/ except /m s x/. In addition, the following vowel clusters occur: /ii yy uu ee aa oo yi ui ei ai oi ea/; the last of these occurs only in the interjection /eaʔa/.

Except for /y/, the vowels have relatively minor qualitative allophonic differences.

A syllabic nucleus consists of a vowel or a vowel cluster. With the exception of /ea/, whose second member has greater sonority, the two members of a vowel cluster have approximately equal sonority and stress, and are uninterrupted
by any laryngeal or sublaryngeal process. The length of a syllabic nucleus is conditioned by several factors; under equivalent conditions, the relative lengths of various types of nuclei are as follows:

1. /VV/ is about twice as long as /V/.
2. A /V/ which belongs to a two-vowel stress unit is about one-and-a-half times as long as a /V/ which belongs to a three-vowel stress unit (107e).
3. The syllabic nucleus of a closed syllable is slightly shorter than that of an open syllable.
4. A stressed vowel tends to be slightly longer than an unstressed one. It may be quite a bit longer if it is the vowel of an initial syllable with strong stress (107d), as in a two-syllable utterance.
5. A syllabic nucleus consisting of a single /V/ is often very short before /\#/ which is followed by a full stress unit, and is always extremely short before /\#/ which is followed by a weak stress unit (107e).

A syllabic nucleus consisting of /VV/ is correspondingly shorter before /\#/; it is only slightly longer than /V/C-0/ when followed by /\#/ which is followed by a weak stress unit.

6. Before /./ (especially /,/) a syllabic nucleus is quite a bit longer than before /c/; a one-vowel nucleus in the former environment is almost as long as
/V/ before /C/, and /VV/ before /'/ or /ˌ/ is correspondingly longer.

Vowel clusters are always voiced. Single vowels are fully voiced except in the environments listed below, where they are always or sometimes voiceless, or fading from voiced to voiceless, as specified.

- **hX-⁺** always voiceless in normal speech.
- **hX-⁺C** almost always voiceless.
- **hN-⁺** not only voiceless, but usually has no audible breath, although the mouth can be seen to be in the proper position for the /V/ involved.
- **h-⁺** voiceless or fading from voiced to voiceless, and accompanied by glottal aspiration.
- **h-⁺C** usually voiceless or fading, but occasionally voiced if phonemically different from the /V/ which precedes the /h/.
- **v-⁺** sometimes voiceless, but usually weakly voiced and accompanied by glottal stricture.
- **vT-ˌ** voiceless or fading from voiced to voiceless.
- **vJ-ˌ** fading from voiced to voiceless.
- **s-hX** usually voiceless when unstressed, often voiceless even when stressed; low vowels are voiced more often than high vowels in this environment.
- **hX-hX** (where the first /ʌ/ is other than /s/) occasionally voiceless, but usually voiced; the
tendency to be voiceless is greater if the /\v/ is unstressed. 

usually fades to voiceless at end.

Pitch of vowels is treated in 160, stress in 107. The vowels have a partial influence upon the position of surrounding /o ho t ht n hn k hk kw hv hs/, as described in 111, 112, 113, 115, 118.

The low vowels are always realized as vocoids, and the high vowels are realized as vocoids except in a very few environments. y/hs-ht/ and y/hs-t/ are represented by syllabic [s] in free variation with a high central vocoid. u/hs-hT/ and u/hs-t/ are represented by syllabic [s] accompanied by lip-rounding and raised dorsum in free variation with a high back rounded vocoid. i/hs-hT/ and i/hs-t/ are represented by a palatalized syllabic [s] in free variation with a high front vocoid. When a vocoid occurs for high vowels in these environments, it is usually voiceless (see above). Syllabic [s] is in all three cases the more frequent representation. i/hn-hT/ is usually represented by a palatalized syllabic [n], but sometimes by a high front vocoid.

141. /i/. /i/ may be preceded by any /C/ except /x q qw/, and by any /v/. It is the only vowel which can follow a /v/ other than itself in vowel clusters. It may be followed by any /C/ except /s x n/, by itself, or by any juncture phoneme.
There is little variation in quality among the phonetic representations of /i/. In most environments it is represented by front vowels, varying from high to lower high, usually closer to high. The environments in which this is not the case are mentioned in the following paragraphs.

\( i/c-(h)q/ \) and \( i/c-(h)qw/ \) are somewhat centralized and slightly lower than /i/ of most environments. The height is around lower high, and it is between front and central, with occasional occurrences closer to central than front. These allophones are very close in quality to the forward allophones of /y/ (142), and the contrast between these two phonemes when preceded by a front consonant and followed by /q hq qw hqw/ is very slight.

\( ^\text{awyhsiqoota}i./ \) scrape it!
\( /cyqoota./ \) dish.

\( i/hn-ht/ \) is often realized as a syllabic palatalized [n], the apex failing to be released from its point of contact for the vowel. /i/ is marked in this situation not only by the palatal quality of the syllabic nasal but also by the dental position of the following /ht/ and by the fact that no other vowel is ever represented by syllabic [n]. This phenomenon may also occur for \( i/hn-hc/ \) and \( i/hn-hs/ \), but it has not been noticed. The sequence /hniht/ has been found only in the representations of two morphemes, in both of which the vowel which precedes is /a/. As the /hn/ is
thus alveolar (123, 112), the apex, if it remains unreleased for the /i/, moves forward to dental position during the syllabic nasal.

/sahnihtiija’a./  watermelon.
/sahnihte’ni./  frying pan.

In sequences of the type /hsiHT/ and /hsiT/ the apex often fails to be released and the /i/ is realized as a palatalized syllabic [s]. If the vowel which precedes such a sequence is other than /i e/, the apex moves forward from its postalveolar position (118) as the front is raised, regardless of what follows the /i/.

/kihmahsi+/
/pihsihtoonaa’a./  having come  pistol.

142. /y/. /y/ may be preceded by any /C/ except /x q qw/, and by itself. It may be followed by any /C/ except /s x m/, by /i y/, or by /t/.

/y/ varies from high to lower high and from central to back. It is central after front consonants, back after all other consonants.

/syhmy’y./  one.
/pyyhsy’yhkihmaht/.  came alone.

Syllabic [s] (without palatalization or labialization) often occurs for /y/ in sequences of the type /hsyhT/ (especially where /T/ is /t/ or /c/), and occasionally in the
sequence /hsy/. In the former sequence the tendency for /y/ to be realized as syllabic [s] is greater if its position with relation to the following sequence is such that it is unstressed.

/ˈnohihsyhtəɪɪtɪ.ˈi/ is freezing.

/ˈnohihsyhtəɪɪtyhy.ˈi/ freezing.

/ˈiɡwahsy.ˈe/ my buckskin.

143. /u/. /u/ may be preceded by any /C/ except /x q kW qw/, and by itself. It may be followed by any /C/ except /s x n/, by /i u/, or by /ə/.

In most environments, /u/ is high to lower high, usually closer to high; it is slightly farther back than the back allophones of /v/; and the lips are somewhat more rounded than for English /uw/. Interconsonantal /u/ which is separated from an /a/ of the preceding or following syllable by a single consonant other than /w/ tends to have a lower tongue height, often as low as upper mid, although the lips seem to be as much rounded as for the higher allophones and more so than for the upper mid allophones of /o/ (146).

/u/hs-ht/ and u/hs-ɪ/ are usually realized as syllabic [s] accompanied by lip-rounding and with the back of the tongue raised. Occasionally, however, the preceding /a/ is released and the /u/ is represented by a vocoid, as in other environments.
/puhku./
/^apunihti./
/pojonahsu./
/^ahsuhueahti./

dog/pet.
saw it.
along the road.
likes it.

144. /e/. /e/ may be preceded by any /C/, and by itself. It may be followed by any /C/ except /s x m/, by /i e/, or by /ə/. It occurs with a good deal less frequency than any other vowel.

/e/ is generally front and mid to lower mid, usually closer to mid. It is somewhat higher, ranging up to upper mid, when followed by /i oi hci hti hsi ni hni əni/ (the sequences /eti eji esi ehji e*ji/ do not occur), and when preceded by /i/. Like /i/, it is centralized before /q hw qw hqw/.

/^ehkwy./
/nopiwee./
/nopikei./
/syjepeci./
/noheqwenə*nə./

ground squirrel.
in the house.
house-having.
coward.
very far away.

145. /a/. /a/ may be preceded by any /C/, and by itself. It may be followed by any /C/ except /s x m/, by /i a/, or by /ə/. It is the most frequently occurring of the vowels. /a/ is a low to higher low central vowel. It has a tendency to be higher when unstressed than otherwise, and in
careless speech it may range to as high as lower mid when unstressed. When followed by /i j/ or preceded by /j/ it is fronted and raised.

/nana./  man.
/mijawai./  will go.

146. /o/. /o/ may be preceded by any /C/ except /x qw/, and by itself. It may be followed by any /C/ except /s x m/, by /i o/, or by /ə/. It is realized as a back rounded vocoid varying in height from mid to lower mid, usually closer to mid, in most environments. It is somewhat higher, ranging up to upper mid, when preceded or followed by /w/, and perhaps to some extent also when preceded or followed by /m hm p hp/.

/pojo./  road.
/nowijawai./  will move away.

150. Junctures

150. The junctures / + . , . / are always followed by /C/ or by , and are the only phonemes which occur before . / . , / are generally preceded by /v/, but may be preceded by /h/; / + . / are usually preceded by /v/ but they occur after certain consonants under special conditions.
The junctures and are in general alike with regard to their effect upon the articulation of following consonants. The length and pitch of vowels in initial syllables is the same after */* , */ and , and under some conditions after */+. The junctures are also alike in that they all play the same role in the determination of the positions of occurrence of stress in preceding words (107).

The phenomena accounted for by the junctures are related primarily to what precedes, particularly the preceding vowel. The effect of each of the junctures upon the preceding vowel may be sketchily summarized as follows:

/+ preceding */ short and weakly articulated (often voiceless), with little or no drop in pitch (from the preceding level) if voiced.

*/ preceding */ always voiced, has pitch level 1+, and is held to full length or longer, with fadeout at end.

/* preceding */ has pitch level 2+, is held to full length or longer, with no fadeout.

// preceding */ short and weakly articulated (often voiceless), has pitch level 1 if voiced.

Note that, with respect to the preceding vowel, */+ and /* are very similar. They are in fact the same whenever the preceding vowel is voiceless. Nevertheless, they contrast clearly with each other in their effect upon that which precedes that *//, and often also in their effect upon the syllable which follows them.
Description of phenomena involving pitch is made with reference to a scheme which represents the pitch range of normal speech as extending from 1 (the bottom of the range) to 4 (the top of the range except in special circumstances). 2 represents the level at which utterances and sentences (i.e. sequences following \(/\)) or and extending to and including the next \(/\)) usually begin. Where \(/\) and supra-segmental phonemes do not occur, the pitch level stays around 2 until the last stressed syllable before \(/\), where it rises to around 3. The interval between 1 and 2 is greater than that between 2 and 3.

151. \(/\). \(/\) is the most frequently occurring of the junctures. It is always followed by \(/C/\) or \(/\), and is usually preceded by \(/W/\), although it is sometimes preceded by \(/C/\) under special circumstances (227b, 237-239). Some of the features for which \(/\) is held accountable are described below.

a. Length of preceding \(/W/\). \(V/C\rightarrow\) is shorter than \(V/C\rightarrow\), at equivalent rates of speed, if any of the following three conditions is present:

(1) The following syllable is a weak stress unit (107e). The brevity of the vowel in question is related to the tendency to maintain roughly equal time intervals between the incidences of intermediate and strong stresses. Under the condition stated, there are two
successive syllables without intermediate or strong stress; these two syllables combined cover about the same time interval as is covered by a single unstressed syllable which is internal in a word. The syllable following /+/ has roughly two-thirds the length of an internal unstressed syllable, while that preceding /+/ has roughly one-third that length. Thus the weak stress unit and the preceding full stress unit together have the duration of one usual full stress unit.

(2) The /C/ which precedes V/+-/ is //>. Under this condition the vowel is usually considerable shorter than an unstressed vowel occurring internally in a word, even when condition (1) is not present. Thus, if condition (1) does not hold, but (2) does, the usually regular rhythm of successive stress units is upset.

(3) The syllable which precedes V/C-+/ contains a vowel cluster. Under this condition, the /V/ is the third vowel of a three vowel stress unit. When not followed by /+/, the third vowel of a stress unit has roughly 2/3 the duration of a /V/ occurring as the second /V/ of a two vowel stress unit (and not followed by /+/). When followed by /+/, however, the third /V/ of a stress unit has considerably less duration, and the preceding two vowels are correspondingly longer. Where condition (1) is present, a vowel cluster preceding /+/ is shorter than one preceding /C/. (The other
two conditions do not apply to vowel clusters preceding /+/.)

If none of the above conditions is present, V/C−+/ and VV/C−+/ are nevertheless often significantly shorter than V/C−0/ and VV/C−C/ respectively.

b. Voicing of preceding /V/. V/C−+/ is voiced or voiceless depending primarily upon further conditions of the environment. The details are given in 140.

c. Pitch. Unlike the other junctures, /+/ has little or no effect on the pitch of the preceding /V/, although it does have a slight effect on the pitch of the /V/ (or /VV/) of the next preceding syllable. Unless a suprasegmental phoneme is present, V/−+/ has pitch level 2 if it is voiced. The nucleus of the next preceding syllable has a somewhat higher pitch, which could be represented as 2+ or 3−.

152. /\-. /\- is always followed by /C/ or by , and is usually preceded by /V/, but occasionally occurs after /h/ (225d).

Vowels preceding /\- are always voiced and are rather long, with the voice fading if # follows. The duration of V/C−-/ approaches that of VV/C−C/; VV/C−+/ is correspondingly longer. Although they are of comparable duration, VV/C−+/ and V/C−−/ clearly contrast with regard to stress and pitch.
V/C−/ has 1+ pitch (slightly higher than the pitch of V/C−/). VW/−/ has a pitch contour falling from 2+ to 1+.

In the sequences /Vh−/ (which occur only as representations of //Vh+/ 225d, 253), the phonetic realization is similar to that of VW/−/, except that the duration is shorter. In this environment /h/ is not represented by a glottal spirent, its function being to account for the stress on the preceding /V/ (according to 107a).

153. //,// is a phoneme of very infrequent occurrence. (It occurs only as the representation of //,// which, in turn, occurs only as the representation of <,>. //,// and <,>, however, have not been treated in this grammar.) It is always followed by /C/ or , and is usually preceded by /V/, although the sequence /Vh,/ has also been found (225c).

Vowels preceding //,// are always voiced and rather long, like vowels before /,/. Unlike the latter, however, V/−,/ does not have a fadeout of voicing, nor does it have low pitch. The pitch of V/−,/ is fairly high, around 2+ or 3, and is level. A vowel cluster preceding //,// apparently differs from single /V/ before //,// only in that it is about twice as long, and is stressed.

Sequences of the type /Vh,/ are similar to the sequences /Vh−/ (152), except for the difference in pitch and the lack of fadeout. The function of /h/ here is the same as in /Vh−/.
154. /./. /./ is always followed by /C/ or , and is usually preceded by /V/, but it sometimes follows /C/ (under the conditions indicated in 237).

/./ is similar to /+/ in that preceding vowels are short and weakly articulated (often voiceless). It contrasts with /+/ in the pitch contour and the degree of stress which it determines, and in some environments it also differs slightly in its effect on voicing and length of the preceding /V/.

The stressed syllable of a stress unit which is followed by /./ has strong stress, unless /''/ occurs on a preceding stress unit (461). (Where /''/ does occur on a preceding stress unit, /./ contrasts with /+/ in its effect on the following sequence. After /./ the pitch level is 2; after /+/, when there is a preceding /''/, the pitch level is 1.)

The pitch contour determined by /./ is a fall from 3 or 3+ to 1; but the fall may not reach level 1 if V/-./ is voiceless. (This pitch contour does not occur, however, if /''/, /''/, or /''/ is present in the preceding sequence, with no intervening /./ or , unless /''/ occurs on the last stress unit preceding /./.) The fall takes place on the syllable preceding /./ if it contains a vowel cluster. Otherwise it begins on the next preceding syllable. In other words, the falling pitch occurs on the last stressed syllable; if this is the next-to-last syllable and the /V/ of the last syllable is voiced, the latter has pitch level 1.
V/-./ is apparently always shorter than V/-C/-, at equal rates of speed, regardless of the other features of the environment. On voicing of V/-.-./ see 140.

Suprasegmental Phonemes

160. The suprasegmental phonemes /' ' ^ ' / accompany sequences of segmental phonemes of varying length, but never extending beyond an occurrence of /=./. /()' apparently always occurs with entire sentences. (A sentence, on the phonemic level, is a sequence of phonemes extending from /./ or the beginning of an utterance to, and including, the next following /./.) The sentences with which /()' occurs are generally very short. /' / apparently occurs only with the last stress unit of a sentence. /' ^ ' / have scope extending from the beginning of a full stress unit anywhere in the sentence to the end of the sentence. These four phonemes seem to be mutually exclusive, but there is a possibility that /' / and /()' can occur together. /' ^ ' / are written over the first vowel of the stress unit with which their scope begins. The symbol representing /()' is written such that its two components enclose the sentence with which the phoneme occurs.

Each of these phonemes occurs only as the representation of a single morpheme. Since the morphemes involved
are not treated as such in this grammar, some remarks on their meanings are included in this section, in so far as these meanings have been ascertained.

161. ///. This phoneme occurs with portions of sentences varying from a single stress unit to a whole sentence, but always including the end of a sentence with which it occurs. The scope of its coverage seems always to start at the beginning of a full stress unit.

It represents an intonation contour, and strong stress on the syllable with which its scope begins. Pitch level 4 occurs, with strong stress (sometimes extra strong) on the syllable with which its scope begins; /// is written over the (first) /V/ of this syllable. The pitch falls during this syllable if it contains /VV/, or on the next one if it does not. Succeeding syllables have pitch 1, with apparently the possibility of some slight variation about this level if there are several following syllables. If the beginning of this contour is on a stress unit preceding the last one of the sentence, the last one does not have strong stress and high pitch (as it does when no suprasegmental phoneme occurs). /// and ./ are distinguished from each other, after the occurrence of /// in a sentence, by the fact that the pitch level continues to be 1 after ///, whereas after ./ it goes back up to 2 (the usual level for the beginnings of sentences).
The meaning of the morpheme «» has to do with emphasis upon the form at which the contour begins.

162. /engers varies from single stress units to the whole sentences, but it always extends to the end of a sentence with which it occurs. The scope of its coverage seems always to start with the beginning of a full stress unit. It represents an intonation contour which begins with a fairly high pitch level (3 to 4) and which falls gradually from this level on following syllables, till it reaches level 1 at the end of the sentence. The beginning of the contour has intermediate stress (not strong stress, as with /), and the last stress unit in the sentence also has intermediate stress; there seems to be no occurrence of strong stress in a sentence containing /engers. The symbol for this phoneme is written over the (first) /V/ of the first stress unit included in its scope. Unlike /, /gers seems not to occur (i.e. to begin to occur) near the ends of sentences.

The meaning of «» is not clear.

163. /angers apparently does not vary with respect to the amount of a sentence over which its scope extends. Its distinctive characteristic is the pitch of the last stressed /V/ of the sentence, which falls from level 2 (instead of going up to 3). This fall is sometimes anticipated to a
slight degree on two or three syllables immediately preceding the last stress unit. This seems likely to be a matter of free variation; thus it may be correct to state that this phoneme occurs in only one position of a sentence. It is written over the first /V/ of the last stress unit of the sentence.

The meaning of <'> is unclear. It sometimes appears to be connected with lack of enthusiasm of the speaker regarding what he is talking about. Sometimes it appears to indicate concern or reflection.

164. /()/. This phoneme occurs with whole sentences, usually very short ones. It is marked by a shift of the entire pitch register to around two or more tones lower than that of a preceding sequence not occurring with /()/. The lowered pitch register is characterized also by diminution of the intervals between the pitch level. In addition, the volume of the voice is considerably less than that in surrounding sequences not enclosed in /()/; and the last stressed syllable before /./ does not usually have higher pitch than the preceding syllables (as it does when there is no accompanying suprasegmental phoneme).

The sentences occurring with /()/ are usually very short, often containing only a single word. In terms of its meaning, the sequence containing <() can also used to amplify or clarify some idea expressed in the
preceding sentence; or, most often, the sequence accompanying \(/()\) is a form like \(/^\text{iy}^\text{t}^\text{hy}\). 'saying' or \(/^\text{in}^\text{e}^\text{h}^\text{ti}\). 'says/said' or an expression of the like containing another verb of saying; these forms can be freely translated, 'one might say' or 'one would say', where reference is to the preceding sentence.

\(/^\text{ip}^\text{e}^\text{h}^\text{u}^\text{m}^\text{a}^\text{h}^\text{u}^\text{+}^\text{ny}^\text{y}^\text{h}^\text{m}^\text{y}./(^\text{in}^\text{e}^\text{t}^\text{y}^\text{h}^\text{y}\.) /

Maybe that's an Indian. (One might say.)

170 Anomalous Phonemes

170. Some sounds which have occurred in the speech of Lucy Kinsman and/or other Northfork speakers are, for one reason or another (as indicated below), considered not to belong to the standard phonemic system of Northfork Mono. These sounds are accounted for by what are called the anomalous phonemes. Some of them are treated briefly in this section; they have been ignored throughout the remainder of the grammar.

171. An apico-alveolar trill has been found in two imitative expressions, which themselves are somewhat anomalous morphemically, in that they do not (like most imitative expressions) occur with the suffixes <hna'> 1NF 'being which makes the sound ...' (316d) and <\textit{\textquotedblq}}\textit{i}\text{> 1V 'to make the
sound ...' (367c); i.e. they occur only as frustums (402b). One of these imitatives is accompanied by a very high pitch, with an intonation contour that is not found elsewhere in the language (176).

172. An alveopalatal affricate, long, fortis, and voiceless, occurs (intervocally) in an imitative word occurring in a mythological text. This word is accompanied by a distinctive intonation, and occurs only as a frustum. In accordance with its long, fortis, voiceless quality and the patterns involving other consonants, this sound can be represented by /hɔ/. It is not, however, considered elsewhere in this description.

173. In the text mentioned above, another element occurs which contains a long fortis voiced bilabial stop intervocally. The word occurs in a quotation uttered by the same character who utters the imitative expression mentioned in 172. The occurrence of length and fortis quality in conjunction with voicing is contrary to the standard pattern of Northfork consonants. The word in question is clearly a borrowing from Northeastern Mono or from Southern Paiute (in which long fortis voiced stops occur). Northfork has the cognate, with the corresponding stop voiceless. The Northfork cognate is /yhpety/ 'thy daughter'; the form occurring in this text might be rendered /yhaaty/. 
174. A velar nasal, long, fortis, voiced, intervocalic, and thus representable by /hn/, has been found in a hand-game song which appears to be of Yokuts origin.

175. A phoneme /l/ occurs in at least two songs, which may be of Yokuts origin. It also occurs in a few personal names of English origin (where it corresponds to English /l/), in which it varies freely with /n/. In these names, the variants containing /n/ are taken as standard.

176. A number of phonetic features involving pitch, intonation contours, modification of tone of voice, and/or anomalous stress patterns, which are associated with specific imitative expressions, are classed as anomalous and are not described in this grammar.

177. Another suprasegmental phoneme which has been classed as anomalous comes closer to the possibility of being considered standard, since it occurs somewhat more freely than those mentioned above. It may be referred to as allegro, and might be written with a raised line extending over those segments which it affects. A sequence of phonemes accompanied by the allegro phoneme is uttered at about double the speed of the adjacent syllables (which have a fairly definite rhythm established by the regular stress pattern). Phonemes accompanied by allegro have
phonetic features differing from those occurring when allegro is not present, mainly in the following respects: the obstruents and nasals usually occur with only an approach of the articulator to the point of articulation, or with very fleeting contact; /i e u o/ are more centralized, /a/ is higher, /i y u/ are lower. There is often extreme difficulty in determining the phonemic segments represented in such a sequence, but the determination of the phonemes present is usually aided by consideration of the semantic context and knowledge of the fact that the allegro phoneme has a tendency to occur with particular forms. The forms which have most frequently been found with allegro are /qatu’o/ 'no, not, none' and /awaañi’ihti/ 'wants/wanted it'; the latter often sounds almost as if it might be approximately rendered as * /awaihti/. Often, when one of these forms occurs with the allegro phoneme, the scope of that phoneme extends also to one or more syllables (in one or both directions) of contiguous forms, sometimes as far as to include three or four words in all.

The primary argument for considering allegro an anomalous phoneme is based on the following fact: wherever it occurs, it varies freely with zero, i.e. with its absence. Moreover, in every case in which the informant was asked to repeat, as closely as possible, a sequence containing allegro which had been recorded on tape, the repetition occurred without the occurrence of allegro. Allegro tends to occur
most commonly in conversation and in spontaneous, unpre-
meditated texts.

176. One juncture phoneme which has been classed as
anomalous is associated with interruption of an utterance
by the speaker in the midst of a sentence (often in the
middle of a word), under circumstances which make it appar-
ent that the speaker has changed his mind about what he
was going to say. Occurrences of this anomalous juncture
are followed by (what the speaker apparently chooses as)
an alternative beginning (and continuation) of the utterance
or some portion of the utterance. As in the case of allegro,
occurrances of this phoneme and the immediately preceding
sequence are never repeated by the informant, even immedi-
ately after she has heard their reproductions on the tape
recorder. The phoneme is marked by a shortening of the
time span covered by the preceding two or three segments,
becoming progressively shorter, with no change in the pitch
level.
CHAPTER TWO

MORPHOPHONEMICS

201. This chapter describes the relationships between the phonemes and morphophonemes of Northfork by means of statements defining the phonemic representation, or realization, of the morphophonemes, whose inventory is indicated below (202). Additional data, on distribution and on relationships to the morphemic level, are added wherever they are considered to be of particular interest.

As indicated in 1d, the morpheme is characterized by:
(1) one or more morphophonemic representations, or morphs;
(2) distributional properties, or membership in one or more distribution classes; (3) one or more semantic representations, or semes. Where a morpheme has more than one morphophonemic representation, each of them may be referred to as an allomorph of the morpheme. (Similarly, two or more semes of the same morpheme may be called its allesems.) (Allo)morphs and morphophonemes are enclosed in //...//.

A morphophoneme will be said to correspond to a phoneme if it is written with the same symbol as that phoneme, and is represented by that phoneme in at least some of its (morphophonemic) environments.
202. The inventory of morphophonemes includes one morphophoneme corresponding to each of the phonemes (102), plus the following:

- Oral Stop: $E$
- Nasal: $N$
- Semivowels: $J \quad \tilde{W}$
- Glottals: $\tilde{M} \quad ,$ $\tilde{M}$
- High Vowels: $\ddot{U} \quad Y$
- Reduplicatives: $R \quad R$
- Juncture: $-$

# represents pause, which is considered to be the absence of linguistic phenomena. It is not set up either as a phoneme or a morphophoneme, but sometimes functions as a significant factor in an environment. As it is not given a structural status, it is allowed to circulate freely among the various levels, representing the same thing whether enclosed by //...// or by //...// or by nothing. It occurs only after junctures, except //~//, and before the beginning of utterances.

203. The classification of the morphophonemes is based upon that of the phonemes (103), as follows: morphophonemes which have corresponding phonemes (201) belong to classes having the same names as the classes to which their
corresponding phonemes belong. The morphophonemes without corresponding phonemes are classed as indicated in 202.

204. The notational devices used in this chapter are described below.

a. The following morphophonemic cover symbols are used:

V - any vowel
C - any consonant
H - //h// or //h//
X - any obstruent
T - any oral stop
\* - any combination made up solely of //C - u//
J - any semivowel
I - any high vowel
A - any low vowel
\# - //+/+, //++, or //++
\$ - //\$// or //\$// or a glottal, or any combination of these

b. Except where they are too complicated, morphophonemic rules are stated in the following type of notation:

\[ x//y_1\ldots y_n-z_1\ldots z_n//w \]

This is to be interpreted as follows: The morphophoneme //x//, when preceded by the morphophonemic sequence //y_1\ldots y_n// and followed by the morphophonemic sequence //z_1\ldots z_n//, is represented phonemically by /w/. That is, the morphophoneme under discussion is given at the left. The environment for which the rule applies is given in the space between // and //, with the position in the environment
designated by -. The phonemic representation is given after /.
When - is not preceded or followed by any morphophonemic symbols, the rule applies for any preceding or following morphophoneme, respectively. If the rule applies for all environments, -- is written in the space for environment.

c. Wherever some special statement concerning an environment is needed, an asterisk * accompanies the appropriate symbol, and an explanation is given.

d. In some of the examples in this and the following chapters, morphs are separated by spaces (which have no morphophonemic significance). E.g. //ta ta//= //tata//.

e. Most morphs are continuous and follow one another in linear order. When this is not the case, the following devices are used if it is desired to indicate morph boundaries:

(1) Two dots following a morph-initial morphophonemic symbol indicate that that morphophoneme occurs (a) immediately before the second preceding morphophoneme, if the latter is a consonant, or (b) immediately after the second preceding morphophoneme if the latter is a vowel, or if the first preceding morphophoneme is //?//.

//mija o..hki//= //ni^jahki//

//o.chki o..hki//= //eh^xihki//
(2) Two commas preceding a morphophonemic symbol indicate that that morphophoneme occurs (a) immediately after the third following morphophoneme if the fourth is a consonant, or (b) immediately before the third following morphophoneme if the fourth is a vowel.

//a,~*ah~capana$/) = //a,~capana$ (319f)
//Rh,,* syy mano htu// = //Rhsyy*manohtu// (332)
//,h *yty*y// = //yhty*y// (384b)

210 Oral Consonant Morphophonemes

210. The class of oral consonant morphophonemes comprises one member corresponding to each of the oral consonant phonemes, plus three others of rare occurrence, //k j w//, and one other, //N//, which occurs in a single very frequently occurring morph, //Na// representing <Na> n0 'obj.' (337a)

Except where specified otherwise by the statements of 211-217, any oral consonant morphophoneme is represented phonemically by its corresponding phoneme.
211. The phonemes /k q/ are in overlapping distribution, as shown by the table of 113. Since /q/ never occurs before high vowels, and /k/ never occurs before /o/, //k/ is set up for all morphs whose phonemic representations have /k/ followed by high vowel, and //q// for those whose phonemic representations have /q/ followed by /o/. /k/ occurs before /a/ only in suffixes and in the interior of morph representations, never initially in the representation of a root morpheme. Thus root-initial /q/ which is followed by /a/ never alternates with /k/. In other than root-initial position, /k/ occurs before /a/ when preceded by high vowel or high vowel plus /h/, except in the case of two morph representations which have /q/ instead: /tyqahpo/ 'rope', /pahnyqahpy/ 'the Coast Range'. There are only two known roots whose representations begin in /ke/, /keejihi/ 'sp. flower or its seeds' and /keewii/ 'clam shell'; and two whose representations begin in /qe/, /qety/, which occurs in the combination /puhi qety/ 'abalone shell', and /qete/, which occurs in the combination /cah qete teh/ 'to drag noisily'. As with the roots with initial /qa/ (and all roots with initial velar stop), there is never any alternation involving the initial consonant for these roots with initial /ke/ and /qe/. In other than root-initial position, /k/ but not /q/ occurs when there is following /e/ and preceding high vowel or high vowel plus /h/, except in one form, /tyhqeeoi/ 'sp. plant (whose greens were eaten)'. This form, like the two cited
above which have /qa/ where /ka/ might be expected, are set up with //q/>. //jaqa// 'to cry' is the only morph having the alternation in its interior (235).

Thus the alternation /k/-/q/ occurs only for suffixes with /ke/-/qe/, /ka/-/qa/, /ku/-/qo/ (231a), and for //jaqa//. These suffixes are set up with //x//; the two roots mentioned above whose representations begin in /ke/ are set up with //x//. The alternations involving /k/ and /q/ are covered by the statements below.

a. k/A"-A/q
   //no pih ~ ke i//  house-having (396b)
   /nopikei/          (224a)
   //"ahpo ~ ke i//  basket-having
   /"ahpoei/
   //"a puh "ni kaa hpy// has gone to see it
   /"apunikaahpy/
   //pa hkwi ka kaa hpy// has gone fishing
   /pahkwikaqaahpy/

b. k/ox-u/q
   //wahahku//  two-obj.
   /wahahku/
   //syywanohku// ten-obj.
   /syywanohqo/ (231a)
212. /kw/ and /qw/ are in overlapping distribution, as shown by the table of 115. The only environments in which both occur are /i-e/, /i-a/, /y-e/, /y-a/, and /u-a/. Of the two phonemes, only /kw/ occurs before /i y o/, and it occurs before /o/ only as the representation of //w//. Neither occurs before /u/. As in the case of /k q/, /kw/ and /qw/ undergo no alternation if they are initial in representations of roots. There are only two suffixes whose representations begin in /hkw/-/hqw/, aside from those in which the stop represents //w//; (there are no suffixes having representations beginning in /kw/ or /qw/.) These two suffixes are <hkwa> vWg 'remote future' (376), and <hkwa'> nNp 'plural' (322a). The sequence /kwe/ occurs only when this /kw/ is the realization of //w//. Thus there is no statement needed for the alternation of /kw qw/ representing //kw qw// except before /a/. The only forms involved are the suffixes mentioned above. //kw// is set up for these, paralleling the treatment of /k/-/q/ (211).
kw//A"-a/qw

/*a puh "ni hkwa hti// will see it
/apunihkwahti/
//pa hkwi k a hkwa hti// will go fishing
/pahkwikahqwahti/

The distribution of post-vocalic //kw// and //qw// is indicated in the table of 213.

213. /w/-/kw/-/qw/ represent //w//. Aside from the two suffixes beginning in //hkwa// mentioned in 212, /kw/ never occurs before low vowels except as the representation of //w/>. The morphophoneme //w// is set up for the three forms which contain the sequence /hw/: //pahwa// 'father's sister; uncle's wife', //pihwi// 'sp. flower', //qwatyhwi// 'to belong'. In the statements a and d below, h signifies //h// or //K// (225).

a. w//Th-//kw

//wyh weni// to hang (smthg.) up
/wyhkweni/
//qi wehoi// my grey hair
/qiwehoi/
//?h wehoi// thy grey hair
/?hkwwehoi/
//waqa// to say
//"iwaqa hna//
//"iwaqahna/
//"yhw waqa hna//
//"yhwkwahna/

b. w//Ah—I/qw
//cah wyna "i//
//cahywyna"i/

to knock down

//"i woon //
//"iwoo. /
//"yhw woon //
//"yhwkwoo. /

my head.

(225)

thy head.

d. w//Ah—e/qw
//"ah wehci//
//"ahqwehci/
//no ph ~ pa"h woon. //
//nopipa"ahqwee./

his grey hair

over the house

e. w//Ah—a/qw
//"ah waqa hna//
//"ahqwaqahna/

what he/she said

f. w// -- /w
//qwatyyhwi//
//qwatyyhwi/

to belch
These statements are summarized in the following table:

<table>
<thead>
<tr>
<th>Preceding</th>
<th>i</th>
<th>y</th>
<th>u</th>
<th>e</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
</tr>
<tr>
<td></td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
</tr>
<tr>
<td></td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
</tr>
<tr>
<td></td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
</tr>
<tr>
<td></td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
<td>kw</td>
</tr>
</tbody>
</table>

kw : //hw// represented by /hkw/

qw : //hw// represented by /hqw/

\_ : //kw// and/or //hkw// occur

\~\_ : //qw// and/or //hqw// occur

Note that when /kw/ occurs after /In/ and before /a/ it can automatically be known that it is either (a) not the initial phoneme of a root, or (b) the initial phoneme of a root, representing //w//. Where /qw/ occurs in the same environment, it must be initial in a root, and represent //qw//.

//\textasciitilde{y}h\textasciitilde{wa}h\textasciitilde{n}\textasciitilde{i}h\textasciitilde{n}i// thy barrel

//\textasciitilde{y}h\textasciitilde{k}w\textasciitilde{a}h\textasciitilde{n}\textasciitilde{i}h\textasciitilde{n}i//

//\textasciitilde{y}h\textasciitilde{w}a\textasciitilde{h}k\textasciitilde{i}h\textasciitilde{t}a// on this side of thee

//\textasciitilde{y}h\textasciitilde{k}w\textasciitilde{a}h\textasciitilde{k}i\textasciitilde{h}t\textasciitilde{a}//
214. The alternation /j/-/t/ corresponds to that of /w/-/kw/-/qw/, but is simpler, as there is only one stop taking part in the alternation. The morphophoneme //j// is set up for the two forms in which the sequence /hj/ occurs: /hupuhja/ 'elderberries'; /ci pohja/ 'to string (fish) on a stick'.

a. j//h-//t

//i jatuha "i hti// spoke to me
//ijatuhiti/
//nah nah jatuha "i hti// spoke to each other
//nahnahtatuhiti/

b. j//-/-j

/hupuhja// elderberries
/hupuhja/

215. Intervocalic //v// is sometimes represented by /∅/, according to the following statements.

a. In the environments //V-V// and //Vh"-V//, except (1) //y(h")-i//, (2) where the preceding //V// is //i// and the following //V// is other than //i//, (3) //VV(h")-V//, (4) //V(h")-VV//, //w// is represented sometimes by /w//
(unless 215b applies), sometimes by /ø/. The tendency for //w// to be represented by /ø/ rather than /w/ is somewhat greater if its position with regard to the following syllables up to the next occurrence of //f// is such that, were it represented by /w/, this /w/ would be the beginning of a stress unit (107e). This is especially the case if the preceding and following vowels are identical.

//pa hwki wihsi // fish-line.
/pahkwiihsii./

//pa hwki wihsi Na // fish-line-obj.
/pahkwiihsina./ (217)

b. w//u“-u)/ø
//ouhmuujuju“wuh.// (a place name)
/ouhmuujujuu./ (231b, 224b)
(The sequence //wu// occurs only in the representation of <wu> nL- ‘at’ (348a), which is always preceded by <”>.)

c. In the environment //i-a//, //w// is usually represented by /j/, but occasionally by /w/, if its position with regard to the following sequence up to the next occurrence of //f// is such that its phonemic representation falls at the beginning of a stress unit; if its position is otherwise, it is always represented by /w/.

//pa hsiwah Py// sand
/pahsijahpy/
//pa hsiwh noo kaa wai// will go haul sand
/pahsiwhnooqaawai/ (211a)

216. Intervocalic /m/ does not occur. In those environments where it might be expected, /w/ occurs instead.

a. m//V-V/w
   //°yh mah "ja// thy hand (224a)
   //°yhmaja//
   //°i mah "ja// my hand
   //°iwaja/

b. m//Vh"-V/w
   //wijah "mahqa// to give acorns to
   /wijawaha/

c. m//º-V/w
   //pahnihochna' my// Mexicans
   /pahnihochna'awya/ (227o)

217. //N// occurs only in the representation of <Na> n0 'obj.' (357a). Its phonemic realizations are covered by the following statements:

a. N//º-/a  (cf. 227g. i.e. N'/--/-?a)
   //pahnihochna' Na// Mexican-obj.
   /pahnihochna'a/aa/
b. YN//--/yn-a (232)
   //wijah pY Na// (black) oak-obj.
   /wijahpyma//--/wijahpa//
   //pahnyqaahpY Na// the Coast Range-obj.
   /pahnyqaahpyma//--/pahnyqaahpa//

c. ykn//--/a (225m, 233)
   //mija tyk Na// going-obj.
   /mijataa/
   //"i kwyytyk Na// my friend-obj.
   /"ikwyytaa/

d. N//--*/n "except where 217a, b, or c applies.
   //puhku Na// dog-obj.
   /puhkuna/
   //wijah Na// black oak acorns-obj.
   /wijana/ (224o)

220. Glottal Morphophonemics

220. The glottal morphophonemes are //"h n //. Those without corresponding phonemes //h // are defined in 225, 226, and 227 respectively. Except where specified otherwise by the statements of 221-224, or 236, //"h// are represented phonemically by their corresponding phonemes.
221. /s x/ do not occur intervocally. Where they might be expected, one finds instead /hs hx/, as specified by the following statements.

a. φ//V(−)−s/h
   //°yh sono//
   //°yhsono/
   //°i sono//
   //°ihsono/

b. φ//V−x/h
   //°i xaahnu' //
   //°ihxaahnu'°u.//

222. °//−x/h
   //mija °..hki hti// (204e) went hesitantly (373a)
   /m°ja:hkihti/
   //°a wyy °..hki hti// took it hesitantly
   /°awy°yhkihti/
   //jaqa °..hki hti// cried hesitantly
   /jahqa:hkihti/
   //°ehki °..hki hti//
   /°ehki:hkihti/
   //°ehki:hkihti//

223. Phonemic sequences of the type /HH/ do not occur.

a. H//−H/φ
"/³yh hahma' .// thy older sister.
/³yhahma³a./
/³a³awə/ his horns
/³awə/
/ha³kwihsa³i³ki³hti// is sneezing inter-
/ha³kwihsa³i³ki³hti/ mittently

b. h/°/Ø
/ty³pah ' .// píphon nuts.
/ty³pa³a./

224. /h// is represented by /Ø/ in a few additional environments, as specified by the following statements.

a. h/°/Ø
/no pih' weeh .// in the house. (396b)
/no³piwee./ (224b)

b. h/°t/Ø
/³i³no pih .// my house.
/³inopi./

c. h/°N/Ø (217)
/³i³no pih Na// my house-obj.
/³inopina/

d. h/°'c/Ø **: any juncture, or //
/nohi³hmukih pY// object with very
/nohi³hmukihpy/ sharp point
225. The special "h" morphophoneme //h// occurs finally in all morphs containing it. Most of these morphs represent locative morphemes (340), but there are some which represent morphemes of other classes:

//tyh// representing <tyh> vNf,1N (319a,b)
//neh//<neh> vT 'while ...ing' (356b)
//hnuh//<hnuh> vNr+ (319a)
//ehh/, /nehh//<ht> vIN (379b)
//qeh//<qeh> hN indef. pron. base (328)
//hsy'yah//<hsy'yah> F 'only' (395)
//tjahn//<tjahn> E,F 'also, anyway, okay' (392b, 393b, 395)
//jaqah//<jaqah> C,Ge 'perhaps, apparently' (393)
//kwytyah//<kwytyah> Mf 'friend' (318)

The two final morphophonemes //N// of the morphs containing //h// are realized phonemically by sequences of the types /NhV/, /Nh/, /N/. In the /NhV/ realization, the vowel which follows the /h/ is the same as that which precedes it, and is thus predictable. The special morphophoneme //h//, differing from //h//, must be set up since there are other morphs ending in //Nh// whose phonemic realizations exhibit a different type of alternation (224). The possibility of
setting up //Vhv// to cover this alternation is ruled out by the fact that there are morphemes with morphs ending in //Vhv// whose phonemic realizations have /Vhv/ in all environments, for example:

<qohsoo'moho> Mf 'Southern Sierra Miwok'
<ceehpahniihi> Mf 'magic; magician'
<mowahu> T 'now'

//Vh// is realized as /Vhv/ only when followed by //// or //+#//. Otherwise the sequence is realized as /Vh/ or /V/. The statements which govern the phonemic realization of //h// are as follows:

a. h///V1*/-///h/V1/* except where 225b applies

//mijatYh.// going.
/mijatyhy.//

//nopih'pa'ahtyH.// that which is on top of the house. (224a, 2251)
/nopipa'ahtyhy.//

//typihnahtukuH.// onto the ground.
/typihnahtukuHU.//

b. h///omu-///ho bucket.

//'ahnapanoohnuH// (231a)
/'ahnapanoohnho.//

c. h///-///h (153)
/mijatYH,.// going,
/mijatYH,.//
d. h/–t+/h (152, 253)
   //nymahmah++cipuhihti// is climbing on me
   /nymahmah•cipuhihti/
   (216a)
   //nyhohtuneh++mijatyň.// going with me.
   /nyhohtoneh•mijatyhy.//
   (231, 225a)

e. h/’l/=+/h/’l/ except where 225f applies
   //nyhohtuneh#mijatyň.// going with me.
   /nyhohtonehe#mijatyhy.//

f. h/o=+/h/ho
   //añpanoonohnuñ+#/ bucket
   /añpanoonohnoho+#/
   (231a)

g. h/–+/h/∅
   //yhmah~ja~hmañ•amah~tyhoi.// dig with your
   /ymajahma•awayhoyi./ hands! (224a, 252)
   //hahqaa•ijoñ•ahpukut•pihtytyň.// whose dog is this
   /hahqaa•ijo•ahpukut•pihtytyhy.// coming? (252)
   //nymahmah+hohpohpo•cipuhihti.// a spider crawled
   /nymahmahohpohpo•o+cipuhihti.// on me. (227a)

h. h/–+/J/∅
   //kihmahkwañ•wahkihta.// come ye hither!
   /kihmahkwawahkihta./
   (212, 252)

i. h/–+/C“/h C“ not H or J
   //iñmah•ja•hmañ•nyvihti// is walking on my hand
   /iñjahmahnyvihti/
   (216a, 224a)
is climbing on me
(216a, 252)
went with me.
(231, 252)
on top of my acorns,
a bag. (224a, 252)

went through the
water (251)
here are acorns
(2251, 224b)

with whom
among those going

into the handkerchief.
(227d, 225a)
that which is on top
of the house (224a)
easterners (i.e.
the Northeast Mono).
m. yʔa//--/a  (217)
   //mijatyʔNa//    going-obj.
   /mijataa/
   /ʔikwytyʔNa//   my friend-obj.
   /ʔikwytyaa/

226. Another special "h" morphophoneme is necessary for an alternation of the type /V-/VhV/ (with no /Vh/ alternant), with the conditions of the alternation differing from those of //h// and //ʔ//. This morphophoneme is symbolized as /'//, and occurs in <hkwa'> nVp (322) and in four verbal suffixes: <hky'> vVt (372a), <ki'> vVf, <hmi'> vVf, <hti'> vVf (377b).

   a. /'//V/-./hV/_
      //ʔajqahsitihky'.//    make her blow her
      //ʔajqahsitihkyhy.//   nose!
      //ʔapuh"niki'.///    come see it!
      //ʔapunikihi./

   b. /'//--*/∅  *except where 226a applies
      //ʔanapoohky'kaa./    go have his hair cut!
      //ʔanapoohkykaa./
      //ʔapuh"niki'hti./    came to see it.
      //ʔapunikihti./
227. The special glottal stop morphophoneme //ʾ// occurs in many free noun roots (318) and several suffixes, three of which have only //ʾ// as their morphophonemic representation, another of which has an allomorph consisting only of //ʾ//. //ʾ// occurs finally in all morphs containing it. The noun roots ending in //ʾ// belong to a limited number of semantic categories (but not all members of these categories end in //ʾ//), namely: (1) kinship terms (some of which have freely varying allomorphs differing by presence or absence of final //ʾ//); (2) personal names (both native and introduced); (3) other terms which refer to various types of people; (4) non-human animals; (5) plants, foods derived from plants, parts of plants (as seeds) used for food; (6) artifacts introduced by European culture, plus //ʔoonoʾ// 'gold'. The suffixes containing //ʾ// are the affectives //oiʾ// and //kitaʾ// (335), the limited noun suffix //ʾ// (331b), the allomorph //piʾ// of the absolutive suffix (333), the agentive suffixes //htyʾ// and //ʾ// (319a), the nominalizing suffixes //h..ʾ// (319b) and //hnaʾ// (319c), the nut suffix //ʾ// (332), and the allomorphs //h..ʾ// and //ʾ// of the place suffix (334).

Sequences of the type //ʾ// have the phonemic representations /v/, /vʊ/, /vʊv/, depending on the morphophonemic environment in which they occur. In the last of these, the two vowels are identical, i.e. the second is predictable.
The special glottal stop morphophoneme "/'/' is necessary since there are morphophonemic sequences "/\text{V}^o\text{V}'/' which are always represented phonemically by "/\text{V}^o\text{V}'/' (e.g. internally in a number of noun and verb roots, and finally in allomorphs of some prefixes), and there are morphophonemic sequences of the type "/\text{V}^o\text{V}'/' (with both vowels the same), always represented by "/\text{V}^o\text{V}'/', occurring, among other places, finally in some noun roots, e.g. "/\text{nato}^\circ\text{V}^o\text{V}'/' 'shirt', "/\text{kutu}^\circ\text{V}^o\text{V}'/' 'stick'.

/\text{kutu}^\circ\text{V}^o\text{V}'/ stick.
/\text{kutu}^\circ\text{uhci}'/ stick-diminutive.
/\text{kutu}^\circ\text{una}'/ stick-obj.
/\text{aahmu}'/ boss.
/\text{aahmu}^\circ\text{hoci}'/ boss-dim.
/\text{aahmu}^\circ\text{Na}'/ boss-obj.

The statements defining the phonemic representation of "/'/' are given below.

a. "/\text{V}^o\text{V}'/' "/\text{V}^i\text{V}'/' except where 227b applies
/\text{kiti}^\circ\text{i}'// oat.
/\text{kiti}^\circ\text{i}'/
/\text{yney}'+\text{kihmahi}'// A white-man is coming.
/\text{yney}^\circ\text{y}'+\text{kihmahi}'/
/\text{Rhtuwahi}'+\text{Rhnahma}^\circ\text{waaicity}'// the children are
/\text{tuhtuwahi}^\circ\text{i}'+\text{nahnahma}^\circ\text{waaicityhy}'// hiding from each other. (241, 225a)
/typah/. // pinyon nuts.
/typaʔa/. 

b. '/+io/ of 238.
/ʔi poḥso’ + ʔa puh ʔi ni hti// my partner sees it
/ʔi poḥso’+ʔapunihti/ (224a, 251)

c. '/V1(h)-(~)C"/ʔV1 "any //C// except //N//
/tahqaahti’pY../ sourberry bush.
/tahqaahti’ipy../ (332)
/ʔyny’nihtu./ like a white-man
/ʔyny’ynihtu./ (396b)
/qanaaq’a’ymy../ Negroses.
/qanaaq’a’awy../ (216c)
/tunah’hoi/ with pine nuts
/tunə’ahoi/ (223b)

d. '/V1-(~)hC"/ʔV1 C" any //C// except //T//
/mahsihkata’ʔmahtukuʔ/ into the handkerchief.
/mahsihkata’ahmahtukuhu/ (226, 348a, 396b)
/ʔyny’hṣy’yʔʔ/ only a white-man.
/ʔyny’yhsy’yhy./

e. '/-hT/∅
/kitiʔ’hoi’/ oat-diminutive.
/kitiʔ’hoiʔi/
/Rhhyhi’ʔhoi’hqo’jо/ darn old women.
/hyhyhi’hqi’hqo’jо./ (223a, 335)
f. '//' (~) /∅
   //a-hma-pa-atate's-ihnu//: church. (421b, 337a,
   //a-hma-pa-atate's-ihnu: // 319a, 225a)
   //qah-nih-pah-nah'iht//: (bell) rings.
   //qah-nih-pah-nah'iht: // (387a)

g. '//' ~ N/∅ (217a)
   //kii'i'Na.// cat-obj.
   /kii'i'aa.//
   //Rhtuwa-hpi'Na.// children-obj.
   /tuhtuwa-hpi'aa.//
   //'ny'Na.// white-man-obj.
   //'ny'aa.//

h. '//' ~ y/∅ (331a)
   //'ny'y'i'ihtu.// strange, fearful.
   /'ny'y'i'ihtu.//

(The morphemic sequence <'ny' y> furnishes the only known instance of '//' followed by '/V//'.)

230 Vowel Morphophonemics

230. The class of vowel morphophonemes comprises one member corresponding to each of the vowel phonemes, plus two others: //u Y//. Except where specified otherwise by
the statements of 231-239, each vowel morphophoneme is represented phonemically by its corresponding phoneme.

231. /u/ does not occur after syllables whose vocalic nucleus is /o/ or /oo/ except in the representations of a very limited number of morphemes. For these morphemes, //û// is set up. The general case is covered by 231a.

a. u//ow--/o
   //wahahtu//  two
   /wahahtu/
   //syywanohtu//  ten
   /syywanohto/
   //pa noo 'i htuha tyh.// (dim.) hauling water
   /panoo'ihtuhatyhy./ (somewhere else).
   //pa noo htuha tyh .// hauling water (some-
   /panoohotchyhy./ where else).
   //pa noo hu htuha tyh .// hauling water (brief-
   /panoohotchyhy./ ly somewhere else).

b. û//--/u
   //û// has been found in only three morphs: //jûhu// 'fat', //hmûhsu// 'almost, nearly', //wûh// (locative suffix occurring in some place names).
   //'a nohi toh jûhu wii hky' hti// made it very
   /anohtohtuwhuwhkhyhti/ greasy (214a, 226b)
was almost carried
away (by the current)
(a place name)

232. The morphophonemes //Y// occurs finally in some nominal suffixes and noun roots. It is always preceded by //p//.

   a. YN//--/yn.a  (217b)
      //wynyh pY Na/
      tree-obj.
      /wynyhpyna//--/wynyhpaa/

   b. Y//--^/y  *except where 232a applies
      //wynyhpY.//
      tree.
      /wynyhpY./

233. yhN//--/a  (217c, 225m)
      //mija tyh Na//
      going-obj.
      /mijataa/

234. The sequence //ae// occurs where a morph ending in //a// is followed by the morph //eh//, an allomorph of <hti> vIN 'neutral tense'. The sequence //see// occurs when //htee//, representing <htee> vvf (377b), is followed by //eh//. This situation makes necessary the following statements:
235. The morpheme "i [v]" (371b), which occurs only after three verb roots, makes necessary the following statement:

a. a/"i/∅
   //jatuha hti//  talked
   /jatuhahti/

b. a/"ae/∅  (i.e. aa//"e/∅)
   //pa noo kaa eهن.//  went to haul water.
   /panooqeehe./  (211a, 234a, 225a)

c. e//"e−e)/
   //a cee htee eهن.//  held it for a while.
   /aacehte.ehe./

//ta pyha hti//  day is breaking
/tapyhahti/
236. One morph, representing <"ai"> (2) (392a), is set up as beginning with //"// to account for the forms given in the examples below.

a. //y'y//-""/\n   //"yoy'y ""ai// (exclamation of pain resulting from cold)
   //"ycai/
   //"yty'y ""ai// (exclamation of pain resulting from heat)
   //"yta/

b. //y'//-""/\n   //"yny' ""ai// (exclamation of fear of or wonder at something strange or fearful)
   //"ynai/

237. //v// which is preceded by //ht//, //hk//, or //hp// and followed by //+// or //// is sometimes represented by /\, sometimes by its corresponding vowel phoneme (or by /o/ if 231a applies), according to the following conditions:

a. When preceded by //ht// or //hk// and followed by //// which is followed by //T// without an intervening #, it is usually, but not always, represented by /\/. (Such sequences of morphophonemes occur only occasionally, due to the
rarity of the combination of morphs necessary to bring them about, so that an extensive body of texts must be examined in order to arrive at a complete statement.) In an examination of fifty minutes of tape-recorded text, only one example was found of //hkV.T||, namely //hku.q||, and the //V|| was represented by /∅/.

//wahahku.qatu̱u̱po̱o̱o// ...two-obj. But not...
/wahahku.qatu̱u̱po̱o̱o/

It may well be the case that V//hk-.T|| is represented by /∅/ only for //T|| = //k|| or //q||, and it is also possible that there is free variation even in this environment, with /V/ occurring in some instances. In the case of //t||, examples were found, in the same portion of texts, in which the stop morphophoneme following the //..// was any of the following: //t|| (three examples), //p|| (one example), //q|| (three examples). In all of these examples except one of those involving //q||, the //V|| was represented by /∅/. The one exception is:

//ṯa̱aa̱nihtu.qatu̱u̱u// ...bad. Not...
/ṯa̱aa̱nihtu.qatu̱u/

The environment in which the //V|| in question appears is practically identical to that in which it appears in another example, in which it is represented by /∅/:

//nahsy̱myhtu.qatu̱u̱u// ...all. Not...
/nahsy̱myhtu.qatu̱u
We must therefore assume free variation in this environment, but there is some indication that /ʊ/ is the more frequent representation. Where the stop following the //.// is //p// or //t//, there is also the likelihood that the representation might be /v/ rather than /ʊ/, since the examples are too few to allow a definite conclusion. It seems likely that /ʊ/ is the more frequent representation also when the following stop is //c//, //k//, //kw//, or //qw//, though none of these occurred in the position in question in the material examined. No example occurred in which any stop other than //t k// occurred preceding the //v// in sequences of the type //hT.vT//, because of the rarity of other stops in this position in morphemes which occur freely before //.//; but we may judge that /ʊ/ is a frequent, if not the usual, representation of the //v// in these sequences, when they do occur, except when the preceding stop is //kw//, //qw//, or //c//, since the phonemes /kw qw c/ always have a non-stop component following their oral closure.

b. When preceded by //ht//, //hk//, or //hp// and followed by //.// or //+// which is followed by //m// without an intervening #, //v// is represented sometimes by /v/, sometimes by /ʊ/, the two representations being in free variation, as follows: /v/ is the more frequent representation after //k//, /ʊ/ the more common after //p//, with /v/ and /ʊ/ having approximately equal frequency after //t//.
what (is) that...

...could understand it.
That...(221a, 235)
...will see him
tomorrow.
...thought of him who
was there... (221a,
211b, 231a, 225g) 25a)

c. When preceded by //ht// and followed by //++// or
//.// which is followed by //n// without intervening #,
//V// may be represented by /V/ or by /∅/. The two repre-
sentations are again in free variation, with /V/ being more
frequent. (When this //V// is represented by /∅/, the /t/
is nasally released.)

//ˈinehti+nyyhkwaheard.
//ˈinehti+nyyhkwa heard.//ˈineht+nyyhkwa heard.// (226)

d. When preceded by //ht// or //hp// and followed by
//.// or //++// which is followed by #, //V// is represented
sometimes by /V/, sometimes by /∅/, as follows:

(1) When the preceding stop is //p//, there is
free variation between /V/ and /∅/, the former occurring
nearly twice as frequently as the latter.

(2) When the preceding stop is //t//, the repre-
sentation of //V// under these conditions is as follows:
(a) The sequence //iht/.#// (with or without suprasegmental phonemes, which were found to play no significant role in this respect) is almost always represented by /iht.###/. In 26 examples of this morphophonemic sequence found in the 50 minutes of text examined, only one was represented by /ihti.###/.

(b) In the sequence //yhti.###/, /i/ and /φ/ occur with approximately equal frequency as the representations of //i//.

(c) In the sequence //ehti.###/, /φ/ is much more frequent than /i/ as the representation of //i//.

(d) In the sequence //ahti.###/ the two representations have approximately equal frequency.

(e) For the sequence //ohti.###/ there are only two examples, both having /i/ as the representation of //i//. (The great frequency of examples of the sequence //hti.###/ is due to the frequency with which the actual tense morpheme <hti> occurs as the final morpheme of a sentence.)

(f) For other situations, there are not enough examples to allow a statement of relative frequencies. Where //+// is the juncture involved, the relative frequencies of /V/ and /φ/ are probably about the
same as in the case of //.//, but too few examples occur to permit a definite statement. Where the //v// is other than //i// (and not considering here what vowel precedes the //ht//), the two representations seem to occur with about equal frequency.

e. In situations other than those described in a-d, //v//ht+t// and //v//ht-../// are always or nearly always represented by //v//.

For all these situations, and those described above, in which //\(/, if it occurs as the representation of //v//, is in free variation with //v//, the //v// representation is taken as the standard one (even though it is not the more frequent in some environments). The standard representation (i.e. with //v// represented by //v//) is used in general in examples cited throughout this grammar.

238. //v//n+-t\(/\)
   //nuytihpl{o+qatu\u+apuhtapya\u101ihti.\//
   /nuytihpo\u+qatu\u++apuhtapya\u101ihti.\// (235)
   But I don't see it.

239. a. //v//n+n/\(/\)
   //caiqo\u+n+ no napi ty\u // bluejay sitting on
   /caiqo\u+n+no hapityhy.\// its eggs. (225a)
a. \(/^{a}aahpa^{n}i + ^{n}iinh\) \(copa\) \(hna/\) apples which we have
\(/^{a}aahpa^{n}i^{+}niihoopahna/\) picked up

b. \(/^{n}n-\cdot n/\phi\)
\(/^{c}aiqo^{n}o+^{n}nygope^{w}weeh+johcihti/\)
\(/^{c}aiqo^{n}n^{+}nygopecwee+johcihti./\) (253, 251, 224b)
A bluejay flew in
front of me.

240. Reduplication

240. Each of the reduplicative morphophonemes \(/^{R}R/\)
occurs in the representations of a single morpheme. The
morphemes involved are <Rh> Pa 'distributive' (362) and
<Rh> vWr 'durative' (371d).

241. \(/^{R}R-(H)C_{1}V_{1}/C_{1}V_{1}\)
\(/^{R}pojoh\a/\)
\(/popojoh/\)
\(/^{Rh}pa^{o}ooh\) \(pY./\)
\(/pa^{h}pa^{o}oohpy./\)

to run distributively

242. \(/R/C_{1}V_{1}(H)-/C_{1}V_{1}\)
\(/quaca\) Rhi \(ht\i/\)
\(/quaca\) \(cah\)\(hihti/\)
fell a long distance

pebbles here and
there.
250 Juncture Morphophonemics

250. The class of juncture morphophonemes includes one member corresponding to each of the juncture phonemes, plus //"//. Each of the juncture morphophonemes occurs (by itself) as the representation of a morpheme (396-398), and //"// occurs in combination with other morphophonemes in some morphs. One or more of the junctures is a significant factor in the environment for the following morphophonemic statements: 211d; 215a, c; 216b; 224a, b, d; 225a-j; 226a; 227a, b; 235; 236; 237; 238; 239; 253.

As far as is known, each of the juncture morphophonemes is represented phonemically by its corresponding phoneme except as specified below.

251. "//--/∅
   (numerous examples in preceding sections)

252. +//h-c/∅ (225g-1)
   //no pih ~ pa⁻ah + qahty hti // sat on top of
   /nopipɐ⁺ahqahtyhti./ the house. (224a, 225i)
//Rh nah pih nañ + mija qo ñ tyñ /// going after
/nahnahpihmahmijaqoityh /// one another. (241)
//kihma hkwam + wahkihta /// come ye hither!
/kihmahqawawahkihta. /// (212, 225h)

253. +//−•/φ /// /// occurs only after ///+// 397
//ny mahmah + • cipuhihti /// climbed on me
/nywahmah•cipuhihti/ /// (216a, 225d)
CHAPTER THREE

MORPHEME CLASSES

301. This chapter gives a rough classification of the morphemes according to their distribution and describes the morphophonemic representations of the morphemes listed. The breakdown of the inventory of morphemes into classes is by no means intended to be complete, or even nearly complete; there are minor differences in the distribution of members of the same class of the present classification. Thus the classification, with the statements of morpheme arrangements of Chapter Four, is not intended to enable the reader to synthesize Northfork utterances (though many correct utterances can be synthesized on the basis of the information given), but is intended merely to account for utterances which occur in the corpus.

302. The distributional properties of the various morphemes, in so far as they are described, are indicated by distribution-class labels (303) (with occasional additional statements), and are defined on the basis of the forms with which they occur in immediate constituency, and the distribution of the respective constitutes. The terms 'prefix',

126
'suffix', 'root' are used, where convenient in facilitating discussion, not as defining terms but as handy descriptive labels for certain forms which are similar to forms of other languages traditionally referred to by these labels. (The defining terms are the morpheme-class labels.) Thus there are instances in which forms called 'prefixes' are followed directly by forms called 'suffixes' with no intervening 'roots' (Pp can be followed by nQ1).

The groupings of the morpheme classes into larger sets, such as "nominal elements" (310), "substantival suffixes" (320), etc., are made largely for purposes of convenience of organization, and do not necessarily reflect fundamental differences and similarities in distributional properties.

303. The morpheme class labels are listed in 303a. They serve as basic indications of distributional properties. Modifications of these symbols are described in 303b-f.

a. In the list of class labels below, brief notes suggesting the defining characteristics of the classes represented by each are followed by references to the places in this chapter where the classes are treated.

Nominal Elements 310

 type 'Nb' occur with Pb 311
 Nbb constitute occurs with Pb 311a
 Nbr constitutes are Mr 311b
Nbf constitutes are Nf 3110
Nu occur with <pono> nU 312
Nt, Ntn, Nn occur with nNt and/or nNn 313
No "cranberry morphemes" 314a
Nx <tohpo> 314b
Nw occur with <wano> nT 315
Nr restricted noun roots 316
N1 place names 317
Nf free noun roots 318
vNr, vNf deverbative nominalizing suffixes 319a
qN, 1N nominalizing suffixes occurring with Q, L 319b
qoN <hpY> (occurring with <cyhkwyta> Qo) 319c
IN nominalizing suffix occurring with I 319d
hNsr nominalizing suffix occurring with H 319e
uNf <"," (occurring with <ahcapono> U) 319f

Pronominal Elements 320
Pp personal pronominal morphemes 321a
Pr reflexive pronominal morpheme 321b
Pp, nNp personal pronominal plural 322
pN personal and reflexive pronoun base 323
Pt indefinite verbal object 324
D demonstrative morphemes 325
dN demonstrative base 326
H interrogative-indefinite pronominal morpheme 327
hö interrogative-indefinite pronoun base 328
o <hka> 329

Substantival Suffixes 330
limited noun suffixes 331
nNn <h>, <y>, <X>, <nuku> 331a
nN' <'> 331b
nNo <hco'o> 331c
nNJ <ja> 331d
nNt tree suffix 332
nNn nut suffix 332
nNf absolute suffix 333
nNI place name suffix 334
nNH affective suffixes 335
nNm animat plural suffix 336
no <Na> 'obj.' 337a
ho <ihmaa>, <eehti> 337b

Locative Elements 340
(Kt), (Kh), (Km) components of K 341
K occurs with <hnahqweh> kL 342
pK <qwa> 343a
x <tyh> 343b
(pL) <qopo>, <kwita>, <kywa> 343c
(pK) <naah> 344
(L) <typihi> 345
kL <hnahqweh> 346
L locatives 347a, b
pL occur with Pp (set 2) 347b
nL occur with noun stems, Pp, L 348a
dL occur with D 348b
xL <nañ> 348c

Miscellaneous Adverbial Elements 350
(Qn) <nañ>, <taah>, <wooh> 351a
qQn <mano> 351b
Qn- <hyy> 351c
QL- <¿ino>, <tapaa>, <syta> 352
(-A) ¿ 353a
hA <ihno°o> 353b
Qn quantitatives 354a
QL qualitatives 354b
Qo <cyhkwyta> 354c
nQL qualitativizing suffixes 355
T- occur with <hsu> (T) 356a
t <uhsu> 356b
(T) <hsu> 356c
T temporals 357
nT temporalizing suffix occurring with Nw 358a
vT temporalizing suffixes occurring with Vi 358b
qT temporalizing suffixes occurring with Qn 358c
Aq <qatu°u> 359a
Añ <min°o> 359b
Verbal Elements 360

nU <pono> 361a
(U) <pata> 361b
-U occur with preceding (U) 361c
U- <shiiki> 361d
pU <cimyty> 361e
U occur with uV 361f

morphemes occurring with vVr 362

Vºa occur with <ºi>, constitutes are vVa 362a
Vºx occur with <ºi>, constitute is Vx 362b
Vr occur with <ºhi> 362c
Vrº occur with <ºhi> or <ºi> 362d
Vºt occur with <ºi>, constitute is Vt 362e

Vx occur only with Pi 363
Vi intransitive 364
Vt transitive 365
Vtt double-transitive 366

nVi, nVt verbalizing suffixes occurring with N 367a
uV verbalizing suffixes occurring with U 367b
iV verbalizing suffix occurring with I 367c
pV <ni> 367d

Verbal Suffixes 370

limited verbal suffixes 371

vVi <i>, <h...> 371a
vV <ºi> 371b
vVtt "a.." 371a
vVr <ghi>, <°i> 371d
vVt <hky> 372a
vVw <wi> 372b
vVp <°..ki>, <hpa°i> 373a
vtV <ta> 373b
vVa auxiliaries 374
vVb <hu> 375a
vVe <poto>, <ja°wi>, <nawi> 375b
vVd <qoi>, <°o> 375c
vVe <°i>, <°awi> 375d
vVc <hkuc> 376
vv component of vVf 377a
vVf directionals 377b
vVg <hkwa>, <hmaa>, <tuwa> 378
vWw <waiah> 379a
vIN <hti>, <hpy> 379b
vIM <hna°i> 379c

Prefixes (other than pronominal) 380
Pq <qaha> 381
Pd <Rh> 382
Pn <nohi> 383
pPa <mi> 384a
b. The members of Nr (monomorphemic and polymorphemic) occur in immediate constituency with <pi> nNF, the absolutive suffix (333), and/or with members of Pp (321a, 421, 423). The details are given in parentheses following the class symbol Nr, when these forms are cited, as follows:

(1) P indicates that the form occurs with Pp, e.g.

<nahqa> Nr(P) 'ear'.
(2) If the form occurs with \(<\text{pi}>\) nNφ, the allomorph of \(<\text{pi}>\) nNφ which occurs with it is indicated, e.g. \(<\text{toja}>\) Nr(pi) 'mountain', \(<\text{pohina}>\) Nr(P,pe) 'chief' (i.e. \(<\text{pohina}>\) occurs with Pp or with the allomorph \(/\text{pe}///\) of \(<\text{pi}>\) nNφ).

c. In citing members of the class N1 (place names) a further indication of distribution is given in parentheses after the symbol N1, as explained in 317.

d. A raised plus sign (\(^+\)) accompanying a distribution-class symbol (e.g. \(\text{Pb}^+\)) indicates that the form in question has certain special distributional properties in addition to those which it shares with other members of that class. This symbol, and those described in 303e, f, are often not used, however, when the special distributional properties are specified in the statements of constructions given in Chapter Four.

e. A raised minus sign (\(-\)) accompanying a distribution-class symbol indicates that the form in question has more limited distribution than other members of that class.

f. A raised \(\times\) accompanying a distribution-class symbol, e.g. \(<\text{a}>\) Pp\(\times\) 'third person' (321a), indicates that the form in question does not occur in some types of environments in which other members of the class occur, but does occur in some environments from which other members are excluded.
g. The symbol $N'$ is used to designate the class consisting of $N_+ N_f$ (monomorphic and polymorphic) except those members of $N_f$ which are constitutes of the constructions of 416.

h. The symbol $N$ designates the class consisting of $N_f$ (monomorphic and polymorphic) plus the following classes of composite forms which are defined in Chapter Four: $N_q, N_p, N_d, N_h$.

i. The symbol $V$ is used as a cover symbol for $V_i, V_t$, and $V_{tt}$ (monomorphic members and composite forms).

304. The following notational devices are used in this chapter (other than those used for indicating distribution which are described above):

a. In the lists of members of the various classes, the convention for citation of morphemes described in 1d is departed from as follows:

   (1) The "morphemic brackets" $<>$ are not used for morphemes having a single morph. The brackets are used only for those with allomorphs, and the allomorphs are listed and enclosed in $//$.

   (2) The meanings are given without being enclosed in "".
b. Composite forms are cited in a manner similar to that used for single morphemes. The distribution-class symbols and indications of meaning are those of the composite forms taken as units. Enclosed in < > are the fundamental symbolizations of each of the morphemes, in the order in which they occur, separated by spaces wherever necessary for the sake of clarity. For example, the sequence consisting of <nohi> Pn 'very' followed by <cawu> Ql 'good' is written <nohi cawu> Ql 'very good'.

When composite forms are given as examples, the meanings are given without encloasure in ' ', and the morphemic brackets < > are omitted if the symbolization which would be included in them coincides with the morphophonemic representation. Otherwise, the morphophonemic representation (identified by encloasure in // //) is given.

c. Any other deviations from standard practice (1d), or from the conventions indicated above, should be clear from the context in which they occur.

d. Statements concerning immediate constituency will be abbreviated as follows:

- IC - immediate constituent
- ICs. - immediate constituents

occur in IC with - occur in immediate constituency with
310. Included in the nominal elements are two very large classes, the "restricted noun roots" Mr (316) and the "free noun roots" Nf (313). There are also several smaller classes (given in 311-315 and 317) consisting of either (1) morphemes similar in distribution to members of Nf or Mr, or (2) morphemes of limited distribution which occur as components of polymorphic members of Nf or Mr. Nominalizing affixes are given in 319.

311. The classes of the type 'Nbb' consist of noun roots which occur in immediate constituency with Pb (385). Three classes are distinguished, according to the distribution of the constitutes.

a. Nbb. Constitute occurs in IC with Pb (385). There appears to be but one member in this class.

hkwi Nbb (fish) only with <pa> Pb 'water'

pahkwi Nbr,Nf fish as Nbr, occurs with <mah> Pb 'hand, arm'

mahpahkwi Mr(P) flesh of forearm: "arm-fish"

(303b)
b. Nbr. Constitute is Nr like noun roots of 316.
With <kuh> Pb 'fire, heat':
  kuhih Nbr (smoke)
    kuh kuhih Nr(pe) smoke
  juhu Nbr, Nr(pi) fat
    kuh juhu Nr(pi) soot (214a, 231b)
With <pa> Pb 'water, moisture':
  pooh Nbr (pebbles, etc.)
    pa pooh Nr(pY) pebbles, gravel, or rocks which
    have been made smooth by running water
  hsiwah Nbr (sand)
    pahsiwah Nr(pY) sand
  waha Nbr (meadow)
    pawaha Nr(pY) meadow
  joqa Nbr, Nr(pY) nasal mucous, slime
    pajoqa Nr(pY) the slimy green substance which
    appears in standing water
  puhi Nbr, Nu blue, green
    papuhi Nr(pY) grass (see also 312)
  ooo Nbr (moss)
    paooo Nr(pY) moss
With <tyh> //tyh//, //tah// Pb 'rock':
  tahsi'a Nbr (sp. rock)
    tyhtahsi'a Nr(pi) sp. rock (pale green to tur-
    quoise in color, sometimes used for arrow-
    heads)
qah Nbr (obsidian)

//tahqah// Nr(pi) obsidian

hanii Nbr (sp. rock)

tyhhanii Nr(pY) sp. rock (looks like granite, but is soft, crumbles) (223a)

<paha> Nbr, Nr (bedrock mortar), pestle when occurring as Nr, has the allomorph //paha// and the allophone 'pestle'; when occurring as Nbr, has the allomorph //pahaa// and the allophone '(bedrock mortar)'

//tyhpahaa// Nr(pY) bedrock mortar

With <ty> Pb 'earth':

pooh Nbr (land etc.)

typooh Nr(pY) land, earth, place

caga Nbr (clay)

tycaqa Nr(pY) clay

With <ta> Pb 'sun, heavenly body':

mya Nbr+ moon, month

tamy a Nr(ta) moon, month (216a, 416b) occurs also in names of some months as second member of compound.

oinuh Nbr (star)

taoainuh Nr(pe) star

pe Nbr-x (sun, day)

tape Nr(ta) sun, day (416b)
With <no> Pb egg, dwelling:
   jo (egg)
      nojo Nr(P,p)i egg (excepting roe)
   roe (roe)
      no roe Nr(P,pY) roe
hypi (yolk)
      nohypi Nr(P) yolk alternates freely with
      //hypi nojo // Nr(P)
   aahpy (afterbirth)
      no aahpy Nr(P) afterbirth
With <coh> Pb 'head':
piki (brains)
      oohpiki Nr(P) brains
With <puh> Pb 'eyes':
    "tuhsi (eyelashes)
      puh tuhsi Nr(P) eyelashes
tahqaa (eyebrows)
      puhtahqaa Nr(P) eyebrows
With <mah> Pb 'hand, arm':
kiipy Nbr (elbow)
      mahkiipy Nr(P) elbow
With <tah> //tah//, //toh// Pb 'foot, leg':
nopoto Nbr, Vi (knee)
    //tohnopoto // Nr(P), Vi knee as Vi, 'to sit
    with legs curled up'
With <mah> Pb 'hand, arm' and <tah> Pb 'leg, foot':
  \*wicoqo (wrist, ankle)
    mah\*wicoqo \(Nr(P)\) wrist (223a)
    tah\*wicoqo \(Nr(P)\) ankle
\*owa (astragalus)
    mah\*owa \(Nr(P)\) protruding knob of wrist bone
    tah\*owa \(Nr(P)\) astragalus
peta (palm, sole)
    mahpeta \(Nr(P)\) palm
    tahpeta \(Nr(P)\) sole
toqo (thumb)
    mahtoqo \(Nr(P)\) thumb
    tahtoqo \(Nr(P)\) big toe
piicyky (little finger, toe)
    mahpiicyky \(Nr(P)\) little finger
    tahpiicyky \(Nr(P)\) little toe
tahna (knuckles)
    mahtahna \(Nr(P)\) knuckles
    tahtahna \(Nr(P)\) toe-joints
situ (claws)
    mahsitu \(Nr(P)\) fingernails
    tahsitu \(Nr(P)\) toenails
With <ty>, <puh>, <mah>, and <pih> Pb 'buttocks, back',
    <muh> Pb 'nose':
<pih> //pih///, //si///, //"ja///, //qo///, etc.,
Nbr,Nbf 'empty noun root' (See also 31lo)
//ty pih// Nr(pY) dirt, ground, earth
//puh si// Nr(P) eye(s)
//mah "ja// Nr(P,pj) hand, glove
//*ahmaja// Nf his hand(s), his glove(s)
//majapi// Nf glove(s)
//pih qo// Nr(P) buttocks, lower part of back
mu pih Nr(P) nose

c. Nbf. Members of Nbf occur in IC with Pb, the con-
stitutes being Nf.

With <kuh> Pb 'fire, heat':

"nah Nbf (fuel, wood)
kuh"nah Nf fuel, wood (224a)

With <pa> Pb 'water, moisture':

"owaa' Nbf,Nf", I (baby)
\pa\"owaa' water-baby (317e)
hsakyh Nbf (bridge)
pahsakyh Nf bridge
co\"o Nbf (spring)
paco\"o Nf spring
hsoojona Nbf
pahsoojona Nf depressions formed in rock by
running water
//toqowa// <toqohqwa> Nf, Nbf rattlesnake, snake
 //pahtoqowa// Nf water snake

With more than one member of Pb:
<pih>//pih//, //so//, //"ja//, etc. Nbf, Nbr 'empty noun root' (see also 311b)
<kuh pih> //qohso// Nf fire, match (385)
<pa pih> //pa "ja// Nf water
<tyh pih> //tyhpih// Nf rock
<no pih> //nopih// Nf house

312. Nu. This class comprises the forms which occur in IC with <pono> nU (361a) which in turn occurs only in IC with members of this class. Some of the members of Nu occur also in IC with other morphemes besides <pono> nU, and in most of these other constructions they are tactically equivalent to noun roots of other classes. With one exception (see 319f), the forms consisting of a member of Nu followed by <pono> nU occur only in IC with one of the three verbal elements uV (367b).

tohoi Nu white

<tohoi pono> //tohoi taja// U white
<tohoi tyh pih> //tohoi htyh pih// Nf white rock
(311c, 385)

olah Nu red

<olah pono> //olah pana// U red
<olah h qo'jo> //olahqo'jo// Nf strawberries (335)


<tuhmu> Nu black when followed by <pono> nu, has the allomorph //tuhmu//; when followed by <tyh pih> Nf 'rock' (311c), has the allomorph //tuhu//.
<tuhmu pono> //tuhmu °ani// U black
<tuhmu tyh pih> //tuhu htyh pih// Nf black rock (385)
puhi Nu,Nbr blue/green the combination <puhi tuwa> Vi (367a) has the portmanteau sense 'to be green' (literally: 'to become blue')
<pahi pono> //pahi pono// U blue
<pahi tuwa> //pahi tuwa// Vi to be green
<pa pahi> //papi// Nr(pY) grass (311b)
<pahi qety> //pahi qety// Nf abalone shell (3181)
<pahi nawahku> //pahinawahku// Nf 'blue-green money (beads cut from abalone shell)'
°oha Nu yellow, brownish yellow
<°oha pono> //°oha pono// U yellow, brownish yellow
<°oha pata> //°oha pata// U turn yellow, brownish yellow (361b)
°ahoa Nu tan, brown, copper colored
<°ahoa pono> //°ahoa pono// U tan, brown, copper colored
°ehsi Nu gray
<°ehsi pono> //°ehsi pono// U gray
<°ehsi ja> //°ehsi ja// Nr(pY) ashes (331d)
9ahtyh Nu round
  <9ahtyh pono> //9ahtyhpoko// U round
haky Nu foolish, silly
  <haky pono> //hakypoko// U foolish, silly occurs only with <h...h...hka> uV (367b)
to9oh Nr(P),Nu hole
  <to9oh pono> //to9oh ~jawa// U have holes (e.g. a road)
nahqa Nr(P),Nu ear
  <nahqa pono> //nahqacaja// U have long ears (e.g. a rabbit)
topo Nu hill
  <topo pono> //topoca9a// U peaked, pointed, having the shape of a hill

313. Nt, Ntn, Nn. Morphemes of class Nt occur with <pY> nNt (332), the "tree suffix". Some of them occur also as free noun stems, and thus belong to both Nt and Nf. One morpheme has been found which occurs only with <'> nNn (332), the "nut suffix". This morpheme (313e) constitutes the class Nn. Several other morphemes occur either with <pY> nNt or with <'> nNn; these are classed as Ntn (313d).

a. The following morphemes, among others, belong to both Nf and Nt:

wijah Nf,Nt (black oak) acorn  (This is used as the specific term for black oak acorns, and as
the generic term for any type of acorn.

<wijah pY> Nf functions similarly as the term for black oak and the generic term for oaks.)

wijahpY Nf (black) oak

*aahpohsowa Nf, Nt manzanita berries

*aahpohsowapY Nf manzanita bush

wojoochno Nf, Nt buckeye

wojoochnopY Nf buckeye tree

*aahpa*ni Nf, Nt apple

*aahpa*nipY Nf apple tree

*aahpyhkahci Nf, Nt apricot

*aahpyhkahcipY Nf apricot tree

piihšihsi Nf, Nt peach

piihtihsipY Nf peach tree

b. The following morphemes, among others, occur only with <pY> nNt, as far as has been determined:

wa*aah Nt (incense cedar)

wa*aahpY Nf incense cedar

wohqc Nt (ponderosa pine)

wohqcopY Nf ponderosa pine

jepih Nt (lodgepole pine)

jepihpY Nf lodgepole pine

kunuki Nt (elder)

kunikipY Nf elder  (Its berries are <hupuhja> Nf in higher altitudes, <seenowa*> Nf in
lower altitudes.)
syhy Nt (willow)
syhypY Nf willow
ahmaahca Nt (tarweed)
ahmaahcapY Nf tarweed

c. The two morphemes listed below also occur as members of Nt, but each of them occurs also in a limited construction with a morpheme other than <pY> nNt.
wynyh Nt+ (tree) occurs also with " nVi (367a)
wynyhypY Nf tree
wynyh− Vi (sg.) to stand
sahqwa"a Nt+ (fir tree) occurs also with <hmu> vNr+
(319a) (which has the allomorph //hmu// when occurring with it)
sahqwa"apY Nf fir tree (of any species)
//sahqwa"a hmu// Nf strainer (made of fir branches, used in leaching acorn flour)

d. The following morphemes, among others, occur with <pY> nNt or <'> nNN:
jaqa Ntn (white oak)
jaqapY Nf white oak
jaqa' Nf white oak acorn
oikinu Ntn (live oak)
oikinupY Nf live oak
oikinu' Nf live oak acorn
soto Ntn (water oak)
sotop Y Nf water oak
soto Nf water oak acorn
<caha> Ntn (savannah oak) when occurring with <'> nNn, has the allomorph //caha//; when occurring with <pY> nNt, has the allomorph //caha//
//cahaapY// Nf savannah oak
//caha'// Nf savannah oak acorn
tapa'ja Ntn (gooseberry)
tapa'jap Y Nf gooseberry bush
tapa'ja' Nf gooseberry
tunah Ntn (digger pine)
tunahp Y Nf digger pine tree
tunah' Nf digger pine nuts (223b)
typah Ntn (piñon)
typahp Y Nf piñon pine
typah' piñon nuts (223b)

e. One morpheme has been found which occurs with <'> nNn but not with <pY> nNt.

<qawoqohq(w)a> Nn (nuts... ) has freely varying allomorphs //qawoqohqa// - //qawoqohqwa//

<qawoqohq(w)a ' > Nf nuts of any of the following pine trees: <wohgo pY> Nf 'ponderosa pine'
(313b), <kuhsi wohgo pY> Nf 'jeffrey pine'
(314a), <jepih pY> Nf 'lodgepole pine' (313b)
314. Described below are two classes containing morphemes of unique distribution.

a. No, "cranberry morphemes". Included in this class are a number of morphemes which occur in IC with a following member of Nf. The constitutes are likewise members of Nf. One of the cranberry morphemes occurs with either of two members of Nf; each of the rest is (as far as is known) a unique constituent.

wa^o No only with <paqa> Nf 'arrow, bullet':

wa^opaqa Nf headless arrow tipped with four small cross-pieces, tied perpendicularly to the shaft, to prevent penetration, used for small game and birds

sai No only with <pa hkwí> Nf, Hbr 'fish, trout':

saipahkwí Nf sp. fish (small, found in Owens Valley)

pahsi No only with <toqohqwa> Nf 'rattlesnake, snake', which has the allomorph //qohqwa// when proceeded by <pahsi> No:

//pahsi qohqwa// Nf gopher snake

pahnee No only with <tahp ah > Nf 'píñon pine nuts'
(315d, 332) and <wynyip Y> Nf 'tree' (315c, 332);

pahneetahp Nf sugar pine nuts (225b)

pahneewynyip Y Nf sugar pine
kuhsì Nc occurs only with <wohqo pY> Nf 'ponderosa pine' (315b, 332);
kuhsìwohqopY Nf jeffrey pine
qacih Nc occurs only with <wono> Nf 'conical burden basket'
qacihwono Nf conical burden basket, not as closely woven as <wono> (213a)

b. Nw. This class contains a single member:
<tohpo> Nw occurs only with <h ci' h ci'> (335); the constitute occurs only with <^ ni> nQl 'like'
(335)
<tohpo h ci' h ci'> Nf
<tohpo h ci' h ci' > ^ ni> Ql 'short'

315. Nw. This class comprises those morphemes which occur in IO with <wano> nT, 'time' (358a). The constitutes occur as T or as Vi. Two of them occur also with the absolutive suffix, <pi> nMf (333) which has the allomorph //pe// when occurring with them. These two constitutes participate in a limited way in the distribution of Nf and occur also as a special class Na (457). <wano> nT 'time' has the allomorph //no// when occurring with <jypa> Nw 'autumn'.

too Nw winter, year (occurs also with <no pih> Nf 'house')
toowano T,Vi (to be) winter(time)
<too pi> /toope// Na a winter, a year
toonopih Na winter-house

ta Nw spring
tawano T,Vi (to be) spring(time)
taca Nw summer
tacawano T,Vi (to be) summer(time)
jypa Nw autumn
/jypa no// T,Vi (to be) autumn(time)
toqa Nw night
toqawano T,Vi (to be) night(time)
/toqape// Na a night

316. Mr. This is a very large class, which is made up of morphemes other than those included in Nw (315) which occur in IC with the absolutive suffix <pi> nIf (333), or with Pp (321, 421, 423), or with either. The constitutes are free noun stems Nf, having distribution similar to that of the monomorphemic members of Nf (313). Many members of Mr occur also in one or more of a variety of additional constructions.

The morphemes listed below represent only a small sample of the members of Mr. Following the class symbol Mr in the designations of the morphemes is an indication in parentheses of the allomorph of <pi> nIf which occurs with each of the morphemes occurring with <pi> nIf; for those which occur with
pronominal prefixes, (P) is given after the class symbol Nt for those which occur with either pronominal prefix or <pi> nNf, both P and the allomorph of <pi> nNf which occurs are given. Except in special cases, namely <paah> Nt(P,pi)^X 'blood', <wooh> //wooh// Nt(P,pi)^X 'head/hair', pronominal prefix and absolutive suffix do not both occur with a noun stem at the same time.

a. Body Parts.

nahqa Nt(P) ear

wooh Nt(P,pi)^X head, head hair occurs with both Pp and <pi> nNf in the meaning 'head hair'

tyhpe Nt(P,pY) mouth

//tyhpepY// Nf a person who talks a lot

qeqo Nt(P) tongue

tawa Nt(P) tooth

qana Nt(P) beard, whiskers

qope Nt(P) face

kuhta Nt(P) neck

γ pūhta Nt(P) arm

huhka Nt(P) leg

kyhky Nt(P) foot

sono Nt(P) lungs

piwy Nt(P) heart

nywy Nt(P) liver

qohi Nt(P) stomach.
poci Mr(P), nih navel  (335)
sihi Mr(P) guts
pego Mr(P) penis
tapa Mr(P) testicles
tekwi Mr(P) vagina
*oho Mr(P, pY) bone

//*öhöpy// Nf bone; strong person
jümü Mr(P, p1) fat (231b)

//jühpö// Nf fat, grease; fat person
paah Mr(P, p1) blood occurs with <pi> nNf and Pp at the same time; the suffix does not occur, however, in the form <paah ka> yi 'to bleed'
(367a)
pyhy Mr(P) skin, hide, fur, body hair
joqa Mr(P, pY), nor nasal mucous

//joqapö// Nf person with runny nose
<pa joqa pö> slime (311b)
kyhna Mr(P), nNn semen (335)
*saw Mr(P) horns
qwaci Mr(P) tail.
qahsa Mr(P) wing, wing feathers

b. Relationship terms.
papi' Mr(P) older brother or male cousin (227)
wahma' Mr(P) younger brother or male cousin
hahma' Mr(P) older sister or female cousin
pyhni' Nr(P) younger sister or female cousin
<pohso(')'> Nr(P) sibling or cousin of same sex; friend, partner has freely varying allomorphs
//pohso//' - //pohso'//.
sawu Nr(P) sibling or cousin of opposite sex
tuwah Nr^x(P,p1') son, child has allomorphes as follows:
after Pp and not followed by <my> nNm 'pl.' (336), 'son, son of sibling of same sex, offspring of animal'; after Pp and followed by <my> nNm 'pl.', 'child (of either sex, as kinship term), child of sibling of same sex, offspring of animal'; before <p1> nNf, 'child (not as kinship term)'. <p1> nNf has the allomorph //p1'// only when occurring after <tuwah> Nr^x. When both <my> nNm 'pl.' and <ci'> nNn 'dim.' (335) occur after the combination of <tuwah> Nr^x with a member of Pp, <my> nNm precedes <ci'> nNn instead of following it as in the normal situation (433a).

'o1 tuwah Nf my son
'o1tuwahmy Nf my children
'o1tuwahmyhci Nf my children-dim.
tuwahpi' Nf child
pety Nr(P) daughter, daughter of sibling of same sex
nawa Nr(P) father, father's brother
pija Nr(P) mother, mother's sister
notyhkwa Nr(P) wife, wife's sister, (man's) brother's wife
kuwa Nr(P) husband, husband's brother, (woman's) sister's husband
'ihnhipai (P) spouse's sibling of same sex, spouse of sibling of same sex (i.e., one who is called 'wife' or 'husband' but who actually isn't)
<kwytyň> Nr(P) friend has freely varying allomorphs
//kwytyň//'//kwyty'//' (225, 227)
tyhmu' Nr(P) enemy
tyni' Nr(P) master (of a pet)
'aahmu' Nr(P) boss

c. Miscellaneous.
pohina Nr(P,pe) chief (311b)
nyhtena Nr(P,pY) assistant chief, messenger
toja Nr(pi) mountain
kuhtuhsi Nr(pY) dust
jyyh Nr(pY) level ground
'oohma Nr(pi) salt (<oohma pi> Mf occurs also as a masculine name)
nahtii Nr(P,pi) belt
gahki Nr(P,pi) beads
317. NL, place names. Each of the place names generally occurs with a particular member of NL (348a), or with <nän> xL 'on/at' (348c). An indication of which one of these locative morphemes occurs with each is given in parentheses following the class symbol NL. The following list represents only a small sample of the members of NL.

hoojowih NL(weeh) Cascade

hoojowihweeh L at Cascade (213a)

qohnihihma NL(wi) South Fork

moohnih NL(naän) Finegold

poösosöne NL(wi) Farley's ranch

moininih NL(hmaän) sp. mountain

318. NF, "free noun roots". The free or unrestricted noun roots have, in general, a wider distribution than members of any other classes of nominal elements. Except for those members of NF which have some special limitation on their distribution (these are marked NF*), members of NF can be distinguished from members of other classes by the following distributional properties (among others): (1) they occur in IC with <Na> no 'obj.' (337); (2) they occur in IC with nL (348a); (3) they occur with nO; (4) they occur preceded and followed by ↔ (395a); (5) they occur in IC with ↔ (398); (6) they occur in IC with following VI (364, 460, 470), with intervening ↔. NF is the largest class of
nominal elements. The examples given below represent only a small sample of the members of the class.

The Northfork Indians have both Indian names and "White- man" names; the latter seem to be in more common use.

a. Personal names, feminine, Indian. (For various reasons whose discussion would be out of place in a purely descriptive treatment such as this, certain partial resemblances which exist among some of these names have not led to morphemic segmentation, although some attempt at segmentation would of course be desirable in historical analysis.) Several of these names have freely varying allomorphs differing by the presence or absence of final //'/'. In the symbolizations of these morphemes, ' is given in parentheses, e.g. <aqoohsati(')> Nf.

<aqoohsati(')> Nf
hpiwyhkywa' Nf
<ahsuwajahahi(')> Nf
'aihkuhsu Nf
waihuhsa' Nf
tojaty' Nf
puhuajuni Nf
tojakywa Nf
poowynai Nf
kiwachnehx Nf
moojahqa Nf

hiwajuni Nf
hukaita' Nf
huuhtuni Nf
jukita' Nf
wijuhnui Nf
wahna'huxahti Nf
sawahpino Nf
mo'uhkahoi Nf
sijapi Nf
jyhmahowy Nf
tujupe' Nf
wa'ni' Nf
<jyhma(hu)'> Nf
saju' Nf
<sihsikati(\')> Nf
siwahty' Nf
jawaahxati Nf Lucy Kinsman

b. Personal names, feminine, White-man.
xaahna(h)ni Nf Caroline
hehnahni Nf Helen (175)
suuhsi' Nf Susie
'otoohsi' Nf Rosie
maaki' Nf Maggie
maane' Nf Holly (175)
pasohci' Nf Patsy
'enahsi' Nf Elsie (175)
mahi' Nf Minnie
nene' Nf Nellie
ouuni' Nf Julie
'enahsi' Nf Ella (175)
heehso' Nf Hazel
cini' Nf Jennie
ni(h)hta' Nf Nita
maina' Nf Mina
'ehma' Nf Emma
sipihni' Nf Sibina
mooti' Nf Maude
naahnihni' Nf Nancy

o. Personal names, masculine, Indian. The label Nf applies to each of the following.
tahmaakihsi
qah(a)awahni
pajuuhou'
ta'ahqai
qohmeehna'
poihpoi
tahnaani'
qahsiihna'
pahsehti'
tohseehna'
qohojoni
patahsihna'
tunani'
qahou'wa'
pogehsi
c<iwijahnu(\')>
pohpi'
'aaahhcsi'
cajuhma'
pinkui'
'ohociwi
caahtahhta
pahnaa(wu)'
'awoohsai
sohoky  sehmi  japaa' 
shky'ma'  hihehci  jycypa' 
seehma'  howihno'  wohqo' 
sihmohno  jooho'  myta' 
juhsuhma' 

D. Personal names, masculine, White-man. The label Nf applies to each of the following.

cane' Charlie  pita' Peter 
pyyhsi' Percy  waane' Wally 
pyycu' Virgil  coohno John 
ooo Joe  maihki Mike 
pataihki Prank  oooci George 
sihtiipi Steve  piihti Pete 

E. Types of people. (A few of the following, as noted, can also be used to refer to animals.)
wowa' Nf Chukchansi Yokuts 
qohsoo'moho Nf Southern Sierra Miwok 
<caihnihmahni> Nf Chinaman has the freely varying allomorphs //caihnihmahni//...//caikwani'//. 
pahnijoohna' Nf Mexican 
qanaaqaa' Nf Negro 
nyyhmy Nf Mono Indian, Indian, person; body 
na'a Nf" (boy) is always followed by <ci'> nNh 'dim.' 
nahohi' Nf boy (335, 336a)
syjatyhmy Nf good-looking girl or young woman
sy'a Nf' girl always preceded by <Rh> Pd 'distributive'
(382)
Rhysy'a Nf girls
nana Nf man, male animal
hyyhpi' Nf woman, female animal has the allomorph
//hypi/ when followed by <oi'> nNH 'dim.'
(335); the combination <hyyhpi' h oi'>
//hypihoi// Nf has the portmanteau seme
'old woman'.

ouku' Nf old man
"owaa' Nf', I,Nbf baby (as I (392), has the allophone
'sound made by baby when crying') as Nf',
is usually or always followed by <"nuku'> nNX
(331a) or by <oi'> nNH 'dim.' (335). Occurs
as Nbf in:

pa 'owaa' Nf water-baby (a legendary being)

yny' Nf strange or fearful being (human, animal, or
legendary); white man
pastate' Nf preacher, minister
wahgeenu' Nf cowboy
caan'ma' Nf blind person
caahpu' Nf midget

f. Mammals. The label Nf applies to all of the following.
tyhyhta deer  tocohwi wildcat
to'ohpi wolf  wiheehsihti mountain lion
pahtahqai raccoon
myhy porcupine
kity groundhog
teewa cottontail rabbit
mawi grey squirrel
jowa’ bunny (young of any rabbit species)
"ihsa’ coyote (331)
qohci pig, hog, pork
ho’nopi bat
pohmihka’ sheep
qajiinha’ chicken
too’no’ bull
kitii’ cat (Some speakers use the form <qaahtu’>.)

pohhta skunk
pacuhku beaver
qahmy jackrabbit
"ehkwy ground squirrel
puweci mouse
qawa woodrat
myjy gopher
puhku dog, pet
myhsa’wota’ chipmunk
caqahi donkey
oiwu’ goat
qawaaju’ horse
qahnahtu’ cow, cattle

g. Birds. (The label Nf applies to all of the following.)

ciihpa’ bird (generic term)
qohcohpiha’na’ blue-fronted jay
tahtati’ chicken hawk
kwia’ naa’ eagle
pahnahtata’ California woodpecker
ci’nihsa’ Brown towhee
syhywoi’ fox sparrow
wiho turkey vulture
suuku robin
<caiqo·no> California (blue-)jay has the freely varying allomorphs //caiqo·no// //oecqo·no//
wohpihkuhsu Modoc woodpecker
cihpihta mountain quail
widoici purple finch
qahy sierra grouse
muhu· sp. owl; generic term for owls
wohqa·jaana sp. owl
noito meadowlark
pyjy duck

h. Animals, other than mammals and birds. (Nf applies to all.)

'ochno·ohnohki' king snake
weehqai mountain garter snake
<toqohqwa> Nf, Nbf rattlesnake; snake (generic term)
has the allomorph //qohqwa// when occurring with <pahsi> No ' (gopher snake)' (314a); has
the allomorph //htoqowa// when occurring (as Nbf) with <pa> Pb 'water'; the allomorph
//toqohqwa// occurs elsewhere.

//pa htoqowa// Nf water snake
'ochnoqoi' toad
muhkuhta sp. lizard
'oowohti sp. lizard
poqo·ja sp. lizard; generic term for lizards
'ooqa turtle; clam; padlock; coin purse
'ahmaahcanhna' salamander
'aaqai salmon
'eespihsa bass
qoohqonowai' sp. ant
soo''jape sp. ant
pêna yellowjacket
muipi housefly
hohpohpö' spider
ny'nyhkwypai' centipede

1. Plants, parts of plants used for food, foods derived from plants. (The label Nf applies to all.) Members of Nf which also belong to Nt are given in 313a.

këejihsi' sp. flower and its seeds (2110)
qawohnohma sp. flower; its seeds
sapahnu' sp. fern
sapahsipa' sp. fern
shqoowä' squash
<hihoono'> beans has the freely varying allomorphs
//hihoono//'//pihoono'//
jyhmyhna' acorn soup
qoohpe' coffee

Types of mushrooms:

toohpö

paaku'
tahsihtu'

saahsi'
cajahhki'

seehxajuü'
cujuü'

jaahpahna'
go'noochca'

no'i'
j. Articles of clothing. (Nf applies to all.)
no°mahii° clothing, property
<pishi°mee°> apron has the allomorph //pishi°mee//
when occurring with <ja> nVi 'to wear/don'
(367a); the allomorph //pishi°mee°// occurs
elsewhere.

<pishi°mee ja° Vi to wear/don an apron
cahqeeta° jacket mahsihkaata° handerchief
sowcta° sweater sohmehneehna° hat
woohta° boots taahpanu° shawl
mohqo shoes

k. Tools, equipment, useful objects, etc. (Nf applies
to all.)
°ahpo cooking basket; basket (generic term)
wono conical burden basket
cihku seed-beating basket
cahmaaja winnowing basket
jahta twined cooking basket
pooja small coiled basket with neck
°ohsa bottle wopihqoo wooden bowl
kuhsa bag kuhsihta°ni sack
sahki sack qahoo°na box
wahnihni barrel picoo blanket
°owoohno boat wa°naahqa net
°etyh bow, gun pihsihtoona° pistol
paqa arrow, bullet
naahca' ax, hatchet
naahpu' nail
taahpi'ni board, plank
siija' saddle
sihpweehna' spurs
wynacu brush (made of soaproot)
poto walking stick, digging stick, staff, pole

1. Miscellaneous. (Nf applies to all, unless otherwise noted.)

'oono' gold
co'ahpe ghost (33lb)
puha supernatural power
hupija song, music
hupawa meat-juice
tyyhna meat
kuhnahni corral, fenced-in enclosure
qahniwoohsa jail
tyhkwiki Nf" occurs only with <ni> nQl 'like' (355)

  tyhkwikiniih Ql plentiful, abundant

<nawahku> money has the allomorph //hnawahku// when
  preceded by <puhi> Nu 'blue/green' (312); the
  allomorph //nahahu// occurs elsewhere.

  //puhi hnahahu// Nf.'blue-green money (beads cut
  from abalone shell)'

qety Nf" occurs only with preceding <puhi> Nu 'blue/
green' (312)

puhiquety Nf abalone shell
kyhma’ NfX other the combination of this morpheme with
<Rh> Pd 'distributive' occurs in IC with pre-
ceding <Rh na> Pdr 'reciprocal' (see 382);
this morpheme and the combination <kyhma’ Na> O
'other-obj.' (337a) are commonly followed by
<hsu> F 'precisely, still' (395).

319. Nominalizing affixes. The morphemes listed below
occur in IC with forms other than N, the constitutes being
Nf or Nr. Eight classes are distinguished.

a. vNf, vNr. Occur with verb stems. Constitutes are
Nf (for vNf) or Nr (for vNr).

hpY vNf product of the action; 'that which is produced
by ...ing'
jaqa Vi to cry
jaqahpY Nf tears; wax in ears
naa Vi to grow
naahpY Nf timber, log
sii Vi to urinate
siihpY Nf urine
kwita Vi to defecate
kwitahpY Nf excrement
tuhi Vi to spit
tuhihpY Nf spittle
<hna> vMr act of ...ing; object of the act of ...ing has the allomorph //h// when occurring before nI; the combination of this morpheme with <Ma> nO 'obj.' (337a) has the portmanteau morph //hna//; the allomorph //hna// occurs elsewhere

mija VI to go
mijahna Mr(P) ('...'s) departure; the place to which ...
... went/is going
<a mija hna Na> //'ahmijahna// O his departure-obj.; the place to which he went-obj.

pihty VI to arrive
pihtyhnna Mr(P) arrival

cihouka VT to point at
cihoukahna Mr(P) that which is being pointed at

jatuha VI to talk
jatuhahna Mr(P) what is being said; language

<hnuñ> vMr* instrument with which the action is performed; that with which one ... has the allomorph //hnu// when occurring before Mr or Nf, and when occurring after <sahqwa*a> Nt* 'fir' (313c); the allomorph //hnuñ// (225) occurs elsewhere; occurs after two forms which are not verb stems: <sahqwa*a> Nt* 'fir', and, in a trinary construction, with <pa hkwì> Nf, Nbr 'fish' (311a) and <poto> Nf
'staff' (318k); unlike other members of \( \text{\text{N}} \),
some combinations of verb stems plus \(<\text{hnu}\text{\text{h}}\>\)
occasionally occur in IC with members of \( \text{\text{N}} \)
(340a); they can accordingly be designated as
\( \text{\text{N}}^{1+} \); one form which contains \( <\text{hnu}\text{\text{h}}\> \) as an IC,
\(<\text{oih cuka hnu}\text{\text{h}}\> \) (see below), occurs as \( \text{\text{N}}^{1+} \)
\\//\text{sahqwahnu}\\// \text{\text{N}}^{1+} \text{ strainer (made of fir branches,}
used in leaching acorn flour)

\( \text{tyhka Vi, Vt to eat} \)
\( \text{tyhkahnun} \text{\text{N}}^{1+} \text{ instrument for eating; table} \)
\( \text{wihi NF knitke} \)
\\//\text{tyhkahnwih}i\\// \text{\text{N}}^{1+} \text{ table-knife} \)
\(<\text{oih noo}\\> \) \(<\text{oih }^{*}\text{noo}\\> \) \( \text{Vt to carry or move}
with pointed object (223a, 365, 386) \)
\\//\text{oih}{\text{\text{\text{o}}}}\text{Ooohnu}\\// \text{\text{N}}^{1+} \text{ pitchfork (231a, 225b)} \)
\\//\text{tyhkahnucih}{\text{\text{\text{o}}}}\text{Ooohnu}\\// \text{\text{N}}^{1+} \text{ table-fork} \)
\( \text{pahkwipotohnu} \text{\text{N}}^{1+} \text{ fishing-pole (231a, 225b)} \)
\( \text{tuheh NL under} \)
\( \text{tyhkahnun}^{1+}\text{tuheh L under the table} \)
\( \text{oih cuka} \text{ Vt to point at (386)} \)
\( \text{oihcoukahnu} \text{\text{N}}^{1+} \text{ (index finger)} \)
\( \text{maoihcoukahnu} \text{\text{N}}^{1+}(P) \text{ index finger} \)
\( \text{qahty Vi (a5.) to sit} \)
\( \text{qahtyhnun} \text{\text{N}}^{1+} \text{ chair} \)
\( \text{pa noo Vt to haul (water)} \)
\( \text{pahowhnu} \text{\text{N}}^{1+} \text{ bucket (231a, 225b)} \)
pe vNf cognate object: that which is ... differs from <hna> vNf (above) as follows: <hna> is ordinarily used with verb stems which can take a variety of objects, and the constitute with <hna> denotes whichever of the possible objects happens to be concerned in the particular case, or it may denote the action itself; <pe> vNf is used with nouns which by their semantic nature can have only one or a limited number of logical objects

nyka Vi to dance

nykape Nf a dance

"ehki Vi to eat acorn mush, acorn soup, acorn biscuits.

"ehkipe Nf acorn mush

' vNf agent: one who ...s

nohqaqa Vtt to steal (366)

nohqaqa' Nf thief

kwica Nr(p1) sp. larvae which grow in Mono Lake
tyhka Vi,Vt to eat
tyhka' Nf "eater occurs only as second member of compounds.

kwicatyhka' Nf Mono Lake Paiute: "larvae-eaters"

hty' vNf customary or former agent: one who customarily or habitually ...s; one who used to ...
wyy Vt to catch, capture, take

ty Pt indefinite object (324)

tywyy Vi to catch things/people

tywyyhty' Nf sheriff

poo Vt to cut hair, shear (sheep)

typoohthy' Nf barber

cáahtini Nl place name

wú Nl at (23lb, 248a)

//nyy// Np I (321, 323)
nopih' Vi to dwell (367a, 224a)

//cáahtiniwú+nyy+nopih'hty'// IN I used to live

at Cáahtini (396c)

pecy Vnf excessive agent: one who ... very much, too

much (usually is used derogatively)

syjee Vi to be afraid

syjeepecy Nf coward

syhyka Vi to gather sticks (367a)

syhykapecy Nf a real stick-gatherer, one who is

going around gathering a great many

sticks

tyð Vnf lN neutral agent: one who is now ...ing, one

who has recently ...ed when it follows the

immediate future suffix <waih>, the meaning

of the composite form is 'one who will soon

..., one who is planning to ...'; corresponds

in tense and aspect to the neutral tense
suffix <hti> (379b); see also 318b
mija Vi to go
mijatyn Nf one who is going, one who went
mijawahiy Nf one who intends to go soon
tyhkazy Nf one who is eating, one who ate
/\ca\'ahtini\wi+nxy+nopi\'h-ty\'h// IN I live at
C\'a\'ahtini
hci vNf' agent occurs only with <pa hap\i> Vi 'to
swim', with which it forms a portmanteau
seme, and <ty \'ohi> K left (341)
pahapihci Nf bear
ty\'ohi\'hci Nf left-handed person

b. IN, qN. The following morphemes occur with members
of L, Q1, and Qn.
ty\'h IN,vNf that which/one who is (located) ... (225)
(see also 319a)
nopi\h Nf house (311c, 385)
weeh nL in (348a)
nopi\h\'weeh L in the house (224a, 396b)
nopi\h\'weeh\'ty\'h Nf he who/that which is in the house
\'una\'apash pL,L' on the other side
\'una\'apaahty\'h Nf he who/that which is on the other
side; Auberry Mono (who live on the other
side of the San Joaquin River from North
Fork)
<htu> 1N,qN that which/one who is ... when followed by nL or nO, has the allomorph //h//; when occurring after Q1 or Qn, and not followed by nL or by <Na> nO 'obj.' , has the freely varying allomorphs //htu///i//; the allomorph //htu// occurs elsewhere; does not occur in IC with <symy> Qn×
cawu Q1 well, good
<oawu htu> Nq good (one)
<waha htu> Nq two
<waha htu Na> //waha h ku// 0 good-obj.
nopih"ni Q1 house-like (355, 396b)
<nopih"nihtu> Nq house-like object
<nopih"nihtuweeh> //nopih"nihweeh// L in a/the house-like object (213a)
<puti °i> Vi to emerge (362a, 371d)
ht1 vIN neutral tense (369b)
//poihoa+nopih"weehhtu+puti°ihti// IN Poipo came out of the house
//cah puti °i// Vt to cause to emerge, to get (someone/something) out
qahniwoohsa Nf jail
//poihoaNa+nyy+qahniwoohsa°weehku°acahputi°ihti//
IN I got Poipo out of jail
h. 'qN has been found only in IC with <symy> Qn^X
'one', <Rh symy> Qn 'one-distributive', and
<Rh waha> Qn 'two-distrib.' (382)
//syhay'// Nf, Nq one (227)
//Rhshymy'// Nf some

cf. <Rh symy htu> Nq one by one, one after
another (382)
<Rh waha h.'> //R'wahha'// Nf twins (382, 223a)
cf. <Rh waha htu> Nq two by two

O. qOln. The following morpheme occurs with <cyhkwyta>
Qc 'with effort, hard', the only member of class Qo (354c).

hpY qOln
cyhkwytahpY Nf a person with a great deal of
stamina or physical endurance

d. iN. Occurs with imitative stems. This class con-
tains but one member.

hna' iN 'that which makes the sound ...'. has the
allomorph //'na'// when occurring after
<tawaa'> I 'cry of the spotted towhee' and
<maa> I 'sound made by mosquitoes'; the allomor
morph //hna'// occurs elsewhere
//tawaa'na'// Nf spotted towhee (227f)
//maa'na'// Nf mosquito
qopoqopo I cry of the western tanager
qopoqopohna' Nf western tanager
ooohcoohna' Nf western bluebird
'uu'uihna' Nf roadrunner
pahky+pahky I sound made by the pileated woodpecker (when pecking)
pahky+pahkyhna' Nf pileated woodpecker

e. hMr. Occurs with <ha> H 'indefinite' (327). This class contains a single member.
<iih> hMr
<ha iih> //h iih// Mr(P,pY) what, something
//'ihiih// Nf my what/something (i.e. what/some relative of mine)
//hiihpy// Nf what, something

f. uN. The following morpheme occurs with one member of class U (312, 361a).
,," uN has been found only with <'ahca pono>
//'ahcapana// U tan, brown, copper-colored
//'ah'capana// Nf red-shafted flicker (204e, 234a, 251)

320 Pronominal Elements

320. In this section are listed the personal, reflexive, indefinite object, demonstrative, and indefinite pronominal morphemes, together with certain morphemes which occur with
these elements: <ni> pp 'personal pronominal plural',
<hkwa'> nNp 'personal pronominal plural', <my> pN 'independent personal prounom base', <hm> dN 'independent demonstrative base', <qeh> hN 'independent indefinite prounom base',
and <hka> o ' (obj.)'. The plural morpheme <my> nNǐm 'animate plural', which occurs with Nf as well as with Nd ('independent demonstratives'), is included in the section on substantival suffixes (336).

321. Pp, Pr. These two classes are similar in distribution in that members of both of them occur in IO with Vt ("transitive verb stems"), Vtt ("double-transitive verb stems"), pN (323), and with <ni> nQ1 'like' (355). In other respects they differ in distribution.

a. Pp, "personal pronominal prefixes". These morphemes (aside from the exceptions noted below for <fa> Pp X 'third person' and <tyb> Pp 'subject third person') occur in IO with:

N (303g), where they denote possessor (or similar relationship);
Vt and Vtt, where they denote the object;
nL, pL (348a, 347b), where they denote object;
Vi plus VT (358b, 455d);
<ni> pp 'personal pronominal plural' (322);
nQ1 (355), except <ke> nQ1 'having';
<toki> Ql$^{+}$ 'right' (354b);
<my> pN 'independent personal pronoun base' (323);
Op (independent personal pronominal objects 436b), with
intervening <-> (336c, 423a).
All of the above except Op follow the member of Pp with
which they are in immediate constituency.

<ny> Pp first person has the allomorph //ni// when
occurring before <ni> pp 'personal pronominal
plural', and the allomorph //•i// when occurring before N', V, and <toki> Ql$^{+}$ 'right';
the allomorph //ny// occurs elsewhere (i.e.
before <my> pN 'personal pronoun base', nQL,
nL, and pL)

<•y•h> Pp second person has the allomorph //•y// before
<my> pN when the latter is not followed by
<N•a> n0 'obj.' (337a) and before <ni> pp 'pl.'
when the latter is followed by nL, nQL, <toki>
Ql$^{+}$, and V; the allomorph //•y•h// occurs else-
where, except that the combination of this
morpheme with <ni> pp 'plural', when the lat-
ter is followed by pN, pL, or N', has the
freely varying portmanteau morphs //•y•h•n•i•h//
//•y•h//

<<•a> Pp$^X$ third person does not occur with <my> pN,
the function of such a combination being ful-
filled by the independent demonstrative
pronouns nd (326); but, unlike other members of pp, does occur in constructions 423b-d; 421b, and 461; has the allomorph //'ah// when occurring before N', pL, and Pr; the allomorph //'a// occurs elsewhere

<tyh> pp^{−} subject third person occurs only with N' and <ni> pp 'plural', and denotes (by itself or in combination with <ni> pp) that the possessor of the noun is the same third person as the subject of the verb; has the allomorph //ty// when occurring before <ni> pp 'plural', and the allomorph //tyh// when occurring before N'

<tyh puhku Na + 'a puh 'ni hti> IN he saw his (own)

Pp^{−} Nf n0 Pp^{x} Pb pV vIN dog

sub3 dog obj 3 eye do -ed

337 385 367d 379b
ta Pp inclusive person (i.e. first person plus second person) the combination <ta ni> Pp and the single morpheme <ta> Pp both function as first person inclusive plural; (the combination <ny ni> Pp denotes first person plural exclusive)

A summary of the allomorphy of the personal pronominal prefixes is given in the table below. Six sets of morphs
are designated. They occur as follows: set 1, before `<ny>`<br> Pike 'independent pronoun base'; set 2, before `pL`; set 3, before `nL`, `nQl`; set 4, before `V` and `<toki>` `QL+`; set 5, before `N`; set 6, before `<ni>` pp 'personal pronominal plural'.

<table>
<thead>
<tr>
<th>Set</th>
<th>first</th>
<th>second</th>
<th>third</th>
<th>subj-3</th>
<th>incl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><code>ny</code></td>
<td><code>?y(h)</code></td>
<td>--</td>
<td>--</td>
<td><code>ta</code></td>
</tr>
<tr>
<td>2</td>
<td><code>ny</code></td>
<td><code>?yh</code></td>
<td><code>?ah</code></td>
<td>--</td>
<td><code>ta</code></td>
</tr>
<tr>
<td>3</td>
<td><code>ny</code></td>
<td><code>?yh</code></td>
<td><code>?a</code></td>
<td>--</td>
<td><code>ta</code></td>
</tr>
<tr>
<td>4</td>
<td><code>?i</code></td>
<td><code>?yh</code></td>
<td><code>?a</code></td>
<td>--</td>
<td><code>ta</code></td>
</tr>
<tr>
<td>5</td>
<td><code>?i</code></td>
<td><code>?yh</code></td>
<td><code>?ah</code></td>
<td><code>tyh</code></td>
<td><code>ta</code></td>
</tr>
<tr>
<td>6</td>
<td><code>ni</code></td>
<td><code>?y(h)</code></td>
<td><code>?a</code></td>
<td><code>ty</code></td>
<td><code>ta</code></td>
</tr>
</tbody>
</table>

Paradigms:

With `qwenaw`a pL, L distant, far (from)

//`nyqwenaw`a// I far from me
//`?yhwenaw`a// I far from thee
//`?ahwenaw`a// I far from him/her/it
//`taqwenaw`a// I far from us (incl.)

With weeh `nL in

//`nyweeh// I in me
//`?yhwaehe// I in thee (213a)
//`?aweheh// I in him/her/it
//`taeweheh// I in us (incl.)

With naki Vt to follow

//`?inakii// Vi to follow me
//`?yhnakii// Vi to follow thee
With puhku Nf dog, pet

//aipuhku// Nf my dog
//a'ypuhku// Nf thy dog
//a'nhpuhku// Nf his/her/its dog
//tyhpuhku// Nf his/her/its (own) dog
//tapuhku// Nf our (incl.) dog

For examples with <ni> pp 'plural' and <my> pN 'pronoun base', see 322 and 323 respectively.

b. Pr, "reflexive pronoun". This class, whose distributional properties are indicated below, has one member.

<na> Pr 'reflexive' has allomorphs //py//, //na//,
//nah//, //na9//; the conditions of their occurrence, and the distribution and meaning of the morpheme, are as follows:

(1) Occurs in IO with following <my> pN 'independent personal pronoun base' (323), with the allomorph //py//.

<na my> //pyy// Np 'oneself (intensive)'
does not occur with <Na> n0 'obj.' (337a); this form, and the combination <na my hkwa> //pyyhkwa// Np 'oneselves' are usually (or perhaps
always) followed by <hsu> F 'precisely, still' (335).

(2) Occurs in IC with following Vt, Vtt (365, 366), where it has reflexive or passive meaning, with the allomorph //na//, except before a few verb stems whose morphophonemic representations have an initial resonant, where it has the allomorph //na?//.

<cah puti ?i> Vt to get (smthg.) out (386, 371d)

//nacahputi?i//= Vi to be gotten out (e.g. of jail)

//napuhmaaci//= Vi to be recognized

//na?mah~caqa//= Vi to wash one's hands

mahqa Vtt to give (smthg.) to (someone) (366)

mahqa Vt, Vi to be given (smthg.)

<wahci "a..> //wah~aol//= Vtt" to hide (371c, 204a)

//na?waoi//= Vt, Vi to hide (oneself) (from)

<na my hsu + na jawi hti> //pyyhsu+najawihti//

IN he's laughing at himself

(3) Occurs in IC with preceding <Rh> Pd 'distributive' (362), where it has the allomorph //nah// except when followed by N', where it has the allomorph //na//.
<Rh na> //Rhnah//, //Rhna// Pdr 'reciprocal'
(241)
Rh pa'a=a nL distributively on top
//RhnahRhpa'a=// L on top of one another
//Rhnahna=wac=// Vi to hide from each other
//Rhnahhawa=// Vi to scold each other (223a)
//Rhnahwqa=// Vi to talk to each other (213e)
//Rhnahyi'=// Nf sisters: "each other's younger sister"
//Rhnapey=// Nf parent and daughter: "each other's daughter"
//Rhnahmahqa=// Vt, Vi to give each other (smthg.)
cahmyhnahky'= Vtt to cause to change/turn over (386, 372a, 226)
//Rhnahcahmyhnahky'=// Vt to cause to change each other
//aRhna=cahmyhnahky'=// Vi to cause them to change (position with) each other

See also 382.

(4) Occurs in IC with preceding <a> RpX 'third person' (321), with the allomorph //nah//.

421b.

(5) Occurs in IC with following <ni> nCl 'like'

(which has the allomorph //mahani// when
occurring with it 355), with the allomorph //na//. Here it has reciprocal meaning.

<na ni> //naʔmahani// Ql like each other, alike

(6) Occurs, with the allomorph //nah// and reciprocal meaning, in IC with at least two forms consisting of <Rh> Pd 'distributive' plus nL:

RhpʔaʔnL' distributively on top (382)
//nahRhpʔaʔ// L on top of one another

RhpʔinaʔnL' distributively after, behind
//nahRhpʔinaʔ// L after one another, behind one another, one after another

(7) Occurs in IC with following <typi hi naʔ> L' 'at the middle', with the allomorph //nah//.

//nahtypi naʔaʔn// nL' occurs only with those members of Pp which contain <ni> pp 'pl.' (322b).

//aʔihi nahtypi naʔaʔn// L between them, in their midst

(8) Occurs in IC with following <symy> Qn+ 'one' (which has the allomorph //symy// when occurring with it), with the allomorph //nah//.

//nahsymy// Qn all
322. pp, nNp. These two classes contain one morpheme each. The morphemes both indicate plurality, are both associated with the personal pronominal prefixes Pp, and are mutually exclusive, but they differ in distribution, with respect to both position of occurrence and the distribution class membership of the forms with which they occur in immediate constituency.

a. <hkwa> nNp 'independent personal pronominal plural'

(226) occurs (1) after combinations consisting of a member of Pp followed by <my> pN 'independent personal pronoun base'; the constituents do not occur with <Na> no 'obj.' (or <hká> o '(obj.)'); (2) with imperative expressions IM (493b)

my my> //nyy// Np 'I'
//nyyhkwa'// Np 'we (excl.)'

Further examples are given in 223, 433b.

b. <ni> pp 'personal pronominal plural' occurs with Pp, under the conditions described below

The combinations of <ni> pp and preceding members of Pp occur before <my> pN 'independent personal pronoun base' only if the latter is followed by <hká> o '(obj.)' (329) and <na> no 'obj.' (337a). <ni> pp occurs after <tyh> Pp 'subject third person' only if it is followed by N' (this limitation applies in accordance with the restrictions on the occurrence
of <tyh> Pp not followed by <ni>). The occurrence of this morpheme with the third person morphemes and the inclusive person morpheme is optional; <ni> pp in general does not occur in referring to plural persons except when the speaker is definitely specifying plurality. There is a tendency for <ta> Pp 'incl.' to be used without <ni> pp when two persons are involved (i.e. one second person), and for <ta ni> Pp to be used when more than two are involved (i.e. more than one second person), but this is only a tendency; <ta> Pp alone frequently occurs with reference to more than two, and the combination <ta ni> Pp occasionally occurs when only one second person is involved. These remarks apply also to <ta my> Np and <ta myhkwa> Np.

<nih> pp has allomorphs //nih//, //ni//, //ih//, //i//, partly in free variation, partly conditioned. The allomorphs with final //h// occur before <my> pN 'independent personal pronoun base', pI, and N', and the presence or absence of initial //n// is a matter of free variation except after <ny> Pp 'first person', where the //n// never occurs. Thus we have //nih////ih// before pN, pI, and N', except after <ny> Pp 'first person'; //ni////i// before nI, nQI, <toki> Q1+ 'right' (354b), and V, except after <ny> Pp 'first person'; and //ih// and //i//, in the corresponding environments, after <ny> Pp 'first person'. The combinations of <ni> pp with <tyh> Pp 'second person' require special treatment in the environments in which //nih////ih// occur for
<> pp, <> has allomorphs //⁹yh/ //⁹y/, the former occurring with //nih/, the latter with //ih//. Since all morphs are at the same level of the structural hierarchy, it is not permissible to allow the selection of an allomorph of one morpheme to be conditioned by the occurrence of one of two freely varying allomorphs of another. Therefore, although it is possible to segment each of the two possible morphophonemic sequences into two morphs, freely varying portmanteau morphs must be set up to represent the morphemic sequence <> Pp '2nd pl.' occurring before pN, pL, N': //⁹yhnih// //⁹yih/>. In each of the environments in which freely varying morphs with and without //n// occur for <> pp, the morph without //n// is more frequent. The various morphophonemic representations of the combinations of Pp with <> pp are shown in the table below. The morphophonemes included in parentheses are those which vary freely with //∅//.

<table>
<thead>
<tr>
<th></th>
<th>&lt;ny ni&gt;</th>
<th>&lt;&gt;yh ni&gt;</th>
<th>&lt;&gt;a ni&gt;</th>
<th>&lt;&gt;tyh ni&gt;</th>
<th>&lt;&gt;ta ni&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pl excl</td>
<td>2 pl</td>
<td>3 pl</td>
<td>3 subj pl</td>
<td>1 pl incl</td>
<td></td>
</tr>
</tbody>
</table>

Before:
- N' niih ⁹y(h)n)ih ⁹a(n)ih ty(n)ih ta(n)ih
- pN niih ⁹y(h)n)ih -- -- ta(n)ih
- pL niih ⁹y(h)n)ih ⁹a(n)ih -- ta(n)ih
- nL, nQl, nL niii ⁹y(n)i ⁹a(n)i -- ta(n)i
- V, <toki>
Paradigms:

With <puhku> Nf 'dog, pet'

//niihpuhku// Nf our (excl.) dog
//"yihpuhku//"//"yhnihpuhku// Nf y'all's dog
//"aihpuhku//"//"anihpuhku// Nf their dog
//"tyihpuhku//"//"tyihihpuhku// Nf" their (own) dog
//"taihpuhku//"//"tanihpuhku// Nf our (incl.) dog

With <qwena?a> pL,L 'distant, far (from)'

//niihqwena?a// L far from us (excl.)
//"yihqwena?a//"//"yhnihqwena?a// L far from y'all
//"aihqwena?a//"//"anihqwena?a// L far from them
//"taihqwena?a//"//"tanihqwena?a// L far from us (incl.)

With <weeh> nL 'in'

//niweeh// L in us (excl.)
//"yiweeh//"//"yniweeh// L in y'all
//"aiweeh//"//"aniweeh// L in them
//"taiweeh//"//"taniweeh// L in us (incl.)

With <naki> Vt 'to follow'

//niinaki// Vi to follow us (excl.)
//"yninaki//"//"yninaki// Vi to follow y'all
//"ainaki//"//"aninaki// Vi to follow them
//"tainaki//"//"taninaki// Vi to follow us (incl.)

For examples with <my> pN, see 323.
323. pN, "independent personal pronoun base". This class contains one member, which occurs with the personal pronominal morphemes <ny> Pp 'first person', <?yh> Pp 'second person', and <ta> Pp 'inclusive person', with combinations of these morphemes and <ni> pp 'personal pronominal plural', and with <na> Pr 'reflexive'.

<ny> pN independent personal pronoun base has the allomorph /my/ when followed by <hka> o '(obj.)' (329), and the allomorphs /y/ and /a/ otherwise, the latter after <ta> Pp 'inclusive person', the former elsewhere; occurs after <ni> pp 'plural' only if followed by <hka> o '(obj.)'; otherwise, the plural function is fulfilled by <hkwa'> nNp 'plural' (322a), which follows <my> pN.

In the examples below, * appears after morphophonemic representations which occur (only) if <hka> o '(obj.)' does not follow.

<ny my> //nyy// Np I
<ny my hka Na> //nymyhkaa// Op me/my (216a, 337a)
<ny my hkwa' > //nyyhkwa'// Np we (excl.) (226)
<ny ni my hka Na> //niyhmyhkaa// Op us/our (excl.)
<?yh my> //?yy// Np thou
<?yh my hka Na> //?yhmymhkaa// Op thee/thy
<?yh my hkwa' > //?yyhkwa'// Np y'all
<"yuh ni my hka Na> //"yihmyhkaa// "//"y:ni:hmyhkaa//
  Op y'all (obj.) /y'all's
<ta my> //taa//"* Np we (incl.) (usually dual)
<ta my hka Hua> //tahykaa// Op us/our (incl.)
  (usually dual) (216a)
<ta my hkwHua'> //tahkwa'// Np we (incl.) (usually
  more than two)
<ta ni my hka Na> //tci:hmyhkaa// "//tani:hmyhkaa// Op
  us/our (incl.) (usually more than two)
<na my hsu> //pyyhsu// Np oneself
<na n in hkw: hsu> //pyyhkwa'hsu// Np oneselves
  (226b)

324. Pt, "indefinite object". This class contains one
  member, which occurs in immediate constituency with following
  Vt or Vtt.

ty Pt indefinite object

This morpheme denotes indefinite objects (animate
  or inanimate) as goals of the verbal action, or an in-
  definite number of items of a goal which is specified
  by an objective substantive expression (436, 337a), or
  an indefinite amount of participation as goal of the
  goal.

  poo Vt to cut hair, shear

ty poo hty' Nf barber (313a)
wani VT to sell
//"i ʔahpo Ha + ny + ty weni ty\n// IN I'm selling
my baskets (but not all of them at once)
teeqa VT to paint
tyteeqaty\n NM painting something; painting things
cf. ʔateeqaty\n NM painting it
htwyt Vtt to ask (somebody) for (smthg.)
tyhtwy\n VT to ask (somebody) for smthg./some

325. D, "demonstratives". The three morphemes of this
class occur in IC with <hu> dN 'independent demonstrative
base' (326). Certain other combinations in which members of
D occur are noted below.
<"i> D this has the allomorph //"ih// when occurring
before <tuku\n> nL 'to, through'; the allomorph
//"i// occurs elsewhere.

This morpheme occurs with <tuku\n> nL 'to, through',
<na\n> xL 'at, on', <naah> (pK) (344), and <peh> dL
(which occurs only with <"i> D), as well as with <hu> dN
'demonstrative base'. The latter has the allomorph
//hi// when occurring with <"i> D.
<"i hu> //"ih\n// Nd this (one)
<"i tuku\n> //"ihtuku\n// I. to here, hither
"ina\n I,(pL) here
"ipeh I right back here
"inaah pK occurs only with <hnahqweh> xl 'side'
"inaahhnahqweh pL on this side of
"u D that (nearer) occurs with <nahn> xl 'at, on' and
<nahn> (pK) as well as with <hu> N
"uhu Nd that (one) (nearer)
"unañ (pL) occurs only with <paah> nL 'by'
"unañpaah pL, L on that side (of), on the other
side (of)
"unaah pK occurs only with <hnahqweh> kl 'side'
"unaahhnahqweh pL on the other side of
<br> <ma> D that (farther) has the allomorph //maa// when
followed by <nahn> xl 'at, on' (which has the
allomorph //hnoh// when occurring with <ma>);
the allomorph //ma// occurs elsewhere.

The difference in meaning between <u> and <ma> is
very slight; the two morphemes are practically inter-
changeable, but have a tendency to be differentiated on
the basis of distance from the speaker, and in that <ma>
has a somewhat stronger demonstrative force. Very oc-
casionally, <ma> occurs in IC with following Vt, as a
third person object (occurring here instead of <a> Pp
'third person'). The use of <ma> rather than <a> in
this position gives greater force to the expression.

mahu Nd that (one) (farther)
<br> <ma nahn> //maa hnoh// L there
326. dN, "independent demonstrative pronoun base".
This class contains one member, which occurs in immediate
constituency with D (325). The constitutes, Nd, have dis-
tribution similar to that of free noun stems Nf.

<hu> dN demonstrative base has the allomorph //hi//
when occurring after <"i> D 'this', and
after <ni> nQ1 'like', with or without inter-
vening <'> ("A) (353a); has the allomorph
//hu<h// when occurring after nL (343a); the
allomorph //hu// occurs elsewhere

This morpheme is always preceded by <hka> o (329)
when it is followed by <Na> nO 'obj.' (337a). Members
of nL (348a) occur between D and <hu> dN.

<"i hu> //"ihi// Nd this (one)
"uhu Nd that (one) (nearer)
mahu Nd that (one) (farther)
'i hka hu Na Od this one-obj.
"uhkahunNa Od that one-obj.
makahunNa Od that one-obj. (211a)

<"i wheh hu> //"iweehhu<h// L in this (one) (223a)
//"weehhu<h// L in that (one)
//maweehhu<h// L in that (one)
//"ipa"nahhu<h// L on top of this (one) (225k)
//napa"nahhu<h// L on top of that (one)
//mani'hi// Q1 just like that
327. **H.** This class contains one member, whose unique distributional properties are described below.

<ha> H interrogative-indefinite occurs, with allomorphs //ha// and //h//, as indicated by the examples:

ha qeñ Nh who, someone (328)
tu'i ha qeñ Nh anyone (333b)

<ha hka Na> //ha hka a// Oh who/someone-obj. (337a, 329, 211a)

//tu*iiahkaa// Oh anyone-obj.

//h eehtí// Oh what/something-obj. (as object of verbs of saying) (337b)

//tu*i h eehtí// Oh anything-obj. (as object of verbs of saying)

//h ihmaa// Oh what/something-obj. (except as object of verbs of saying) (337b)

//tu*i iihmaa// Oh anything-obj. (except as object of verbs of saying)

//h iih// Nr(P,pY) what, something (319e)

//tu*ihiih// Nr(P,pY) anything

ha wuhta l in what/some direction (348b)
tu'i ha wuhta l in any direction

<ha nañ> //ha hno// l where, somewhere (348c)

//tu*i hahno// l anywhere

//h ihoñ°o// qn,t as qn: how many, some; as t: when, sometime (353b)
//tu'ihilno'o// Qn,T as Qn: any amount; as T: anytime

ha hmi'i C why, for some reason (333a)
tu'ihahni'i C for any reason

328. hN. This class contains a single member, which occurs only with <ha> H (327) and <tu'i ha> H 'any' (333b).

qe'h hN interrogative-inddefinite pronoun base
豪qen Nn who, someone
tu'ihqen Nn anyone

The object forms which correspond to these (see 327) do not contain <qe'h> hN, but do contain <hka> o (329), like the object forms corresponding to Np and Nd.

329. o. This class contains a single member, which has no meaning, but whose presence is required in combinations of <Na> n0 'obj.' (337a) with Np, Nd, and H.

<hka> o '(obj.)'

<ny my> Np I (321a, 323)
<ny my hka Na> //nyymhkaa// Op me
<ny ni my hka Na> //ni ih my hka a// Op us

ma hu Nd that (one) (325, 326)
ma hka hu Na Od that-obj. (211a)
<ha hka Na //ha hka a// Oh who/someone-obj. (211a)

For further examples, see 323, 326, 327.
Substantival Suffixes

330. The morphemes treated in this section (except those of 337) occur in IC with preceding noun stems, the constitutes likewise being noun stems. Forms containing the morphemes of 337 as ICs are objective substantive expressions.

331. Limited Noun Suffixes. These morphemes are very limited in distribution. One of them occurs with three morphemes; the others occur with a single morpheme each.

a. nNx. The morphemes of this class each occur with a single member of Nf. The constitutes are also Nf.

h. nNx only with <wynacu> Nf 'brush made of soaproot'
   <wynacu h..> //wynahcu// Nf White-man brush, broom, comb

<x> nNx only with <"ihsa"> nNf 'coyote'; the combination has the portmanteau morph //"ica"/
   <"ihsa" x> //"ica"// Nf coyote (obscene term)

"nuku" nNx only with <"owaa"> Nf",Nbf,"I '(baby)' (319e, 311c, 391)

"owaa","nuku" Nf baby (227f)

y nNx only with <"yny"> Nf 'strange or fearful being; white man'; the constitute is limited in distribution
"yny'y Nf" only with <ni> nql 'like', with intervening «» (396b)
"yny'y"ni q1 strange, fearful (227h, 251)

b. nN'. This class contains a single morpheme, which occurs in IC with one member of Nf and two members of Nr. Two of the constitutes are Nf, one is Nr'.

'nN' only with <pija> Nr(P) 'mother', <nahqa> Nr(P) 'ear', <co'ahpe> Nf 'ghost'
pija' Nr"(P) has been found only in the form:
<"oono' Na + "a pija' /> //"oono'Na+ahpija'//
Nf placer (217a, 337a, 321a, 396c)
nahqa' Nf sp. mushroom (which is ear-shaped)
co'ahpe' Nf crow, daddy long-legs

c. nNo. This class contains a single member, which occurs with one member of Nr. The constitute occurs as either Nf or Nr(pY) with no apparent difference in meaning or use.

hoo'o nNo only with <nahqa> Nr(P) 'ear'
nahqahco'o Nf-Nr(pY) deaf person (or animal)
nahqahco'opY Nf deaf person (or animal)

d. nNj. This class contains one morpheme, which occurs with one member of Nu.

ja nNj only with "ehsi> Nu 'gray'
"ehsija Nr(pY) ashes
332. nNT, nNN. These classes contain a single member each. Both morphemes occur with members of Ntn (313d). In addition, nNT occurs with Nt (313a–c) and nNN occurs with Nn (313e).

' nNN nut suffix

typah’ Nf piñon nuts (223b)
jaqa’ Nf white oak acorns
For further examples, see 313d, e.

pY nNT tree suffix

typahpY Nf piñon pine
jaqapY Nf white oak
wynyhpY Nf tree
wijahpY Nf black oak; oak (generic term)
*aahpohsowapY Nf manzanita bush
*aahpa’nipY Nf apple tree
For further examples, see 313a–d.

333. nNF. This class contains one member. It occurs with Nr (restricted noun stems), the constitutes being Nf (free noun stems).

<pi> nNF absolutive suffix has allomorphs //pi//, //pY//, //pe//, //p1’//; the last occurs only with <tuwah> NrX(P,pi’) ‘son, child’ (316b); the occurrence of these allomorphs is defined by the designations in parentheses following
the distribution symbol \( Mr \) of forms which occur with this morpheme \( (369b) \)

For examples, see 316.

334. \( nN_2 \) This class contains one member. Forms containing it are \( Nl \) (place names), but there are many place names which do not contain this morpheme.

\(<h..'> nNl place suffix: place where there is/are ...

has the allomorph \(/h../' \) \((304a)\) when occurring after \(<pY> nMt 'tree suffix'; the allomorph \(/'/' \) occurs elsewhere

jaqa pY Nf white oak

\(<jaqapY h..''> /jaqahpY'// Nl(weeh) place where white oaks grow (this is the place where informant Lucy Kinsman lives) \((303c)\)

//jaqahpY'weeh// L at the place where white oaks grow

wojochno pY Nf buckeye tree

//wojochnohpY'// Nl(weeh) place where there are buckeye trees

\(*ohma pi Nf salt

//\(*ohmapi'// Nl(hma\$) place where there is salt (a mountain)

wa*aah pY Nf cedar

//wa*aahhpY'// Nl(weeh) Cedar Grove (Mono name for North Fork) \((223a)\)
335. \textit{n\textsuperscript{NH}, "affective suffixes"}. The members of this class occur with preceding \textit{Nf}, the constitutes likewise belonging to class \textit{Nf}. One of them, \textit{<ci'> n\textsuperscript{NH}+ 'diminutive'}, has a wider distribution, and four of them have very limited distribution as members of \textit{n\textsuperscript{NH}}. Two members of \textit{n\textsuperscript{NH}} occur also as \textit{Mr}. Members of \textit{n\textsuperscript{NH}} (when occurring as \textit{n\textsuperscript{NH} rather than \textit{Mr}) are always preceded by the tactic juncture \textit{<h> (396a).}

\textit{<ci'> n\textsuperscript{NH}+ diminutive}

This morpheme is used with forms denoting entities held in affectionate regard by the speaker as well as those whose small size the speaker wishes to emphasize. It is very common in the former sense. It occurs with \textit{Np, Nd, and Nh} as well as with \textit{Nf}. It can occur twice after certain members of \textit{Nf} (see below), and it always occurs twice after a few forms which occur only with it, \textit{væz. <tohpo> Nx ' (short)' (314b), <hyy> Qn- ' (few)' (351c), <^ino> QI- ' (small)' (352), <tapaa> QI- ' (near-by)', <syta> Q1- ' (slightly)'}. In its second occurrence after \textit{Qn- or Ql-}, it has the allomorph //ci'//; in all other environments, the allomorph //ci'// occurs. (For the circumstances which make necessary the allomorph //ci'//, see 227e and \textit{<h> qN 319b.})

\begin{align*}
\text{puhku} & \text{ h ci' Nf dog/pet-dim.} \\
\text{poihpoi} & \text{ h ci' Nf Poipoi-dim} \\
\text{<ny my h ci'} & \text{ //nyyhoi' // Np I-dim.}
\end{align*}
ma hu h ci' Nd that-dim.
ha qeŋ h ci' Nh who/someone-dim.
ma hka hu h ci' Na: Od that-dim.-obj. (329, 337a)
tuwah pi' Nf child (316b, 333)
tuwahpi'hci' Nf child-dim.
tuwahpi'hci'hci' Nf child-dim.-dim.
'owaa'hci' Nf baby
'owaa'hci'hci' Nf baby-dim. this form appears to be interchangeable with:
'owaa'nuku'hci' Nf baby-dim. (331a)
<hyyhpí' h ci'> //hypi h ci'// Nf old woman (316f)
<Rh hyyhpí' h ci' h ci'> //Rh,h hypi h ci' h ci'// Nf old woman-distr.-dim. (382)
//Rh,'h cuku' h ci' h ci'// Nf old man-distr.-dim.
tohpohci'hci' Nf" occurs only in:
tohpohci'hci'ni Ql short (314b, 355, 396b)
<hyyhci'hci'> //hyyhci'hci'o// Qn few (351c)
//'inohci'hci'o// Ql small (352)
//'tapaahci'hci'o// Ql nearby (352)

kita' nNñh mild pejorative does not carry as strong a pejorative sense as <kyhna> nNñh,Nñr(D) (see below); can be translated by such expressions as 'that old ..., that darn ...'
puhku h kita' Nf darn dog
qahnihpaa'hna' h kita' Nf darn bell (227e)
kyhna nNhn, Nr(T) strong pejorative (as Nr, 'semen')

This morpheme has a stronger pejorative force than
<kita'> nNhn. As with some English words, its use is not
considered very polite in mixed company, although it
often is used under these circumstances if the speaker
is forgetful, angry, or daring. It can be rendered in
English as '(that) damn ...'.

puhku h kyhna Nf that damn dog
'ahsa' h kyhna Nf the damn coyote

The remaining members of nNhn have a specialized use as
mild pejoratives; each of them occurs in this function with
one or a few members of Nf containing the distributive pre-
fix <Rh> Pd (382). Each of the forms in which these mor-
phemes have been found in this function are given in the
examples below. As pejoratives they are about as strong as
<kita'> nNhn, or perhaps a little stronger, but they also
carry a humorous touch, and indicate that the speaker is
making fun of the persons denoted by the preceding stem as
often as they indicate that he is angry with them. One of
these morphemes occurs also with a member of Nu; another
occurs also as a member of Nr.

qo'jo nNhx with <Rh hyyhpi' h ci'> //Rh, Brass hypi h ci'/
Nf 'old woman-distr.' (294e, 318e), <Rh tuwah
pi> //Rh tuwah pi'/ Nf child-distr. (316b, 333),
<Rh tuwah pi h ci > Nf child-distr.-dim.,
<?ahqa> Nu 'red'

//Rhhyhpihci'hoqo'jo// Nf those darned old women!
//Rhtuwahpi'hoqo'jo// Nf those darned kids!
//Rhtuwahpi'hoqo'jo// Nf those darned kids!
ahqahqo'jo Nf strawberries

poci n?Nh", Mr(P) (as Mr, 'navel'); as n?Nh", occurs
with <Rh sy'a> Nf 'girl-distr.'

Rhysa?ahpoci Nf those darned girls!

pa?wo n??Nh" with <Rh ouku'> //Rh, 'h ouku'/ //Nf 'old
man-distr.'

//Rhouhku'hpa?wo// Nf those darned old men!
//Rhouhku'hpa?wohkyhna// Nf those darned old
men!

"juhki' n?Nh" with <Rh na'a my> //Rh na'a a...// Nf
'boys-distr.'

//Rhnaa'sah~juhki'// Nf those darned boys!

336. NNm. This class contains one member, which occurs
with Nd and certain members of Nf, the constitutes being Nd
or Nf respectively.

<my> NNm animate plural

This morpheme occurs with members of Nf which
refer to people, occasionally with members of Nf refer-
ing to animals, and with Nd when they refer to people
or, less commonly, when they refer to animals. The use
of <my> nNm in speaking of more than one person or animal is optional; it is used very commonly, perhaps usually, with nouns referring to people when more than one is involved, but very rarely with animals where more than one is involved. It is often used together with the distributive prefix <Rh> Pd (382). With certain forms there is a special usage: <tuawah pi> Nf 'child' (316b, 333) rarely if ever occurs with <my> nNm in utterances in which children are referred to, but it does (always or nearly always) occur with <Rh> Pd; <sy"a> Nf" 'girl' (318e) never occurs without <Rh> Pd, and rarely if ever occurs with <my>; <na"a> Nf" 'boy' (which is usually followed by <ci> nNh+ 'dim.') generally occurs with both <my> nNm and <Rh> Pd when boys are referred to; <nana> Nf 'man' always (or nearly always) occurs with <my> nNm when men are referred to, but can occur with the distributive prefix as well; for old men and old women, <cuku> and <hyyhpi' h ci> respectively, the distributive prefix and not the plural morpheme is generally used. When occurring in the same form with nNh, the latter precedes <my>, except after <nana> Nf 'man', <na"a> Nf" 'boy', and combinations of Pp and <tuawah> Nr(P,pi') 'child, offspring, son'.

<my> nNm has the allomorph //my// occurring everywhere except with the forms <nana> 'man' and <na"a> 'boy'. With these, it has the allomorph //a...// (294e).
qohsoo' moho my Nf Southern Sierra Miwok-pl. (216a)
sipihty' my Nf Northeastern Monos; Mono Lake Paiutes
(2251)
ganaaqa' my Nf Negroes (227c)
<Rh na'o a my h ci'> //Rhnaa'ahci'// Nf boys
<nana my> //naana// Nf men
//Rhnaana// Nf men
<a tuwah my h ci'> //ahtuwahmyhoi'// Nf her children (321a)

337. n0, h0. These two classes occur only as ICs of
"objective substantive expressions". Their distribution is
more precisely defined below.

a. n0. This class contains one member, which occurs
in IC with preceding Nf and Nq; it also occurs in trinary
constructions with Np plus o, Nd plus o, and H plus o (329,
436). The constitutes are "objective substantive expres-
sions" O f, Oq, Op, Od, Oh; the cover symbol o is used to in-
clude all members of these five classes.

<Na> n0 'obj.' has the allomorph //a// when immediately
preceeded by <hka> o '(obj.)' (323), and the
allomorph //ku// when occurring after <htu> qN
(319b); the combination of this morpheme with
<hna> vN' act/object of ...ing' (313a) has
the portmanteau morph //hna//; the allomorph //Na// (217) occurs elsewhere

<ny my hka Na> //nymhykaa// Op me (321a, 323)
mahkahuNa Od that-obj. (325, 326, 211a)
mahkahumyNa Od those-obj. (336)
<ha hka Na> //hahkaa// Oh whom, someone-obj. (327)
<cawu htu Na> //cawu h ku// Oq good-obj.
<waha htu Na> //wahahku// Oq two-obj.
<°a mija hna Na> //°ahmijahna// Of his/her/its departure/destination-obj.
wijahpYNa Of (black) oak-obj. (217b)
puhkuNa Of dog/pet-obj.
nopihNa Of house-obj. (224c)

b. no. This class contains two members, which occur only with <ha> H 'interrogative-indefinite' (327) or with <tu°i ha> H 'any'. The morpheme <ha> H has the allomorph //h// when followed by h0.

eehti h0 occurs in

<ha eehti> //heehti// O what/something (as object of verb of saying)

//tu°iheehti// O anything (as object of verb of saying)

ihmaa h0 occurs in

//ihmaa// O what/something (not as object of verb of saying)
340. Members of the class L (locatives) are given in 347. The other morphemes listed in this section, which fall into several classes, occur as constituents of locatives.

341. The three classes listed below contain one member each. The three morphemes involved are of very limited distribution; but they have in common the property of occurrence as constituents of forms belonging to class K. Class K consists of the forms which occur in IC with <nahanqweh> kL (346), the constitutes being locatives.

a. (Kt). This class contains a single morpheme, which occurs in IC with two members of Ql, <cawu> Ql,E 'good' and <"ohi> Ql" 'left' (354b).

   tyh (Kt) only in
tyhoawu K only in
tyhoawunahqweh L only in
   tyhoawunahqwehtyn Mr(P) right side hand
(319b)
tyh°ohi K (223a) only in
  tyh°ohihnahqweh L\x only in
    tyh°ohihnahqwehtynı Nr(P) left side/hand
  tyh°ohihci Nf left-handed person (319a)

b. (Kh). The one member of this class occurs only with
  <pih> Pb\text{'} 'back' (385).
    huh (Kh) only in
      huhpih K only in
        huhpihhnahqweh L\x (223a) only in
          huhpihhnahqwehtynı Nr(P) back (as body part) (319b)

c. (Km). The one member of this class occurs only
  with <ha wuhtah> L 'in what/some direction' (327, 34b).
    ma (Km) only in
      hawuhtahma K only in
        hawuhtahmahnahqweh L from what/some direction

342. K. This class consists of the forms which occur
  in IC with <hnahqweh> kL, the constitutes being L. There is
  one monomorphemic member in addition to the four forms given
  in 341.
    sahqwe K only in
      sahqwehnahqweh L\text{'} only in
        sahqwehnahqwehtynı Nf a side, one side (319b)
343. The three classes listed below contain morphemes which occur as constituents of members of \( pL \). The class \( pL \) consists of forms which occur in IC with \( Pp \), the constitutes being locatives.

a. \( pK \). This class contains one morpheme, which occurs only with \(<\text{hnahqweh}> kL 'side' (346) and <tyh> x (343b).\)

\( \text{qwaa } pK \) only in

\( \text{qwashnahqweh } pL \) beyond

\( \text{qwaatyh } (pL) \) only in

\( \text{qwaatyhweeh } pL \) beyond (348a, 213a)

b. \( x \). This class contains one member, which occurs only with \(<\text{qwaa}> pK (343a).\)

\( \text{tyh } x \) only in

\( \text{qwaatyh } (pL) (343a)\)

c. (\( pL \)). This class contains three monomorphemic members (listed below) and three combinations of two morphemes: \(<\text{qwaa tyh}> (343a, b), <\text{u nañ}> (325, 348c), and <\text{a nañ}> (325, 348c). Members of \( pL \) occur in IC with \( xL (348c) \) and/or members of \( nL (348a) \), the constitutes occurring as \( pL \).

\( \text{qope } (pL), \text{Mr(\( P \) face} \) as \( pL \), occurs in

\( \text{gopenañ } pL \) in front of, ahead of (348c)

\( \text{qopeweeh } pL,L \) in front (of), ahead (of), before,

first (348a)
kwita (pL) only in
  kwitanaŋ pL at the bottom of
kywa (pL) only in
  kywapaah pL beside (but not touching) (348a)
  kywatuheŋ pL beside (and touching) (348a)

344. (pK). This class contains one member, which occurs with two members of D (325) and with <paah> nL 'by' (348a).
  naah (pK) only in
    *inaah pK (325) only in
      *inaahñnahqweh pL on this side of (223a, 346)
      *unaah pK (325) only in
      *unaahñnahqweh pL on the other side of
naahpaah nL behind
  nopih−naahpaah L behind the house (396b)

345. (L). This class contains a single member, which occurs only with <naŋ> xL 'at, on' (348c). The constitute occurs in one construction as a member of L, but occurs also with <na> Pr 'reflexive' (321b).
  typihi (L) only in
    typihaŋ Lx only in
    typihaŋtyŋ Kr(P) middle (2251, 319b)
    */ahtypihaŋtyŋ*/ Kr its middle
<na typhih naʔ> //nahtypihinaʔ// PL" in the midst of, between occurs only with those members of PP which contain <ni> PP 'plural' (322b)

//ʔaihnahyphihinaʔ// I in their midst, between them

346. kl. The one member of this class occurs in IC with preceding K, the constitutes belonging to class L, and with preceding PK, the constitutes belonging to class PL. hnahuqweh kl

The forms in which this morpheme has been found are given in 341-344.

347. L, PL. There are a number of morphemes which either occur alone as locatives (class L) or occur with members of PP, the constitutes being locatives. These morphemes are labeled L, PL and are given in 347b. In 347a are listed those morphemes which occur as L but not as PL.

a. L. Of the various distributional properties which characterize the class L, perhaps the following is best taken as diagnostic: its members occur in IC with following <tah> 1N, vNF (319b), but not with other morphemes which occur with V (319a, 37e, etc.).
sipiŋ L on the other side of the Sierra Nevada, far east
sipiŋtyŋ Nf that which is on the other side of the
Sierra Nevada; Northeast Mono, Mono Lake
Painte

kwiiŋ L north
pihtah L in the Kings River drainage basin (or farther
south), far south

(For the area between the San Joaquin River and
the Kings River drainage basin, the form <u naŋ paah>
L,pL 'on the other side' (325, 343c, 348a) is used.)
pihtahyŋ Nf that which is in the far south; Kings
River Mono (i.e. the Sycamore and
Woponooh tribelets)
typewuh L far below, in the San Joaquin Valley

?ijoh L here

?ijah L there

paŋah L,nL on top (of)

b. The morphemes listed below occur alone as locatives
or occur with members of Pp. The morphemes belonging to Pp
have the allomorphs given as set 2 (32la) when followed by
pL; <ni> pp 'plural' (322b) has the freely varying allomorphs
//nih//−//ih// when followed by pL.

qwena'a L,pL distant, far (from)

nyqwena'a L far from me

//nopiŋNa'ahqwena'a// L far from the house
wahkihtah I,pL hither

wahkihtahytȟ Nf that which is on this side, or fairly close to here (relative to something else being spoken of)

"ahwahkihtah" I closer than him/her/it

pahmatyh I,pL uphill, upstream, up above (in the mountains but not in the air), near east

"ahpahmatyh" I uphill (or the like) from him/her/it

petawih I,pL downhill, downstream, below (in the foothills but not in the San Joaquin Valley)

has the allomorph "petaw" when followed by <weh> nL 'in, at' (348a)

"ahpetawi" I downhill/downstream from him/her/it

petawihtyȟ I that which is downhill/downstream

"petawehtyȟ" I (seems to have the same use and meaning as the above form)

348. Locativizing suffixes.

a. nL. Members of this class occur in IC with Nf, Nq, Nd, Nh, Pp, and L, the constitutes being L. The morphemes belonging to Pp have the allomorphs given as set 3 (321a) when followed by nL; <ni> pp 'plural' (322b) has the allomorphs "ni", /i/ when followed by nL. The tactic juncture <~> occurs before nL after Nf, except after those members of
Nf which end in the morphemes <tyh> vNf,1N (313a, b) and <hna> vN (313a); the latter has the allomorph //h// when followed by nL. When occurring with Nd, members of nL precede the demonstrative base <hu> dN (326), which has the allomorph //huN// in this construction.

pa:añ nL,L on top (of)

npy:añ L on top of me

://apa:añ// L on top of him/her/it

://mapa:añhuN// L on top of that (225k)

nopih-pa:añ L on top of the house (224a)

wahana:añpa:añ L one on top of the other (343c)

paah nL+ by

This morpheme has the meaning "by" referring to location as well as to agency. In the latter use, it is always followed by <htu> qN (313b). In addition to the distribution which it shares with other members of nL, <paah> occurs with Qn, <'i nañ> (pL),L (325, 348c), <'u nañ> (pL),L, <kywa> (pL) (343c), and <naah> (pK) (344).

npyaah L by me

*ety Nf gun, bow

cah tyhki *i Vt to fire (gun) (386, 362b, 371d)

na Pr reflexive

*ety+npyaahhtu+nacñtyhki*ihtí In the gun was fired by me
waha (n) two
wahapasah L in two places, with reference to two
places/things
*ewapaah L in many places, with reference to many
places/things
*sana*paha L,pL on this side (of)
*sana*paha L,pL on the other side (of); on the other
side of the San Joaquin River
*sana*pahahtyN sf that which is on the other
side; Auberry Mono (who live on the
other side of the San Joaquin River)

kywapah pL beside
naahpasah nL behind

weeh nL in, at

nyweeh L in me
nopisweeh L in the house, at home

$mija Vi to go

//h// allomorph of <hna> vNl (319a)

//*i// allomorph of <ny> Pl I (321a)

//*imijahweeh// L in my going, in/at my destination,
because I went (216a, 213a)

nypa*aah L on top of me

nypa*aahweeh L in on top of me (i.e., in the space
above me) (213a)

nypa*aahweeh+joheichti IN flew over me (224b)
wyNyhpY Nf tree
*ahqah nL among
wyNyhpY*ahqah I among the trees
wyNyhpY*ahqahweeh I in among the trees (i.e. in
the area among the trees)
wyNyhpY*ahqahweeh+kihahti IN came through
the trees

<hmaN> nL on, by means of has the allomorph //mahmaN//
when occurring with morphemes of class Pp ex-
cept <"a> Pp 'third person' and with D except
<ma> D 'that', and the allomorph //ahmaN//
when occurring with <"a> Pp 'third person' or
<ma> D 'that'; the allomorph //hmaN// occurs
elsewhere

nopih*hmaN I on the house

wihi Nf knife
tohqopa Nt to cut

wihi*hmaN*atohqopa Vi to cut it with a knife

<n y hmaN> //nymahmaN// I on me (216a)
<"a hmaN> //"aahmaN// I on him/her/it, by means of
it

<ma hmaN hu> //maahmaNhuN// I on that, by means of
that

tukuN nL to, into, through

nopih*tukuN I to the house

wono+*tukuN I into the burden basket (231a)
nāpih\"pa\'an I on top of the house
nopih\"pa\'aŋtukūh I to the top of the house
\"ahqah nL among; within
\"wyňyňy\"\"ahqah I among; the trees
\"iwooh\"\"\"ahqah I in my hair
//\"\aňyy\nňy\"\"\"\ahqah// I within his body, a part of
his body
\<tuheň> nL+ under occurs also with <nato\"o> Mf 'shirt'
and <qahnihsu\"ju> Mf 'trousers', with the
allomorph //tuhih//, and with <kywa> (pL)
(343c); the allomorph //tuheň// occurs in all
environments except the two just mentioned
nopih\"tuheň I under the house
//tuhihqahnihsu\"ju// Mf underpants
//tuhihnato\"o// Mf undershirt
kywatuhę̃ pL beside (and touching), right next to
\妞 nL- at occurs only in certain place names
ca\'ahtiniwū I at Ca\'ahtini

b. dL. This subclass contains two members, one of
which occurs with two members of D (325) and with H (327),
the other with <\"i> D only.
\<wuhtah> dL in ... direction has the allomorph //uhtah//
when occurring after <\"u> D 'that'
\<\"u wuhtah> //\"uuhtah// I in that direction
\"iwuhtah I in this direction
hauhtah L in what/some direction

peñ dL occurs only with "i> D 'this'

ipeñ L right back here

c. xL. This class contains one member, which occurs with members of several different classes, as specified below.

<nañ> xL at, on

This morpheme occurs with Nf, Nr, H, (L), (pL), <pin> Pb 'back, buttocks', D, two members of L, and at least one member of Qn. It has the allomorph //hnōh// when occurring after <ha> H (327), and the allomorph //hnōñ// when occurring after <ihoñ> L 'here' or <ma> D 'that'; the latter has the allomorph //maa// when occurring with <nañ> xL.

pojo Nf road

pojo nañ L on the road

hsu F staying, still, precisely (395)

pojo nañ hsu L along the road (225k)

typih Nr(pY) ground, dirt, land (311b)

typih nañ L on the ground

pawaha Nr(pY) meadow (311b)

pawaha nañ L in the meadow

ha H what, something (327)

<ha nañ> //ha hnōh// L where, somewhere
typihi (L) (middle) (345)
typihi naŋ L- at the middle occurs only with <na> 
Pr (which has the allophone //nah// when occurring with it) and <tyā> vNF, LN
(319b)

//nah typihi naŋ// pL- in the middle of (345)
typihi naŋ tyā Mr(r) middle
<pīh> Pb+ back, buttocks (385)
pīh naŋ nL,T- behind, after (see also 356c)

<i> D 'this', <u> D 'that'
naŋ L,(pL) here, on this
naŋ paah L,pL 'on this side (of)
naŋ L,(pL) there
naŋ paah pL,L on the other side (of)
naŋ paah tyā Nf that which is on the other
side; Auberry Mono (who live on the
other side of the San Joaquin River
from North Fork)

<ma> D that
<ma naŋ> //maa hnoŋ// L there

tñoŋ L here, tjaŋ L there

/tñoŋ hnoŋ// L here

tjaŋ naŋ L there

waha Cn two

waha naŋ L- has been found only with <paŋaŋ> L,nL
'on top (of)'
waha naŋ paʔaŋ L one on top of the other (as two knots tied in a string)
quope naŋ pL in front of, before (343c)
kwita naŋ pL at the bottom of (343c)

350 Miscellaneous Adverbial Elements

350. In this section are listed members of the following classes which, together with L (349) fall under the loose heading of "adverbs": Q (354), T (357), Aq (359a), Am (359b). Included also are a number of morphemes which occur as constituents of Q (351-353, 355) and T (353, 356, 358). The class Q contains the three subclasses Qn "quantitatives", Q1 "qualitatives", and Qc <cyhkwyta>; the last has only one member.

351. Constituents of Qn.

a. (Qn). This class contains three morphemes of specialized distribution, each of them occurring with a single member of Qn.

naa (Qn) twice only with <pahi> Qn 'three'
naapahi Qn six

tnəh (Qn) (seven) only with <symy> QnX 'one' (which
has the allomorph /\oywv\ when occurring with it)
/\t\a\h\oywv\ Qn seven
wooh (Qn) (eight) only with <symy> Qn^x 'one'
woohsymy Qn eight (216a)

b. qQn. This class contains a single member, which occurs in IC with nine members of Qn, as indicated below.

mano qQn decade
<symy mano> /\syy\mano\ Qn ten (216a)
<Rh symy mano> //Rh, 's syy mano// Qn ten by ten
wahamanolo Qn twenty
pahimano Qn thirty
wacymano Qn forty
manymimo Qn fifty
naapahimano Qn sixty (351a)
/\t\a\h\oywymano// Qn seventy (351a)
/woomsymymano// Qn eighty (351a)
qwanyhkimo Qn ninety

c. Qn-. This class contains one member, which occurs only followed twice by <ci'> n\m^+ 'diminutive' (335), each time with the tactic juncture <h> (which always precedes members of n\m) intervening. <ci'> has the allomorph /\ci'i// in its second occurrence after this morpheme.

hyy Qn- only in
<hyy h ci'h ci'> //hyy\ci'hci'i// Qn few
352. Q1-. The three members of this class are like <hyy> Qn- (above) in their occurrence with <ci'> nNh⁺, but the constitutes are Q1 rather than Qn.

?ino Q1- only in
<?ino h ci' h ci'> //_?inohci'hci'/?// Q1 small
tapaa Q1- only in
 //_tapaahci'hci'/?// Q1 nearby
<sytai> Q1- has the freely varying allomorphs
 //_sytai// //_hyla//
 //_sytaihci'hci'/?// //_hytahci'hci'/?// Q1 slightly,
a little bit

353. The classes labeled (-A) and hA contain one member each. The forms in which they occur as ICs belong to more than one class of adverbs.

a. (-A). The one morpheme belonging to this class has been found with Q1 and with one member each of the classes pL, L, and T-.

'( -A) emphatic
cawu Q1,E good
cawu' Q1 very good

<ma ni hu> //_manihii// Q1 like that (325, 355, 326)
 //_manihii// Q1 just like that
kywapaah pL beside

kywa'paah pL beside (and very close to) usually occurs with <nohi> Pn 'very' (383) nohikywa'paah pL next to, very close to pa'aahkanL,nL on top (of) pa'aahkanL only with <hsu> P 'precisely' (395) pa'aahkanhsu L quite on top 'ywi Vi to sleep pa'aahkanhsuywi Vi to doze pyty T- (after a while) (356a) pyty'T- (pretty soon) pyty'hsu T pretty soon (356c)

b. haA. The one member of this class occurs only with H (327). The constitutes belong to both Qn and T.

ihno'o haA only in

<ha ihno'o> //ihno'o// Qn,T as Qn: how many, some; as T: when, sometime //tu'iihno'o// Qn,T as Qn: any amount; as T: anytime

354. Q. This class comprises the three subclasses Qn, Q1, and Qc.

a. Qn, quantitatives.

<syro> QnX one

Unlike other quantitatives, this morpheme does not
occur in IC with <htu> qN,lN (319b). However, it occurs with several morphemes with which other members of Qn do not occur, viz. <h...> qN" (319b), <na> Pr 'reflexive' (321b), <taah> (Qn) '(seven)' (351a), <wooh> (Qn) '(eight)' (351a), <hkutaa> qT' (358e). <symy> has allomorphs as follows: //sy'ny// when occurring with <na> Pr (which has the allomorph //nah// in this construction); //sy'yy// when occurring with <mano> qQn 'decade' (351b); //oywy// when occurring with <taah> (Qn) '(seven)'; //sy'my// elsewhere.

//sy'hm'// Nf,Nq one
//nahsy'my// Qn all, entirely
//taahcywy// Qn seven
woohsymy Qn eight
symyhkutaa T always
//syymano// Qn ten
waha Qn two
pahi Qn three

<wacy> Qn four has the allomorph //wahcyhkwi// when occurring with <htu> qN,lN (319b), <pah> nL 'by' (348a), and <nahpy> qT times (358e); the allomorph //wacy// occurs elsewhere

manyki Qn five
qwanyhki Qn nine
*ewa Qn many
qatu'yu Qn,Aq,E none, not, no (see also 359a, 392b)
b. Ql, qualitatives.

<oawu> Ql, 'good' has the allomorph /coo/ when immediately followed by V or N; the allomorph /cawu/ occurs elsewhere

*ywi Vi to sleep

/cooh*ywi/ Vi to sleep soundly (396a)

pa.hkwí Nf,Nbr fish (311a)

/coohpahkwí/ Nf trout

papa Ql large
typici Ql great, important
woqo Ql thick
takiʔaʔa Ql thin
*yty Ql long, tall
syhta Ql bad
toki Ql⁺, 'right, sufficient, appropriate' (see also 392b)

This morpheme, unlike the other qualitatives (with the exception of <hohma> Qlₓ), occurs with Pp (or may occur without Pp). Morphemes of class Pp have allomorphs of set 4 (321a) when occurring with <toki>.

//ʔitoki// Ql right for me, enough for me

ʔatoki Ql right for him/her, enough for him/her
hohma QIx over, above, larger than

This morpheme occurs only in IC with Pp (allomorphs of set 4), the constitutes being QI. This feature of distribution is shared only with <toki>.

<ny hohma> //°i hohma// QI larger than me
//°yihohma//...//°ynihohma// QI larger than y'all
<ny hohma htu> Nq (319b)
//°i hohma h weeh// I in the space above me
<oiihpa' + no pih Na + °a hohma htu weeh + johci hti>
//oiihpa'+huhma'+ahohmweeh+johcihti// IN
the bird flew over the house
°ohi> QI (left)

This morpheme occurs only in IC with <tyh> (Kt) (341a), which, in turn, occurs only in IC with °ohi> QI and <oawu> QI,E. Since °ohi> shares this feature of distribution with <oawu> QI, which is more widely distributed as a member of class QI, it is classed as a limited member of QI.

<tyh °ohi> K left only in
<tyh °ohi hnahqweh> L° (346)
tyh°ohihoi Nf left-handed person (313a)

C. Qo. This class contains a single member.
<oyhkuyta> Qo with effort, hard

This morpheme is similar to QI in its occurrence in verbal expressions (474a), but is unlike QI in not
occurring with <htu> qNW,1N. Instead, it occurs with <hpY> qNW (319b), (which occurs only with <cyhkwyta> Qc).

<pohö ha> Vi to run

cyhkwytä + pojo ha Vi to run hard
cyhkwytahpY if a person with a great deal of stamina or physical endurance

355. nQl, qualitativizing suffixes. The three morphemes of this class occur in IC with N' (303g), the constitutes being Ql. Two members of nQl have a somewhat wider distribution, as noted below. The tactic juncture <“> (396b) occurs before nQl after N', except those members of Nf which end in <tyK> vNf,1N (319a, b).

<nì> nQl like

This morpheme occurs in IC with N', Nd, Nh, Pp, and Pr. Morphemes of Pp have the allomorphs of set 3 when occurring with <nì>. <nì> has the allomorph //mahani// when occurring with <na> Pr 'reflexive' (which has the allomorph //na<>// when occurring with <nì>), and the allomorph //ma<öani// when occurring with Pp. The allomorph //ni// occurs elsewhere.

nopih^-ni Ql house-like
tojä^-ni Ql like a mountain

<mah pih> //mah "ja// Nr(P,pi) hand, glove
//mah "ja^-ni// Ql like a hand
\[\text{'ulu MØ that }\]
\[\langle u ni hu\rangle \ //\text{unihi// QI like that} \]
\[//\text{ini'hi// QI just like this} \]
\[\langle ma ni htu Na hu\rangle \ //\text{ma ni h ku huN// QI like that-obj.} \]
\[\text{haqeq En who/someone (327, 328)} \]
\[\text{haqeq'ni QI like whom/someone} \]
\[\langle a ni\rangle \ //\text{ama'ani// QI like him/her/it (216a)} \]
\[//\text{yhma'ani// QI like thee} \]
\[\langle na ni\rangle \ //\text{ma'ahani// QI like itself, like each other} \]

\[\text{ho nQI with, accompanied by} \]

\[\text{This morpheme occurs with N', Nh, and Pp. The constitutes occur only with <htu> qN,1N (319b).} \]

\[\text{poihpoi EN masculine name} \]
\[\text{poihpoi'ho QI' with Poipoi} \]
\[\text{poihpoi'hohtu+kihmahti IN he came with Poipoi} \]
\[\text{tyyhna'ho QI' with meat} \]
\[\langle tyyhna'ho htu Na + *eki h.. tyN\rangle \ (371a) \]
\[//\text{tyyhna'hohtu+*ekityN// IN eating acorn and meat} \]
\[\text{haqeq'ho QI' with whom/someone} \]
\[\text{nyhohtu Nq (one who is) with me} \]

\[\text{ke nQI having} \]

\[\text{This morpheme has been found only with N'. The constitutes occur only with <htu> qN,1N (319b).} \]
nopih°ke Q1° house-having
<nopih°kehtu> Nq house-having (one)
qwaci Nr(P) tail
<qwaci°kehtu> Nq tail-having (one)
<°yty htu Na + qwaci ~ ke htu> Nq having a
long tail (434)

356. Constituents of T. This class includes morphemes of specialized distribution which occur as constituents of temporals. One of them occurs also by itself as a temporal.

a. T-. The members of this class occur in IC with <hsu> (T);

japi°i T- only in
japi°ihsu T immediately, quickly
°uno°oho T- only in
°uno°ohohsu T formerly. (23la)
pyty T- occurs with <hsu> (T) and with <°> (-A) (353a)
pytyhsu T after a while
pytu° T- only with <hsu> (T)
pyty°hsu T pretty soon
mowahu T-,°T as T: now, soon

The constitute of this morpheme with <hsu> (T) has a portmanteau sense (see example). This is the only morpheme occurring with <°uhsu> t (356b).
mowahuhsu T tomorrow morning, the next morning;
tomorrow, the next day
mowahu'uhsu T- only with <hsu> (T)
mowahu'uhsuhsu T early tomorrow morning, early
the next morning

b. t. This class contains a single morpheme, which
occurs only with <mowahu> T,T- 'now; (tomorrow morning)'.
'uhsu T only in
mowahu'uhsu T- only in
mowahu'uhsuhsu T early tomorrow morning

c. (T). This class contains a single member, which
occurs with T-, the constitutes being members of T.
<hsu> (T) occurs only with <pih näha> nL,T- 'after',
(365; 348c), <japi>i> T-, <uno>oho> T-,<piy> T-, <pyty 'T-, <mowahu> T-T,
<mowahu 'uhsu> T-
pihnañhsu T again
For examples of the other constitutes, see above.

357. T, temporals. Unlike members of Q and L, the
forms belonging to class T (with the exception of <mi'i>i>)
do not occur with a following nominalizing suffix (319b).
mowahu T,T- now, soon (see also 356a)
añihku T now, right now, immediately
<mi'i'i> T nowadays has the allomorph //mi'ih// when followed by <tyh> 1N,vNf (319b); the allomorph //mi'i'i// occurs elsewhere //mi'ihyh// Nf those of nowadays, contemporaries 'apitaa T after a while, presently, later 'ano'oho T no longer hmuu'ahoi T formerly, in the old days (224d) nohihmuu'ahoi T a long time ago (383) 'oohnoho T then

358. Temporalizing suffixes.

a. nT. This class has one member, which occurs in IC with Nw (315). The constitutes occur as T or as Vi. <wano> nT time has the allomorph //no// when occurring after <jyph> Nw 'autumn'; the allomorph //wano// occurs elsewhere toowano T,Vi (to be) wintertime toqawano T,Vi (to be) nighttime //jyphano// T,Vi (to be) autumn //jypanohpy// IN it has become autumn, autumn has come (373b)

b. vT. This class contains two morphemes, which occur in IC with Vi or in a trinary construction with Pp and Vi. When they occur in IC with Vi alone, the 'actor' for this Vi is the same as that of the predicate with which the constitute
T occurs. When they occur with Pp plus Vi, the member of Pp identifies the 'actor' for this Vi; this construction occurs only when this actor is different from the one involved in the predicate with which the constitute T occurs.

hsi vt after ...ing, having ...ed
pihty vi to arrive
pihtyhsi T having arrived
'apihtyhsi T after he/she/it arrives/arrived
<puh ni> //puh 'ni// Vt to see
tyhyhta Na Of deer-obj.
tyhyhtaNa+puh'nihsi T having seen a deer
<ny my> //nny// Np I
pahca Vt to kill (one being)
//tyhyhtaNa+nny+puh'nihsi+'apahcahti// IN having seen a deer, I killed it
poihpoi Nf Poipoi (masculine name)
tai C indeed (393b)
<ny ni> //nii// Pp first person pl. excl.
pa hkwi ka kaa Vi to go fishing (367a, 377b)
//poihpoi'tai+niipahkwikakaahsi+pihtyhti// IN
Poipoi arrived after we had gone fishing
<nef> vt while ...ing has the allomorph //na// when occurring with Pp plus "vi, and the allomorph //nef// when occurring in IC with Vi alone
pahkwikaneň T while fishing
//niipahkwikana// T while we were fishing

c. qT. This class contains three morphemes, which occur in IC with Qn. Two of them occur with a single member of Qn each.

nahpy qT times

symynahpy T once
wahanahpy T twice
"ewanahpy T many times

kanaa qT only with <Rh symy> //Rh"," symy// Qn one
by one, some

//Rhsy"mykanaa// T sometimes, occasionally

hkutaa qT only with <symy> Qn 'one'
symyhkutaa T always

359. The two classes Aq and Am contain one member each. One of these morphemes occurs in only two constructions (494), while the other has a very wide distribution.

a. Aq. The one member of this class occurs in IC with members of several classes in addition to its occurrence as a member of Qn and E. A complete analysis of its distributional properties has not been made, and its occurrence is not fully accounted for in chapter four. Some indication of the variety of environments in which it is found is furnished by the examples below.
qatu?u Aq, Qn, E not, none, no (see also 354a, 392b)
qatu?u+cawu Q1 not good
//qatu?u+nyy+mijawai// IN I shall not go
//qatu?u+ahmijahna// If his failure to go
qatu?u"tai+mahu+syjechty' IN he is not a coward
//qatu?u~po'o+nyy+mi'ii'i+pahkwiakhty'// IN but I
do not fish nowadays
qatu?u~po'o+haqe'k++asuhtapyha~hti IN but nobody
understands it
//qatu?u~po'o+nuyhkwa'++asuhtapyha~ityk// IN but
we do not understand it
Mahni?i+qatu?u+haqe'k++ahawatyk IN why doesn't
anyone scold him?
qatu?u"tai~po'o+mahu+toqohwa IN but that isn't a
rattlesnake
qatu?u+mahu+toqohqwani+sunawityk IN that doesn't
look like a rattlesnake
//qatu?u~po'o+nuyhkwa'++yihon+mi'jahnaahmatyk//
IN but we don't feel like going with you
//qatu?u+niityyhwiihty'hci'// If little one who
does not tell us
//qatu?u"tai+°ihiny+tytyyhwiihty'// IN they do
not tell things
b. Am. The one member of this class occurs only with (1) those members of Nf which consist of Vi plus <tyη> vNf,IN (319a), (2) those members of T which consist of Vi plus <neη> vT (358b). The constitutes are IM ("imperative expressions").

mino'o Am prohibitive

mino'o+mijatyη IM don't go!
mino'o+mijaneη IM don't go!

360 Verbal Elements

360. Included in this section are five classes of morphemes which can be referred to as verb roots (362-366), verbalizing suffixes (367), the one monomorphemic member of class U (361f), and five classes of morphemes which occur as constituents of U (361a-ε).

361. The class of forms labeled U consists of those forms which occur in IC with the suffixes uV (367b). The forms occurring with uV are for the most part bimorphemic and, in general, occur only with these suffixes. The morphemes which are constituents of the forms U, except for <puch> Pe 'eyes' (385) and class Nk (312), are listed in 361a-ε. One member of U has been found which is not segmentable and so is the only unit morpheme belonging to U. It is given in 361e.
a. nU. This class contains one member, which occurs in IC with preceding nU (312).

<pono> nU has several allomorphs, as indicated by the following table:

<table>
<thead>
<tr>
<th>Allomorph</th>
<th>Occurs with</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pono/</td>
<td>puhí nU blue/green</td>
</tr>
<tr>
<td></td>
<td>*ahtyh nU round</td>
</tr>
<tr>
<td></td>
<td>haky nU foolish</td>
</tr>
<tr>
<td>/pana/</td>
<td>*ahqa nU red</td>
</tr>
<tr>
<td></td>
<td>*oha nU yellow</td>
</tr>
<tr>
<td></td>
<td>*ahca nU brown</td>
</tr>
<tr>
<td></td>
<td>*ehsi nU gray</td>
</tr>
<tr>
<td>/taja/</td>
<td>tohoi nU white</td>
</tr>
<tr>
<td>/caja/</td>
<td>nahqa nU, Nr(P) ear</td>
</tr>
<tr>
<td>/ca?a/</td>
<td>topo nU hill</td>
</tr>
<tr>
<td>/a?ani/</td>
<td>tuhmu nU black</td>
</tr>
<tr>
<td>/&quot;jawa//</td>
<td>to oh nU, Nr(P) hole</td>
</tr>
</tbody>
</table>

puhipono U blue
puhiponoki Vi (sg.) to be blue (367b)
puhiponowa Vi (pl.) to be blue
*ahtyhopono U round
hakypono U only with h...h...hka uV
//hahkyhoponoha// Vi to act foolish
<*ahqapono> //*ahqapana// U red
//*ohapana// U yellow, brownish yellow
//ahcapana// U tan, brown, copper-colored
//ehsipana// U gray
//tochitaje// U white
//nahqacaja// U having long ears (used to describe rabbits)
//topoca'a// U peaked, pointed, in the shape of a hill
//tuhmu'ani// U black
//to'oh-jawa// U having hole(s) (as a muddy road)

b. (U). This class contains one member, which occurs in IC with -U (351c), U- (351d), and at least one member of Nu (312), the constitutes being U. It precedes -U and follows U- and Nu.

<pata> (U) has the allomorph //hpahta// when occurring with <o'oha> Nu 'yellow' (and perhaps other members of Nu, if it occurs with them); the allomorph //pata// occurs elsewhere

patakwni U naked
sikhipata U flat

<o'oha pata> //o'ohaphta// U turning yellow (like leaves in autumn)

For further examples, see 361c.

c. -U. This class consists of the morphemes, except <o'oha> Nu 'yellow', which occur in IC with preceding <pata> (U) (361b).
kwini -U only in
patakwinin U naked
kwici -U only in
patakwici U shiny
qwaja -U only in
patsqwaja U long and narrow (as a fishing pole)
nuju -U only in
patanuju U straight (of a long object)

d. U-. This class contains one member, which occurs only with following <pata> (U) (361b).
sihki U- only in
sikkipata U flat

ë. pU. This class contains a single member, which occurs only with preceding <puh> Pb 'eyes' (385), the constituent being a member of U.

"cimyty pU only in
.puh"cimyty U having wide-open, sparkling eyes
puh"cimytyki Vi to have wide-open, sparkling eyes (216a)
puh"hocimytykha Vi to have wide-open, sparkling eyes momentaneously (222, 367b)

f. U. One morpheme has been found occurring with uV which is unsegmentable on the basis of the material at hand. It is thus the only member of U which is not bimorphemic.
<jepeqono> U open (of a house or fence with regard to its windows, doors, or gate)
jepeqonoki V\ to be open in one place
jepeqonowa V\ to be open in more than one place

362\ The classes V\ a, V\ x, Vr, Vr\, V\ t comprise those morphemes which occur in IC with one or both of the members of v\ vR (371d): <\rhi> v\ vR 'durative', <\oi> v\ vR 'punctual'. Most of these morphemes do not occur except with v\ vR, but there are a few which have a wider distribution: <\myhna> Vr,Vi 'to turn over, change' (362c), <johci> Vr, Vi 'to fly, rise', <qawino> Vr, Vi 'to turn (one's head) back and forth', <qopi> Vr, Vi 'to break (of supple object)' (362d), <qoti> V\ x, Vx 'to break (of brittle object)' (362b), <tapo> V\ x, Vx 'to strike'.

a. V\ a. This class contains two members, which occur only in IC with <\oi> v\ vR 'punctual', the constitutes occurring as v\Va (auxiliaries).

tana V\ a only in tana\oi v\Va for good (signifies that the action denoted by the preceding stem is done with the intention or supposition that its result will be more or less permanent)
cuhipa Vi to sink, go down into (smthg.)
cuhipahtana'i Vi to sink/go down for good
mijahtana'i Vi to go away for good
kihmahtana'i Vi to come to stay
muhsu V^a (231b) only in
muhsu'i VVa almost (signifies that the action
denoted by the preceding stem almost
took place, but didn't)
cuhipahmuhsu'i Vi to nearly sink
hahkwihsa'i Vi to sneeze
hahkwihsa'ihmuhsu'i Vi to almost sneeze
<br>'kyh noo' //kyh 'noo//' Vt to bite
//a'kyh'a'noochmuhsu'i// Vi to almost bite bite it

b. V^x. The three known members of this class occur
in IC with <'^i> VVr (but not with <'^hi> VVr), the constitutes
being Vx. The class Vx consists of those forms which occur
only with Pi (instrumental prefixes 386). Two members of V^x
occur also without <'^i> VVr.
qohtoohtoo V^x only in
qohtoohtoo'i Vx only with <c'ah> Pi 'pulling'
cachqohtoohtoo'i Vt to pull (someone's) hair
<br>qoti> V^x,Vx to break (of brittle object) has the
allomorph //qoht1// when occurring with <'^i>
and the allomorph //qot1// when occurring
with Pi
//cæh'qoht'i'// Vt to break (one brittle object)
//wyh'qoht'i'// Vt to break (e.g. a pole) while whipping
//cɪh'qoht'i'// Vt to break (e.g. a needle)
caqoti Vt to break (several brittle objects)

<"tape> V'X,VX to strike

This morpheme occurs in IC with <"qi> and with <wyh> Pi 'with sidewise motion of long object'. The constitute <"tape"qi> occurs only in IC with <wyh> Pi. <"tape> has the allomorph //"tæho// when occurring with <"qi>, and the allomorph //"tape// when occurring with <wyh>.

<wyh-tape "qi> //wyh-tæho"qi> Vt to strike (one blow, with whip-like motion)
<wyh-tape> Vt to strike (several blows, with whip-like motion)

C. Vr. The roots labeled Vr occur in IC with <Ehi> but not with <"qi>. Two members of Vr occur also as Vi (without <Ehi> or <"qi>).

<joheci> Vr,Vi to fly, to rise (from lying position)

This morpheme occurs with and without <Ehi> with a subtle difference in meaning which is not clear.

<joheci Ehi> Vi occurs in a text where it refers to a large number of birds flying around, but it seems to be an archaic form, as <joheci> not followed by <Ehi> is ordinarily used in conversation regardless of the number
of the subject or manner of flying. <jokci> has the allomorph //joci// when occurring with <qhi>. 

<mynha> Vr", Vi to turn over, change has the allomorph //mynhaa// when not preceded by <cah> Pi and not followed by <qhi>, the allomorph //mynha// when preceded by <cah> Pi and not followed by <qhi>, and the allomorph //mynu// when followed by <qhi>. 

//mynhaa// Vi to turn over (intrans.) 
//mynu qhi// Vi" to turn over and over only with <cah> Pi 'pulling' 
//cahmynuqhi// Vt to turn (something) over and over 
//cahmyha// Vt to turn (something) over (once), to change or exchange (something)

siko Vr to slide (horizontally) 
huju Vr to slide (downhill) 
wojo Vr to be lined up (of several objects) 
kwinu Vr to swing around, spin around (intrans.) 
pyty Vr" has been found only with <cah> Pi 'pulling' 
cahpytyqhi Vt to unravel (rapidly) (as string wrapped around something) 
qwahtunu Vr" has been found only with <cah> Pi 'pulling' 
cahqwahtunuqhi Vt to twist, roll (something) around
satu Vr to spill (out of a container, of several small objects, or a finely divided mass)
kwynu Vr^ has been found only with <coh> Pi
cohkwynuʔhi Vt to turn (something) around and around
tany Vr to ring (of a bell)
nuju Vr to crawl (of a snake)
qawino Vr^, Vi^ only with <coh> Pb 'head'; as Vi^, only with <ʔ.ʔi> vVp (373a)
cohqawinoʔhi Vi to turn the head back and forth
//cohqawinonoki// Vi to turn the head back and forth jerkily
pata Vr to chatter
kwipi Vr to shake, shiver
khyhmy Vr to move noisily, roar (of an automobile)
typy Vr^ only in
typyʔhi Vi^ has been found only in
wyhtypyʔhi Vt (bird) to flutter (its wings)
typyʔhi’ Nf automobile (319a)

d. Vr^o. Members of this class occur with both <ʔi> vVr and <ʔhi> vVr. The constitutes are Vi.
<puti> Vr^o to emerge, go or come out has the allomorph
//puhti// varying freely with //puti// when occurring before <ʔi> vVr; the allomorph
//puti// occurs with <ʔhi> vVr
<puti> //puti// -//puhti// Vi to emerge
(once, of single object)

putiRhVi to emerge (of several subjects one after another)

<qopi> Vr?,Vi - to break (of supple object) has the
allomorph //qohpi// when occurring with <qi>
and the allomorph //"qopi// when occurring as
Vi"; the allomorph //qopi// occurs with <Rh>
qopiRhVi to break (intrans. of several supple
objects one after another)

<qopi o// //qohpi>i// Vi - to break (one supple ob-
ject, as a piece of string, in one place)
has been found only with Pi:
//oahqohpi>i// Vt to break (smthg.) by pulling
//wyhqohpi>i// Vt to break or cut with whip-
like motion of long object
//tohqohpi>i// Vt to break with violent motion
//kyhqohpi>i// Vt to break by biting
//"qopi// as Vi" (not followed by <Rh> or <qi>)
to break (of several supple objects or
one supple object in several places)
has been found only with Pi
wyh"qopi Vt to break (several things) with
whip-like motion of long object
cah-qopi Vt to break (several things) by pulling (used also for picking berries from a bush)

<qwaca> Vr° to fall has the allomorph //qwaha// occurring with <°i>, and the allomorph //qwaca// when occurring with <Rhi>

<qwaca ³i> //qwaha³i// Vi to fall (of one object, a short distance)

qwaca³hi Vi to fall (of several objects, or one object a long distance, as a shooting star)

e. V³t. The members of this subclass occur with <°i> (but not with <Rhi>). The constitutes are transitive.

qapa³wo V³t° only in

qapa³wo ³i Vt° only with <mah> Pb 'with the hand'
mahqapa³wo³i Vt to slap in the face

cohki V³t° only in

cohki ³i Vt° only with <mah> Pb 'hand'
mahcohki³i Vt to pounce upon (as a cat)

tyhki V³t° only in

tyhki³i Vt° only with <cah> Pi 'by pulling' and <mah> Pb 'hand'

cahtyhki³i Vt to fire (a gun)
mahtyhki³i Vt to fire (a gun)
<wyna> Vt to move or throw (smthg.) (when occurring without Pi, has the meaning 'to throw'; constitutes of Pi with <wyna s> have portmanteau semes)

wyna s Vt to throw (smthg.)
oahwyna s Vt to knock (smthg.) down (213b)
cihtoowyna s Vt to push (smthg.) (over)
wychihwyna s Vt to crowd or push against //tahwyna s// Vt to throw (a rock)

<tyhty> Vt to tear

363. Vx. The members of this class occur only with Pi and so are indeterminate as to transitive or intransitive property, since all verb stems containing Pi as immediate constituent are transitive, regardless of the class to which the other IC belongs. The list which follows represents only a sample of the members of Vx.

<qoti> Vx, Vx to break (of brittle object) see 362b
<"tapo> Vx, Vx to strike see 362b
"qwapu Vx (to claw) only with <cah> Pi 'by pulling'
oah"qwapu Vt to claw
pakita Vx (to hit with fist) only with <toh> Pi 'with violent motion'
tohpakita Vt to hit with the fist
pahcuki Vx (to switch) only with <wyh> Pi 'with side-wise motion of long object'

wyhpažcuki Vt to switch

caa Vx (to like) only with <suh> Pi 'mentally'
suhcaaa Vt to like

sigoota'i Vx (to scrape) only with <wyh> Pi

wyhbsigoota'i Vt to scrape

wo'i Vx (to scratch) only with <cah> Pi

cah-wo'i Vt to scratch

pityna Vx (to drag) only with <cah> Pi

cah-pityna Vt to drag

pihsita'a Vx (to throw away) only with <wyh> Pi

wyhpihsita'a Vt to throw away

too Vx— only with <cih> Pi 'with point or end of long object'

cihtoo Vt— only with <na> Pr 'reflexive' or <wyne'a'i> Vt (see 362e)

nacihtoo Vi to walk with the aid of a cane

gopa Vx (to cut) only with <toh> Pi
tohgopa Vt to cut

taaiki Vx (to open) only with <cah> Pi

cahahtaaiki Vt to open (gate, door, or window)

364. Vi. Intransitive verb roots. 'This class consists of roots which occur with verbal suffixes (370) but not with
object forms. Some of them occur also as transitive verb
stems or as auxiliary verbs (374). Vt is a very large class;
the list given below represents only a sample of its members.

a. Types of motion (from one place to another).

mija Vi to go (away)

kihna Vi to come

<painty> Vi to arrive has the allomorph //pity// when
occurring with <hky> vVt 'causative-
benefactive', <hu> vVb 'momentaneously',
<no> Pb 'dwelling' (385); the allomorph
//painty// occurs elsewhere; <pihny hky> Vt
has the portmanteau sense 'to fight (trans.)'

<painty hky> //pityhky// Vt to fight with

<painty hu> //pityhu// Vi to just arrive (at a
given moment)

<no pihny> //nopity// Vi to arrive home

qooni Vi to return

nywi Vi, vVa (sg. subj.) to go/walk/move around (to no
particular place), wander/roam around (see
also 374a)

moo Vi (pl. subj.) to go/walk/move around, wander/roam
around (see also 374b)

maapa Vi to go/come uphill

waawii Vi to go/come downhill

we'ni Vi to descend/get down (from an elevation)
cipuhi Vi to climb (up or out), ascend
munaa Vi to go/come to the top of a hill
kwyhmaa Vi to go over the top of a hill

<öika> Vi to enter has the allomorph //önika// when
occuring with Pi except <cih> Pi 'point';
the allomorph //önika// occurs with <cih> Pi,
and the allomorph //öika// occurs elsewhere

<cah öika> //cahönika// Vt to make (smthg.) enter,
put (smthg.) inside (224a, 251)

<cih öika> //cihönika// Vt to put inside, insert
(with a pointed object) (223a)

<ma öika> //maönika// Vt to corner (one's prey)
cuhpa Vi to go/sink out of sight, to sink
johoi Vi,Vr to fly, rise, get up (from bed) (see also
362c)

b. Position and change of position (in one place)
<qahty> Vi,vVa (s3. subj.) to sit down, to be in sitting
position, to stay has the allomorph //qahty/
when occurring with <tyh> Pb 'rock', with
//qahty// occurring elsewhere

<tyh kahty> Vi (rocks) to be in a row

jyhkwí Vi,vVa (pl. subj.) to sit down, to be in sitting
position

<hapi> Vi (s3. subj.) to lie down, to be in lying position
has the allomorph //tañi// when
occurring in compounds, with //napi// occurring elsewhere

qwapi Vi (pl. subj.) to lie down, be in lying position
qohno Vi (pl. subj.) to stand up, to be in standing position (cf. <wynyh>, 357a)
myta Vi to straighten/stretch out one's legs, to have one's legs straightened/stretched out

c. Types of activity.

nyha Vi to make coiled basketry
tyona Vi to winnow
<pota> //pota//-//pohta// Vi to pound acorns
nyka Vi to dance
ooky Vi to celebrate, to take part in fiesta/fandango

tyhka Vi,Vt to eat
hipi Vi,Vt to drink
jaqa Vi to cry/weep, utter sounds of lamentation; to give forth characteristic vocal sounds or calls (of animals)

ohi Vi to cough

ine Vi,Vt to talk, say
mihene Vi,Vt to say/assert/maintain
jatuha Vi to talk, converse

d. States, conditions.

syjee Vi,Vt to be afraid (of)
tyyja Vi,Vt to be terrified (of)
quahma Vi to be sick, to ache; to taste occurs very
commonly as second member of compounds:
<cawu> Ql good
cawuhqahma Vi to taste good (396a)
qohi Nr(') stomach
qohiqahma Vi to have stomachache
nahqa Nr(?),Nu ear
nahqaqahma Vi to have earache
naa?mihoi Vi to be tired, weary
?ywi Vi to be asleep, to sleep
<wahci> Vi to be lost, hidden has the allomorph
//wacih// when occurring in compounds;
//wahci// occurs elsewhere
<wahci "a..> //wah-aci// Vtt- to hide (oneself)
(371c) occurs only with <na> Pr 're-
flexive' (321b), which has the allomorph
//na"// occurring with <wahci>
//na\"wah-aci// Vt,Vi to hide oneself (from)
<hky'> vVt causative-benefactive
wahoimky' Vt to lose
tyky Vt to put, place
<wahci tyky> //wacihtyky// Vt to hide (smth3.)
jatuha Vi to talk
//wacihjatuha// Vi to whisper (214a)
6. Qualities.

*yty*y Vi to be hot
qwahsy Vi to be ripe
tujuha Vi to be full (of a container)
ha°wynthka Vi to be light (in weight)
ny°nyhkwy Vi to be heavy
kutupa Vi to be smooth, slippery

f. Miscellaneous.

<mai> Vi,vWa to become, be, do (see also 374b) has the allomorphs //mai//, //mane//, partly in free variation, partly conditioned; the exact conditions have not been worked out

coa Vi°,Vt° only with <mah> Pb 'hand'
mahooqa Vi,Vt as Vi: to put or have (one's) hand doubled up in a fist; as Vt: to hold tightly in the hand

naahma Vi,vWa to feel, feel like
sunami Vi to appear
naa Vi to grow, to stick out

<qopi> Vi°,Vr° to break (of supple object) occurs only with <qhi> vVr, <qi> vVr (371d), <toh> Pi, or <cah> Pi (335) (see 362d)

<myhna> Vi,Vr to turn over, to change occurs as Vi with the allomorph //myhna// when not preceded by <cah> Pi or followed by <qhi> vVr (see 362c)
pyha Vi^- only with <ta> Pb 'sun, day, heavenly body'
tapyha Vi to get light (of the sky at dawn)
nopoto Vi^-,:br only with <ta> //toh// Pb 'foot'
//tohnopoto// Vi,hr(p) as Vi: to have legs curled up; as hr: knee
ty Vi^- only with <pytyh> Pa (384b)
pytyhty Vi^- only with <hpy> vN 'product' (319a)
pytyhtyhpyp Nf new, young

365. Vt. Transitive verb roots. This class consists of morphemes which occur in IC with preceding Py, O, Pr, Pt; the constitutes being Vi, plus a number of morphemes of limited distribution whose distribution, such as it is, is like that of other members of Vt. Some members of Vt occur also as Vi or as vN (auxiliary verbs) (374b). Vt is a very large class; the list which follows represents only a sample of its members.

a. Physical activities performed upon objects concerned primarily with changing their condition.

cqo Vt^- to smash only with <thh> Pb 'rock' (385)
<tyh cqa> //tahecqo// Vt to smash with a rock
"cqa Vt^- only with <thh> Pb 'rock'
//tah-cqa// Vt to hit with rock (or other missile)
qwaht Vt to shoot (with gun or bow and arrow), to spear (salmon)
tona Vt to punch, pound, hammer
tana Vt to sting (of stinging insect)
pahoa Vt to kill (one being)
qoi Vt to kill (more than one being)
puuhi Vt to blow upon (with mouth)
poo Vt to cut (someone's) hair, to shear (sheep)
sono Vt to tan (hide)
teeqa Vt to paint
jyhkwy Vt to swallow
kuu Vt to bury

b. Movements, activities, or states concerned primarily with relationships between subject and object.
veki Vt to serve acorn (mush, soup, or biscuits) to capita Vt to be angry with hawa Vt to scold tyyhkwi Vt to tell (somebody), say something to jaa Vt to fail to encounter (someone) (at his house or other place where he was expected to be)
wekija Vt to meet
naki Vt to follow
kwihtaa Vt to go around, surround maanta Vt to abandon, leave behind nua Vt*, Vi* only with <tah> Pb 'feet' (385) tahnu nua Vt, Vi to hunt small game syjec Vt, Vi to fear, be afraid (of)
tyyja Vt, Vi to be terrified (of)
kyywi Vt− (to throw at) only with <tyh> Pb 'rock'
   //tahkyywi// Vt to throw at (with rock or other
   missile)
howai Vt to miss, fail to hit (something shot at or
   thrown at)
wyy Vt to catch, to hold in the hand, to get
cee Vt to hold (something) still in a place the con-
   stitute <tah cee> of <cee> with <tah> Pb 'feet'
   has the portmanteau sense 'to overtake, catch
   up with'
hita Vt to hold or carry in the arms

c. Activities concerned primarily with changes in the
   position or status of the object:
tyky Vt, vVa to put, place (see also 374b)
   <noo> Vt, vVa to carry (from one place to another) on the
   back, to haul; (other allosemes when occurring
   with Pi, Pb as indicated in the examples)
   has the allomorph //*noo// when occurring
   after <pih> Pb+, <kyh> Pi, <toh> Pi, <cah> Pi,
   <cih> Pi; the allomorph //noo// occurs
   elsewhere
   <pih> Pb+ back, buttocks
   <pih noo> //pih*noo// Vt to have (e.g. child) riding
   behind one on a horse
pa Pb water
panoo Vt to haul water
<kuh> Pb wood (allomorph //qoh//)
//qohnoo// Vt to haul wood
<toh> Pi with violent movement
//toh°noo// Vt to hit (with arrow, bullet, or other missile)
<kyh> Pi by biting
//kyh°noo// Vt to bite, to carry in mouth
<cah> Pi by pulling
//cah°noo// Vt to catch (fish); to pull up or out
oawa Vt only with <pa> Pb 'water, liquid'
pacawa Vt to pour (liquid)
tuhta Vt to fasten/wrap (baby) in basket cradle
maa Vt to get/obtain, to ask for

This morpheme occurs very often as second member of compounds of which first member is N:

<etyh Nf bow, gun
<etyhmaa Vi,Vt to ask for/get a gun (from)
tyyhna Nf meat
tyyhnamaa Vi,Vt to get/ask for meat (216a)

naho°mi Vt to buy
weni Vt to sell; the constitute of <weni> with <wyh> Pi
'with sidewise motion of long object' has a portmanteau sense:
wyhweni Vt to hang up (213a)
d. Perception and activities concerned with perception.
   maaci Vt - only with <puh> Pb 'eyes'
   puhammaaci Vt to recognize
   hai Vt - only with <puh> Pb 'eyes'
   puhhai Vt to look for (223a)
   wa'ii Vt to find
   nahqa Vt,Mr(T) to hear (occurs as Mr with the meaning 'ear')

E. Miscellaneous.
   majaa Vt to make, fix, prepare
   matyhka Vt,vWa to finish
   manahqa Vt,vWa to try
   waqa Vt to say (smthg.), to talk to (somebody)
   <'ine> Vt,Vi to say (smthg.) has the allomorph
      //'inee// when occurring after <na> Pr
      'reflexive'; the allomorph //ine// occurs elsewhere
      //na'inee// Vt,Vi to say to oneself

366. Vtt. Double-transitive verb roots. The verb
rppts of this class occur with two objects.
   tywy Vtt to ask (someone) for (smthg.)
   kija Vtt to give (someone) (smthg. other than food or
   drink)
<mahqa> Vtt to give (someone) (smthg. to eat or drink)

This morpheme occurs very commonly in compounds with preceding N', the constitutes being Vt. It has the allomorph //maqa// when occurring with <pa> Pb 'water', and the freely varying allomorphs //wahqa// //mahqa// when occurring after N'; the allomorph //mahqa// occurs elsewhere.

//pa~maqa// Vtt to give (someone) (something to drink)
//tyyhnahwahqa// //tyyhnahmahqa// Vt to give meat to
//wijah~wahqa// //wijahmahqa// Vt to give acorns to

nohqa qa Vtt to steal (smthg.) from (someone)

367. Verbalizing suffixes. (See also <wano> nT 358a.)

a. nVi, nVt. These morphemes occur with N'.

Tu nVi,nVt to make (one item of what the preceding stem denotes)
papotu Vi,Vt to make a braid, to braid (231a)
<no pih> Nf house (3110)
nopihtu Vi to build a house
hupija Nf music, song
hupijatu Vi to sing, play music
nawi nVi, nVt to make (several items of what is denoted by the preceding stem)

nopihhawi Vi to build several houses

ka nVi to gather, get

wijah Nf acorns, black oak acorns

wijahka Vi to gather acorns (211a)

toohpo Nf sp. mushroom

toohpoka Vi to gather sp. mushrooms

jee nVi to be or play the role of (the type of being denoted by the preceding noun stem)

wahqeehnu' Nf cowboy

wahqeehnu' jee Vi to be a cowboy

'a?neehoa' Nf insane person

'a?neehoa' jee Vi to be insane

'yny' Nf fearful/strange being; white man

'yny' jee Vi to have a venereal disease

<ja> nVi to put on, to wear (the article of clothing denoted by the preceding noun stem) has the allomorph //a// when occurring with <tah pihsona> Nf 'socks', with //ja// occurring elsewhere

//tahpihsona// Vi to put/have socks on

nohqa Nf shoes

nohqa jaa Vi to put/have shoes on

cahqosota' Nf jacket

cahqosota'?ija Vi to have/put jacket on
tuwa nVi to become, to become like (what is denoted by preceding noun stem)
nyyhmy Nf Mono, Indian, human being, body
nyyhmytuwa Vi to become human
<kuh "nah> Nf wood (3llc)
kuh"nahtuwa Vi to become stiff (of a corpse)
"a nVi", nVt- to engage in the type of activity appropriate to or characteristic of (what is denoted by preceding stem) has very limited distribution;
puha Nf supernatural power
puha"a Vt to bewitch
mana Nr(P) fuzz (of peaches, hazel nuts)
mana"a Vt (fuzz) to irritate (the skin)
nypa Nr(pi) snow
nypa"a Vi, Vt to snow (on)
pakynah"a Vi to be foggy
ki nVt- only in
sihi Nr(P) intestines
sihiki Vt to remove intestines of (animal)
"i nVi to perform the activity appropriate to (what is denoted by the preceding stem)
typyyhsi Nf fish-fly
typyyhsi"i Vi to fly-fish
paatatapa Nf preacher, minister, devout person
paatatapa"i Vi to go to church, worship God
na nVt— only with <jehnihpa> Nf 'poison'
jehnihpa'na Vt to poison
wi nVi— only with <tyja> Nf 'grave'
tyjawi Vi to die
ha nVi— nVt— only with <pojo> Nf 'road' and <no pih>
Nf 'house'
pojoha Vi to run
nopihha Vt to pack (articles of one's belongings, preparatory to moving)
" nVi— nVt— only with <no pih> Nf 'house', <wynyh> Nt 'tree', and <nyhkweh> Mr(pe)'wind'
nopih Vi to dwell, to camp
wynyh Vi to stand (of sg. subj.)
yyhkwah Vi, Vt (wind) to blow (on)

b. uV. This class contains three morphemes, which occur only with U (361). The constitutes are Vi.

ki uV to be ... in one place, or of one subject
puhipono U blue
puhiponoki Vi (sg. subj.) to be blue
jepeqono U open (of house or fence with regard to its windows, doors, or gate)
jepeqonoki Vi to be open in one place (i.e. with regard to one window, door, or gate)
wai uV to be ... in several places, or of several subjects
puhiponoawa Vi (pl. subj.) to be blue
jepeqonowa Vi to be open (in several places) h...h...hka uV to be ... momentarily or in one small or isolated spot has another allophone occurring with <haky pono> U, which occurs only with this suffix:

//hahkyhpoⁿohka// Vi to be foolish, silly (211a) patakwicí U shiny

//pahtahkwiⁿcihka// Vi to flash (222)

//pahtahkwiⁿcih⁸kakí// Vi to flash off and on (373a)

puhhihpoⁿohka Vi to be blue in one spot (223a)

puhhihpoⁿoh⁸kakí Vi to be blue in isolated spots here and there (as a field with some blue flowers scattered here and there)

c. IV. This class contains one member, occurring with imitative stems I (391) (cf. 319d). The constitutes are Vi.

vi iV to make the sound represented by the preceding imitative stem

qopoqopo I cry of the Western Tanager
qopoqopo'í Vi to make the sound /qopoqopo/

pahky+pahky I sound made by the pileated woodpecker

pahky+pahky'í Vi to make the sound /pahky+pahky/
kyywo I sound made by the sun (in a myth)
kyywo'i V1 to make the sound /kyywo/

d. pV. This class contains one member, which occurs only with <puh> Pi 'eyes', <ma> Pi 'pursuing', <kyh> Pi 'biting', and <wyh> Pi 'with whipping motion'. The constituents are Vt.

<ni> pV has allomorphs //−ni//, //hi//, //−jy//,
//qa//, occurring as indicated by the examples
//puh −ni// Vt to see
//ma hi// Vt to pursue
//kyh jy// Vt to bite
//wyh qa// Vt to whip

370 Verbal Suffixes

370. The verbal suffixes are grouped into several classes, on the basis of position (from root outward), and the order (from innermost layer outward) in terms of immediate constituents. The determination of this order is in a few instances hypothetical, because of the rarity of occurrence of some combinations of suffixes. The suffixes listed in 371 are limited in distribution, those of 372–9 (except as noted) productive. The suffixes of 376 and 379 are predicative (i.e. occur as ICs of forms which occur as IN or IK).
Those of 374-379 (except vv 377a) do not occur in IC with Vt or Vtt, but do occur in IC with Vi, including those members of Vi which contain members of Vt and Vtt as constituents (see 471).

371. Limited verbal suffixes. These morphemes occur with a limited number of verb stems.

a. vVi. The two suffixes of this class occur with a single verb root each. The roots involved are Vt, and the constitutes are Vi.

i vVi only with <nahqa> Vt, Mr(P), Nu 'to hear, ear'
  nahqai Vi to make a sound/noise
h.. vVi only with <eki> Vt 'to serve acorn to'
  <eki h..> //ehki// Vi to eat acorn (mush, soup, or biscuits)

b. vV-. This class consists of one suffix which occurs with three members of Vi. The constitutes are Vt.

"i vV" only with <jatuha> Vi 'to talk', <jaqa> Vi 'to cry', <tapyha> Vi 'to get light'
  jatuha"i Vt to talk to (235, 251)
  jaqa"i Vt to cry at/to (211d)
  tapyha"i Vt- only with <suh> Pi 'mentally' and
  <puh> Pb 'eyes'
  suhtapyha"i Vt to know, understand
  puhtapyha"i Vt to be able to see
c. vVtt. This class contains one member, which occurs only with <wahci> Vi 'to be lost, hidden'. The constitute is Vtt.

"a. vVtt only in
   //wah"aci// Vtt to hide only with <na> //na?//
   Pr 'reflexive'
   //na"wah"aci// Vt to hide oneself (from)

d. vWr. This class consists of the two mutually exclusive suffixes which occur with verb roots of the classes listed in 362.

"i vWr punctual aspect (used in referring to a single action involving motion which is completed in a brief passage of time)
<qwaca "i> //qwahca?i// Vi to fall (of a single object, a short distance)
<puti "i> //puti?i// //puhti?i// Vi to emerge, go or come out (once, of single object)

For further examples, see 362.

<\pici> vWr durative aspect (used generally in referring to an action involving continued motion, or for a series of actions of short duration following upon one another in rapid succession) has the allomorph //\pici// when followed by <".ki> or <hpaci>; the allomorph //\pici// occurs elsewhere
qwacaŋhi Vi to fall (of several objects in rapid succession or one object a long distance, as a shooting star)

putiŋhi Vi to go/come out (of several objects in rapid succession)

tanyŋhi Vi to keep ringing (of bell)

<tany ŋhi ʼ..ki> //tanyhŋki// Vi to ring intermittently (373a)

<qwaca ŋhi hpaʔi> //qwacaŋhpaʔi// Vi to fall repeatedly

372. The two classes given below contain one morpheme each. These two morphemes are related semantically, but differ in distributional properties.

ac vVt. The one member of this class occurs with Vi, the constitutes being Vt, and with Vt, the constitutes being Vtt.

hky' vVt causative-benefactive; (portmanteau seme for the combination with <pihty> Vi 'to arrive', as indicated below)

<pihty hky'> //pityhky'// Vt to fight with

<jota hsiʔi> Vi to blow the nose

joqahsitihky' Vt to make (a child) blow his/her nose
<wahci> Vi to be lost, hidden
wahcihky' Vt to lose
papo tu Vi to braid (231a)
papotuhky' Vt to braid (someone's hair for her)
pani Vt to haul
panihky' Vtt to haul (smthg.) for (someone); to make (someone) haul (something)
<puh "ni> Vt to see
puh"nihky' Vtt to show (smthg.) to (someone); to see (smthg.) for (someone)

b. vVW. The one member of this class has been found, in the modern colloquial language, only with <puha a> Vt 'to bewitch' (367a). The constituent is transitive. The suffix occurs in one or two places in texts as an archaic benefactive suffix, its use in those contexts having been replaced by that of <hky> vVt (372a) in the modern language.

<wi> vVW benefactive only in
puhaawi Vt to doctor (someone)

373. vVp, vtv. These two classes comprise three morphemes, which follow those of 371-373 and precede those of 374-379, if occurring in the same form with any of these. If vVp and vtv occur in the same form, vtv follows the former.
a. vWp. This class consists of two morphemes, which occur in IC with preceding Vi, Vt, or Vtt, the constitutes being Vi, Vt, or Vtt respectively (466a-c).

<"..ki" vWp intermittently, hesitantly, off and on has allomorphs as follows:

(1) When preceded by <Rhi> (which has the allomorph //R// when occurring before <"..ki">), has the allomorph //h..ki// except that occasionally //"..ki// occurs instead when the preceding sequence is such that the /C/ represented by the //R// of <Rhi> is /m n/ (/"o// and //h// cannot contrast before obstruents -- 222).

(2) Elsewhere, the allomorphs //"..ki// and //"..hki// occur, depending on the length of the other IC: //"..hki// when the other IC is such that its phonemic representation contains two vowels, //"..ki// when the other IC is such that its phonemic representation contains more than two vowels. (The forms occurring in IC with <"..ki> consist of the preceding sequences up to and including Pb and Pi, but excluding other prefixes, except in the one form in which <"..ki> has been found as a constituent of vWa (472b). For details, see 460, 470.)
<tany Ḍhi> Vi to keep ringing (of bell)

<wyhw kwinu Ḍhi> Vt to swing (smthg.) around and around

<wyhw kwinu Ḍhi > //wyhkwunuhḍki/  //wyhwkwinu Ḍhi // Vt to swing (smthg.) around and around hesitantly/intermittently

mija Vi to go

mija Ḍki> //mi°jahki// Vi to go hesitantly/intermittently

kihma Vi to come

<kihma Ḍki> //kih°mahki// Vi to come hesitantly (223a)

°ine Vi, Vt to say

<°ine Ḍki> //°inehki// Vi, Vt to say hesitantly

nywi Vi (one being) to walk/go/wander around

<nywi Ḍki> //ny°wihki// Vt to go around hesitantly

<toja Nр(pi) mountain

<toja nywi Ḍki> //tojany°wiki// Vi to hunt hesitantly/intermittently

wyy Vt to catch, take, hold in hand

<wyy Ḍki> //wy°yhlki// Vt to catch/take/hold hesitantly
mihee Vi,Vt to say, assert, maintain
<mihee 'ki> /mihe?ki// Vt,Vi to assert
hesitantly
<cah myhna> Vt to turn over, change
<cah myhna 'ki> /cahmyh?naki// Vt to turn over/
change hesitantly/intermittently
joqa h? nasal mucous
joqahsiti Vi to blow the nose
<joqa hsi 'ki> /joqahsi?tiki// Vi to blow the
nose hesitantly/intermittently (222)

<hpa?i VVP repeatedly
<cih ouka> Vt to point at
cihoukahpa?i Vt to point at repeatedly
cihoukahkyhpa?i Vtt to point (smthg.) out to
(someone) repeatedly
mija Vi to go
mijahpa?i Vi to go repeatedly

b. vtV. The one member of this class occurs only with
Vt, and probably also with Vtt, but examples of occurrence
with the latter have not been found.

ta vtV pl. object occurs only occasionally, even when
there is a plural number of objects as goal
of the action
tohmahapy Vt to crane one's neck to see
(smthg.)
*o vVd pl. subject
tohmohapyta*o Vt to crane their necks to see (pl. object)
cuhpa Vi to sink, go down into smthg.
cuhpahky Vt to cause to sink, to put down into smthg.
mahouhpahkyta Vt to cause (several things) to sink/go down with the hand

374. vV a. Auxiliaries. The auxiliaries are verb stems (Vi or Vt) which occur also as verbal suffixes, following those of 371-373 and preceding those of 375-379 when occurring in forms containing other verbal suffixes. Most members of vV a are monomorphic, but there are three bimorphic members and one member consisting of three morphemes: <tana fi> vV a 'for good' (362a), <ṃ̣̣̈̄ḥ̣̄su *i> vV a 'almost' (362a), <mija poto> vV a, Vi 'to go back and forth' (472b), <mija *'ki poto> vV a, Vi 'to go back and forth hesitantly' (472b). The tactic juncture <h> (396a) occurs between Vi and vV a.

qahty vV a, Vi (sg. subject) continually, (as Vi: *(sg.) to sit*)

As vV a, signifies that the action, condition, or quality denoted by the preceding stem continues to take place or be in effect for an extended period of time. Does not occur with <qahty> or <hapi> Vi *(sg.) to lie* (see <tyky> below).
<tany ṭhi> Vi (bell) to ring (durative)

tanyṭhiq̣ahyty Vi to keep ringing

haṅkwiwənʔiḥq̣ahty Vi to keep sneezing

tyʔkahq̣ahty Vi to keep eating

ʔatyykahq̣ahty Vi to keep eating it

jyʔkẉi vṾa, Vi (pl. subject) continually, (as Vi: '(pl.)
to sit')

Corresponds to <qahty> (above); does not occur with
<jyʔkẉi> or <qwapi> Vi '(pl.) to lie' (see <tyky>
below).

tyky vṾa, Vt continually, (as Vti: to put, place)

Corresponds to <qahty> and <jyʔkẉi> in their
function as auxiliaries, and occurs after <qahty>
Vi '(sg.) to sit', <jyʔkẉi> Vi '(pl.) to sit',
<hapi> Vi '(sg.) to lie', and <qwapi> Vi '(pl.) to
lie'.

qahtỵhtyky Vi (sg.) to keep sitting, be sitting for
a while

jyʔkẉihtyky Vi (pl.) to keep sitting

hapihtyky Vi (sg.) to keep lying

qwapihtyky Vi (pl.) to keep lying

<mai> vṾa, Vi to be in the process of ..., (as Vi: 'to
be, become, do')

As vṾa, signifies that the action denoted by the
preceding stem has been taking place for a while,
without completion, and is expected to continue.
nywilnywi VI (sg. subj.) to wander around

tyhkahnywi VI (sg. subj.) to eat in different

places, to eat here and there

moo vWa, VI (pl. subj.) around, here and there, (as VI:

'(pl. subj.) to walk/go/wander (around)'

corresponds to <nywi>, for pl. subj.

moomoo VI (pl. subj.) to wander around

tyahkahmoo VI (pl.) to eat here and there

375. The eight suffixes listed below follow suffixes
of 371-4, and precede those of 376-9, when occurring in
combinations with them. Combinations of these morphemes
also occur, the relative order corresponding to that in
which the classes are listed. All of these morphemes are
productive.

a. vvB. This class contains a single member.

hu vVb momentaneously

Signifies that the action or condition denoted by
the preceding verb stem took place (or is taking
place or will take place) or was (or is or will be)
in effect for a very short period of time, or
suddenly, or within a very short period of time
from the time-point of reference indicated by the
following tense suffix or other context.
<mija> Vi to go
<hti> vIM neutral tense (379b)
<waih> vi' k near future (379a)
mijahuhti IN went/left suddenly; just went/left
mijahuwaih IN, Vi' will go suddenly; will go
immediately (379a)
tyhkahuhti IN just ate; ate for a short while;
ate suddenly
tyhkahuwaih IN, Vi' will eat immediately; will eat
for a short while

b. vVc. This class contains three morphemes, which
are concerned primarily with locational relationships.
poto vVc back and forth
mijapoto vi', Vwa to go back and forth
<nywi> Vi (sg. subj.) to walk around, wander
<".ki> vVp hesitantly/interruptently
//ny?wihkipoto// Vi to wander back and forth
hesitantly
ja?wi vVc separately

Signifies an action as taking place in several
places or at several times, usually with plural
subject, where the various individual subjects are
acting separately (rather than together, as for
<qoi> vVd).
mijaja\textasciicircum wi Vi to go separately (i.e. in different directions or at different times)

\textlangle pihty\textrangle Vi to arrive

\textlangle hu\textrangle vVb momentarily

pihtythuja\textasciicircum wihti IN several just/suddenly arrived (having come from separate directions)

pihtyja\textasciicircum wiqoihti IN several arrived together (having come from separate directions) (375c)

nawi vVc distributively (of place)

Signifies the action or condition denoted by the preceding stem as taking place or being in effect in several places (usually at the same time, with plural subject).

tyhkanawi Vi to eat in several places

hupijatunawi Vi to sing in several places

\textlangle qoi\textrangle vVd collectively

Signifies plural subject, with its various members acting together, or a singular subject acting in behalf of a group. Has the allomorph //hqoi// when occurring after \textlangle jaqa\textrangle Vi 'to cry'; the allomorph //qoi// occurs elsewhere.

//jaqahqoi// Vi (several) to cry together

mijaqoi Vi (several) to go together
phtyqoi Vi to arrive together
hupijatuqoi Vi to sing together
\textit{\textdegree}acihoukahanpa\textit{\textdegree}qoi Vi (several) to point at it repeatedly together; (one) to repeatedly point at it on behalf of a unified group
\textit{\textdegree}o VVD plural subject
Signifies plurality of subject, but sometimes seems also to carry an idea of collective action of the subject, like \textit{\textdegree}qoi VVD; it is practically interchangeable with the latter, which occurs with greater frequency.
mija\textit{\textdegree}o Vi (several) to go (together)
tyhka\textit{\textdegree}o Vi (several) to eat (together)

d. VVe. This class contains two suffixes having to do primarily with the speaker's evaluation of the subject. They are classed together primarily on semantic grounds, since there are insufficient occurrences of \textit{\textdegree}awi to definitely determine its position relative to other suffixes.

\textit{\textdegree}i VVe diminutive
Signifies that the subject (sg. or pl.) is viewed by the speaker as small, or that it is held in affectionate regard by the speaker.
mija\textit{\textdegree}i Vi (dim.) to go
hupijatuqoi\textit{\textdegree}i (several dim.) to sing together
*awi vVe pejorative

Signifies that the speaker dislikes or disapproves of the subject, or disapproves of the fact that the subject is doing what is denoted by the preceding stem.

mija?awi Vi (pej.) to go
tyhka?awi Vi (pej.) to eat

376. vwk. This class contains one suffix of unique distribution. Like the suffixes of 379a, b, it occurs as an IC of indicative expressions. It also occurs, however, before vVf, vVg, and vhw, as well as before vT (353b) and some nominalizing suffixes (319a), and in these constructions it is not predicative.

hku vwk perfective

Signifies completion of an action, and carries also the idea that the entire action has taken place (or, when followed by <waih> vkw, will take place) within a short period of time. When occurring as a predicative suffix (i.e. as IC of IN), it signifies also recent past time.

pihtyhu IN,Vi as IN: has arrived, just arrived;
as Vi, in (e.g.)
pihtyhuksi T having arrived
mijahku IN,Vi as IN; has gone, just went; as Vi, in (e.g.)

//ºahmijahkuhpy/ Nf his tracks (of an animal) (i.e. the product of his having gone) (319a)
cipuh I Vi to climb, rise
<hma> vNr act/object of ...ing

//ºahcipuhihkuhma/ Nf his having climbed
tyk vNF, IN neutral agent
hupijatuhkutyk Nf one who has just/recently sung
hki vVF before coming

//nek/ allomorph of <hti> vIN neutral tense

(379b)

//ºapuh- NIHKUKinE/ IN just saw it before coming

377. vVF,vv. The suffixes vVF follow those of 371-6 and precede those of 368 and 379, when accompanying them. They have to do with location or direction with respect to the action or condition denoted by the preceding stem; in addition, <kaa> vVF has an alloseme having to do with time. Morphemes belonging to vVF are given in 377b; in 377a is given a morpheme which occurs only as a constituent of vVF.

a. vv. The one member of this class occurs only with <kaa> vVF and <ki' vVF, the constitutes being vVF.
h vv only in
hkaa vvF before going immediate past
"apuh"-nihkaa Vi to see it before going, see it and then go; to just now have seen it
pahkwika Vi to fish
pahkwikakahkaa Vi to fish and then go on (211a)
hki' vvF before coming (226)
"apuh"-nihki' Vi to see it before coming
pahkwikahuhki' Vi to fish for a while before coming

b. vvF. Directionals.
kaa vvF to go and ..., to go in order to ...; to be on the point of ...ing
"apuh-nikaat IN,Vi" to go to see it; to be about to see it
"apuh-nikaawain IN,Vi" will go and see it
"apuh-nikaahpy IN has gone to see it

pahkwikakaa Vi to go fishing (211a)
//pahkwikakaaeh// IN went fishing; is about to fish (379b, 234b)
pahkwikakaaehpy IN has gone fishing
//"ywikaah// IN is going (somewhere) to sleep; is about to fall asleep
ki' vVf to come and ..., to come in order to ...(for
<h ki> vVf, see 367a)
//apuh-niki'neñ// IN came to see it, is coming to
see it
pahkwikaki'waih IN,Vi' will come to fish, will come
and fish
hmi' tVf while going
//apuh-nihi'mi'neñ// IN saw it while going, saw it
on the way (thither) (373b)
//pahkwikahmi'waih// IN,Vi' will fish while going
(along the stream)
hti' .vVf while coming
//apuh-nihti'neñ// IN saw it while coming
nyka Vi to dance
//anbykahtì'/ IM dance (toward) this way!
htuha vVf elsewhere
//apuh-nihtuhaeñ// IN saw it somewhere else (234a)
pahkwikahtuhatyñ Mf one who has been fishing (some-
where else).
htee vVf while staying in the same place; for a while
//apuh-nihteëeñ// IN saw it while staying (234c)
//pahkwikahteetyñ// Mf one who is/has been fishing
while staying in one place
378. vVg. The three members of this class follow suffixes of 371-377 when occurring in combinations with them. Forms containing members of vVg as ICs are Vi', with limitations on their occurrence as indicated below.

<hkwa> vVg distant future

This morpheme has always been found followed by <hti> vIN (379b), <tyh> vHf,1N (319a), or <hsi> vT (358b); there is reason to believe that it could also be followed by <hna> vNrt (319a) and <neh> vT (358b). It has the allomorphs //hkav// when occurring before <tyh> vHf,1N and <hsi> vT; the allomorph //hkwa// occurs before <hti> vIN.

"apuh"nihkwaht iN will see it in distant future

(i.e. after several days or longer)

//"apuh"nihkutyh// Nt one who will see it in distant future

//"apuh"nihkuhsi// t after seeing it in distant future

hmaa vVg already

This morpheme is apparently always followed by <hpy> vIN (379b), <hna> vNrt (319a), or <hsi> vT (358b).

"apuh"nihmaahpy iN already saw it, h as already seen it

//"ahtykahmaahna// Nt his havi: already eaten
tyhkahmaahsi t having already eaten
tuwa vVg could, would

This morpheme is apparently always followed by one of the following: <hpy> vIN (379b), <waih> vWW (379a), <hna> vNR (319a), <tyh> vNf, LN (319a), vT (358b).

tyhkatuwahpy IN could eat, would eat
tyhkatuwawaih IN, VI will be able to eat
tyhkatuwatyh xf one who is able to eat
//"ahtyhkatuwahna// xf his being able to eat
tyhkatuwaneh T being able to eat, while able to eat

379. vWW, vIN, vIN. The morphemes of these classes occur only with VI and are never followed by any of the verbal suffixes.

a. vWW. This class contains one member which, like vIN (379b), occurs as an IC of indicative expressions, but which, unlike them, can be followed by vT, <tyh> vNf, LN, or <hna> vNR. (Cf. vWk, 376.)

waih vWW near future (up to several days)
tyhkawaih IN, VI will eat

tyhkawaihtyh xf one who will eat (in near future)
//"ahtyhkawaihna// xf his future eating, what he will eat (in near future)
tyhkawaihhsi T after eating (in near future)
b. vIN. The two suffixes of this class, with a single exception (483) in the case of <hpy>, are never followed by any other suffix, and always occur as ICs of indicative expressions.

<hti> vIN neutral tense
Indicates present or near past time except when following <hkwa> vVf 'distant future', where its function is simply predicative. Has the allomorph //eH// when occurring after <kaw> vVf, <htuha> vVf, and <htee> vVf; and the allomorph //neH// when occurring after <hmi> vVf, <ki> vVf, and <hti> vVf; the allomorph //hti// occurs elsewhere. <hti> vIN is the most frequently occurring predicative suffix. *apuh-nhti IN sees/saw it
tyhkahti IN is eating, ate
For examples with vVf, see 377b.

<hpy> vIN perfect tense
Signifies that an action or process has reached completion in the present or immediate past, with its result still in effect; after <tuwa> vVf, its function is simply predicative. See also 483:
tyhkahpy II has eaten
pahwikakaahpy II has gone fishing (211a)
qwhsya VI to set ripe, to be ripe
qwhsyyhpy III has become ripe
c. **vIM.** This class contains a single suffix, which occurs only in IM (imperative expressions).

<hna°i> vIM emphatic imperative

Is mutually exclusive with predicative suffixes (vìk, vìw, vIN), vür, vIf, and vT. Imperative forms of verbs (431-495) consist of verb stems usually with "<a> Pp 'third person' (even with Vi) with or without <hna°i> vIM. When <hna°i> is present, the request or command carries greater force. <hna°i> has the freely varying allomorphs //hna°i// //hna°i°h//.

//mijahna°i°h// //mijahna°i// IM go (emphatic)!
//"apahk'wikakaahna°i°h// //"apahk'wikakaahna°i// IM go fishing (emphatic)!

### 380 Prefixes

380. In this section are treated the "prefixes", other than "pronominal prefixes" (which are given in 320). They are divided into several classes, on the basis of distributional properties.

381. **Pq.** This class consists of a single morpheme, which has been found with certain members of Mr which denote
body parts and with one member of Vi. The constitutes are
Nf" (usually or always preceded by <noli> Pn 'very') or Vi,
respectively.

qaha Pq

<mah pih> //mah "ja// Nf(P,pI) hand (311b)
//qahamah"ja// Nf" found only with <noli> Pn
//nohiiqahamah"ja// Nf one who has very large
hands

nohiiqahawooch Nf one who has a very large head

suwahqa Vi to breathe

qahasuwahqa Vi to pant (22la)

382. Pd. This class contains one morpheme. It occurs
with Nf, Qn, Pr, pL, nL, and one member of Vi.

<Rh> Pd distributive occurs, with several allomorphs,
as follows:

With Nf: //R// before <pohina pi> //pohinape// Nf
'chief' (333), //Rh,'h// before <cuku'>
Nf 'old man' and <hyyhpi'> Nf 'woman',
//Rh// otherwise.

<Rh pohina pi> //Rpohinape// Nf chiefs
(This is the usual plural form.
<pohina pi> has not been found with
<my> nǔm 'animate plural'.)

<Rh,'h cuku'> //Rhcuhku'// Nf old men
//Rhhyyhhipi'// Nf women (223a)
//Rhhyhpici// Nf old women (31Ge)
<pa 'oooh pY> Nf pebbles, smooth rocks
Rhpa'ooohpY Nf pebbles here and there
With Vi: has been found with only one verb stem,
<pojo ha> Vi 'to run' (367a), where it
has the allomorph //R//. May occur also
with other V, but the occurrence with
<pojoja> appears to be a special usage;
generally, the suffixes <ja'wi> vVc,
<nawi> vVc (375b) serve instead to convey
distributive meaning.

//Rpajoja// Vi to run (of two or more beings,
in different places or directions)
With Qn: //Rh, o// before <symy> QnX 'one', //Ro//
otherwise.

//Rhsoymy// Qn ones, one by one
//Rwaha// Qn twos, two by two
//Rpahti// Qn threes, three by three (222)
//Rhsyymano// Qn tens, ten by ten

With Pr (321b): //Rh//.
<Rh na> Pdr reciprocal occurs as //Rhnah//
before pL, nL, Vt, and <Rh kyhma'>
NfX 'other' (3181), and as //Rhna//
before Mr
qopena\n pL before, in front of. (343c)
//Rhnah\nhqopena\n//L in front of each other
pa*am nL,L on top (of)

//RhnahRhpa*am// L on top of each other
waqa Vt,Vt to talk (to), to say
//Rhnahwaqa// Vt to talk to each other

(213e)

mohqoja Vt to put/have shoes on

(367a)

//RhnahRhkyhma'Na+mohqojahti// IM has
his/her shoes on the wrong feet

pyhni' Mr(P) younger sister
Rhnapyhni' Mf sisters: "each other's
younger sister"

With pL, nL: //Rh//. Occurs with pL, nL only when
preceded by <na> Pr 'reflexive'. The
forms involved designate locative rela-
tionships among members of a group of ob-
jects, one to another. In the designations
of such relationships, <Rh> may precede
the locative form (pL or nL) only, or Pr
only, or it may occur twice, before the
locative form and <na> Pr. The alternative
sequences are facultative for some of the
locative forms involved, while for others
apparently only one of the possibilities
occurs. (The corpus is undoubtedly in-
complete with regard to such combinations;
the examples below represent the possibilities which have been found.

kywatuheñ pL contiguous to
//RhnahRhkywatuheñ// Rhnahkywatuheñ// L
contiguous to one another
qopenañ pL in front of, before
//RhnahRhqopenañ// L in front of one another
\'inahpaañ pL on this side (of)
//Rhnah\'inahpaañ// L on either side
pa\'añ nL,L on top (of)
//nahRhpaañ/\'///RhnahRhpa\'aañ/\'///Rhnahpa\'aañ//
L on top of one another
pihmañ nL after
hsu F still, precisely (395)
//nahRhpihmañhsu// L after one another, one
after the other
tuheñ nL under
//Rhnah\'htuheñ// L under one another, shorter
than one another (i.e. of different lengths)

383. Pn. This class consists of one prefix, which occurs widely with stems of several classes, wherever their meanings are such as to render occurrence with it semantically appropriate.
<nohi> In very, very much, too, too much has been found with members of Nf, V, C, L, Aq; has the allomorph //nohe// when occurring with <?ewa> on 'many, much' and <qwena?a> I 'far'; //nohe// occurs elsewhere
juhn Nf(pi) fat, grease
juhnpi Nf fat, grease, fat person (or animal)
nohijuhnpi Nf one who is very fat, too fat
kywaa Nf(pY) sharp-edged object
//nohiywaapy// Nf very sharp object
naa?mihoi Vi to be tired
nohinaa?mihoi Vi to be very tired, too tired
kwyyhi Vi to be drunk
nohikwyyhi Vi to be very drunk, too drunk
maapa Vi to go uphill
//nanohimaapatyh// Nf very steep one (216a, 321b, 319a)
tyyhmoo Vi,Vt to be amazed (at)
//anohityyhamohti// IN is/was very amazed at it
tyyhkwii Vt to tell, say smthg. to
hky' VVt causative-benefactive (372a)
tyyhkwiihky' Vtt to tell (someone) for (someone); to make (someone) tell (someone)
//pohlpo?Na+?inohityyhwiihky'hti// IN told Poipoi quite a bit for me
"ewa Qn much, many
//nohe"ewa// Qn very much, very many, too much,
too many
cawu Ql good
nohicawu Ql very good
typioi Ql great, important
nohitypioi Ql very great/important
oyhkwita Qc with effort, hard   (3540)
nohicyhkwita Qc with a great deal of effort, very
hard, too hard
qwena*a L,pL far (away), distant (from)
//noheqwena*a// L,pL very far, very distant, too
far/distant
pa*a\nh A,L,L on top (of)
nohipa*a\nh L very much on top, quite on top

384. Pa, pPa. The morphemes belonging to class Pa,
"adverbial prefixes", are given in 384b. There is one member
of Pa which is bimorphemic; one of its constituents occurs
also as Pb, the other is labeled pPa and given in 384a.

a. pPa. This class consists of one morpheme which
occurs only as a constituent of Pa.

mi pPa only with preceding <pih> Pb 'back, buttocks'
pihmi Pa' back only with <qooni> Vi 'to return'
pihmiqooni Vi to return back again
b. Pa'. This class consists of prefixes which occur with verb stems only, and which precede Pt, Pb, and Pi if occurring in combination with them. The constitutes are Vi, Vt, or Vtt depending upon whether the other IC is Vi, Vt, or Vtt. One of these prefixes, like <pih mi> Pa" 'back' (384a), occurs with only one verb stem; two others are very limited in their occurrence.

nahah Pa" only with <jykwi> Vt 'to treat (smthg. in some way); (other allosemes in certain constructions)'
nahahjykwi Vt to waste (214a)

h Pa".

Signifies force, violence, or the expenditure of great effort in the action denoted by the following stem. Has been found only with a few members of Vt which begin with Pb or Pi; is apparently always preceded by <a> Pp '3rd person' or <na> Pr 'refl.'.

<wyh"tapo> Vt to strike (several blows, with whip-like motion)

*awyh"tapohti IN struck it (with several blows)
*ahwyh"tapohti IN struck it hard (with several blows)

<cah qoti >i> Vt to break (one brittle object)

//*acahqohtiihti// IN broke it

//*ahcachqohtiihti// IN broke it (smthg. hard to break)
<mah oetee h noo> Vt only with <h> Pa' and <na> Pr 'reflexive'

nahmaheetehnoohti IN held/is holding on hard

(while moving along)

<tah mihna> Vt only with <h> Pa' and <na> Pr

nahtahmihnahti IN sprained his/her ankle

nahwyh-caqahti IN fell down (hard)

nah Pa' almost, as it were

Has been found with two verb stems, where the constituent signifies an event something like, or approaching, the type of event denoted by the verb stem.

qoi Vt to kill (more than one)

nahqoi Vt to injure (one or more than one)

//puh'ni// Vt to see (357d)

// ahkhyhkyNa// Of its/his/her foot/feet obj.

pahapihoi Nf bear

//nyy// Np I

// ahkhyhkyNa+nyy+*anahpuh-nihti// IN I saw its

tracks

//pahapihoiNa+nyy+*apuh-nihti// IN I saw the bear

//pahapihoiNa+nyy+*anahpuh-nihti// IN I saw the

bear's tracks, I saw bear tracks.

//pahapihoiNa+nyy+*ahkhyhkyNa+*anahpuh-nihti// IN

I saw the bear's tracks, I saw bear tracks
"h Pa- only with <ty'y> Vi 'to be hot'

//ty'y// Vi to be quite hot  (differs very
slightly in meaning from <ty'y>; the
two forms are practically interchangeable)

pytyh Pa just beginning to; just recently

naa Vi to grow, stick out

pytyhnaa Vi to start to grow, (of plants) to sprout

hupijatu Vi to sing

pytyhhupijatu Vi to start to sing  (223a)

mohqo Nf shoes

maa Vt to obtain, ask for, buy

//'i// allomorph of <ny> Ip 'first person'

<hna> vN action or object  (319a)

//ipytyhmohqomaahna// Nf the shoes which I just
bought

suh Pa

Signifies disapproval with the action or condition
denoted by the following stem, either because of
its tardy occurrence, or its failure to occur (when
the predicate contains <qatu>'u> Aq. 'not'), or for
some other reason.

kihma Vi to come

suhkikhmahti IN finally came/is coming; unfortunately,
came/is coming
//ca'noo// Vt to catch (fish)

//qatu'n+suhtycah'nochtI// IN unfortunately, didn't catch any (fish)

385. Pb. Nominal prefixes. The members of this class occur with Nbb, Nbr, Nbf (311), and with Vi and Vt. In verb forms they precede Pi (386) and follow any other prefixes, if other prefixes occur. Constitutes of Pb with verb stems are Vi or Vt according to whether the other IC is Vi or Vt. Details of the occurrence of members of Pb in noun stems are given in 311. The examples given below illustrate their occurrence with Vi and Vt.

coh Pb head

wyhnaki Vi only with <coh> Pb

cohwyhnaki Vi to nod (213b)

qawino'hi Vi (371d) only with <coh> Pb

cohqawino'hi Vi to shake the head back and forth

puh Pb eyes

<tapyha'i> Vt (371b) only with <puh> Pb,
<suh> Pi

puhtapyha'i Vt to be able to see

maaci Vt only with <puh> Pb

puhmaaci Vt to recognize
"tama Vt" (216a) only with <puh> Pb
puh"tama Vt to look at
<puh t'tama \ldots .ki> /\textit{puh}"ta\textsuperscript{\textacuted{a}}\textsuperscript{\textacuted{m}a}ki// Vt to look
at off and on
hai Vt only with <puh> Pb
puhhai Vt to look for (223a)
mu Pb nose, snout, mouth
hsyhta\textsuperscript{\textacuted{i}} Vi to freeze
muhsyhta\textsuperscript{\textacuted{i}} Vi to have one's nose frostbitten or
very cold
/\textit{\textacuted{n}oo}/\ allomorph of <noo> Vt 'to carry'
mu\textit{\textacuted{n}oo} Vt to kiss
nih Pb voice, speech
sunawi Vt to bother, annoy
nihsunawi Vt to annoy by chattering, talking
kihma Vi to come
nihkihma Vi to ask permission to come, to express
desire to come
mah Pb hands, front paws
cohki\textsuperscript{\textacuted{i}} Vt (371d) only with <mah> Pb
mahcohki\textsuperscript{\textacuted{i}} Vt to pounce upon (like a cat)
tyhki\textsuperscript{\textacuted{i}} Vt (371d) only with <mah> Pb or
<cah> Pi
mahtyhki\textsuperscript{\textacuted{i}} Vt to fire (gun)
qapa\textsuperscript{\textacuted{w}}o\textsuperscript{\textacuted{u}}i Vt (371d) only with <mah> Pb
mahqapa\textsuperscript{\textacuted{w}}o\textsuperscript{\textacuted{u}}i Vt to slap in the face
<tah> Pb feet has the allomorph //toh// when occurring with <nopoto> Vi−,br (311b, 364); the allomorph //tah// occurs elsewhere
dee Vt to hold; (constitute with <tah> Pb has portmanteau same)
tahsee Vt to overtake, catch up with
topa Vt− has been found only with <tah> Pb
tahtopa Vt to take off one's shoes
mihna Vt− only with <tah> Pb
tahmina Vt− only with <h> Pa (384b)
pih Pb+ back$, buttocks in addition to its occurrence
as a member of Pb, has a few specialized uses, as indicated by the examples
nañ xl at, on (348c).
pihnañ nL,T− after, behind
pihnañsu T again
huh (Kh) (341b) only with <pih> Pb+
huhpih (K) only with <nahqueh> ML (see 341b)
mi pPa (384a) only with <pih> Pb
pihmi Pa− back again only with <qooni> Vi 'to return'
kututuuñi Vi− only with <pih> Pb
pihkututuuñi Vi to slide downhill on one's buttocks
'tataa Vi− only with <pih> Pb
pihataa Vi to squat
ta Pb sun, heavenly body

This morpheme has a special use with <ta pe> Mr 'sun, day' and <ta my>a Mr 'moon, month' (311b), with which it occurs (rather than <pi> nNf 'absolutive suffix') to give constitutes which are Nf (416b).

tatape Nf sun, day
tatamy'a Nf moon, month

pyha Vi only with <ta> Pb
tapyha Vi to get light (of the sky at dawn) (See also 371b.)

<kuh> Pb fire, heat has the allomorph //qoh// when followed by <noo> Vt,vVa 'to carry, haul' pr
<pih> Nbf,Nbr 'empty noun root' (311c); the allomorph //kuh// occurs elsewhere

//qohnoo// Vt to haul (wood)

<kuh pih> //qohso// Nf fire

<tyja wi> Vi to die (367a)
kuhtyjawi Vi to be burned to death

majaa Vt to make, fix, prepare
kuhmajaa Vt to cook

ita Vt only with <kuh> Pb
kuhita Vt to smoke out (bees)
qwaqsy Vi to become/be ripe
kuhqwaqsy Vi to become/be ripe from heat
<tyh> Pb rock, missile has the allomorphs //tyh// and //htyh// (the latter when preceded by Nf, Nr, or Nu, the former otherwise) when occurring with <piah> Nbr, Nbf 'empty noun root' (311c), <hanii> Nbr (311d), <paha> Nbr 'pestle, mortar', and <qahty> Vi, vVa 'to sit'; the allomorph //tah// occurs elsewhere
<tyh qahty> //tyhqaty// Vi (rocks) to be lined up in a row
kyywi Vt only with <tyh> Pb
//tahkyywi// Vt to throw at
wyna?i Vt to move, throw (371d)
//tahwyna?i// Vt to throw (rock or other missile)
coko Vt only with <tyh> Pb
//tahcoko// Vt to smash with a rock

ty Pb earth has been found only with Nbr (311b)
<p> Pb water, moisture has the allomorph //pah// when occurring with <kya tuheh> pL 'beside' (343c)
(which has not been found with other members of Pb); the allomorph //pa// occurs elsewhere
//pahkywatuhéh// L at the edge of the water
//pahkywatuhéhhsu// L along the edge of the water/river

tyky Vt to put, place
patykky Vt to put in water
hsa Vi only with <pa> Pb
pahsa Vi to be/become dry
cawa Vt only with <pa> Pb
pacawa Vt to pour
noo Vt to carry, haul
panoo Vt to haul water
no Pb dwelling/camping
mija Vi to go
nomija Vi to go camping (216a)
//pity// allomorph of <pity> Vi to arrive
//nopity// Vi to arrive home
qooni Vi to return
noqooni Vi to return home

386. Pi. Instrumental prefixes. The members of this class occur only with Vi, Vx, Vt; the constitutes are always Vt. Pi generally follow prefixes of any other class, when occurring in combinations with them.

cah Pi by pulling; (various other allosemes)
pityna Vx only with <cah> Pi
cahpityna Vt to drag (along), pull (along)
pihka?na Vx only with <cah> Pi
cahpikana Vt to tighten (e.g. string) by pulling
<qopi vi> //qohpi'ioi// Vi to break (of supple object) (371d)
//cahqohpi'ioi// Vt to break (one supple object)
<myhna> V<sub>i</sub>, V<sub>r</sub> to turn over, change (362a)
cahmyhna Vt to turn over, change
tyhki<sub>i</sub> Vt only with <oah> Pi or <mah> Pb
cahtyhki<sub>i</sub> Vt to fire gun
tyky Vt to put, place
cahthyky Vt to put down (heavy object)
kyhna Vx only with <oah> Pi
cahkyhna Vt to fasten by tying
wyna<sub>i</sub> Vt to move, throw (371d)
cahwyna<sub>i</sub> Vt to knock down (213b)
"nika// allomorph of <nika> Vi to enter
/oah-nika// Vt to put inside an enclosure, to imprison
"qwapu Vx only with <oah> Pi
cah"qwapu Vt to claw
"n<sub>oo</sub>// allomorph of <n<sub>oo</sub> Vt 'to carry'
/cah/n<sub>oo</sub>// Vt to haul; to catch (fish)
w<sub>h</sub> Pi with sidewise motion (of long object), with whipping motion, with long object
"tapo// Vx,V"x to strike (362b)
w<sub>h</sub>"tapo Vt to beat/strike several blows with whipping motion (of club or stick)
"w<sub>h</sub>"tapo<sub>i</sub>// Vt to strike (one blow) with whipping motion
pohnaa Vt to surpass, to win
wyhpoohnaa Vt to overtake (while running), to run
past (In this case, the long object is
the subject's body.)
pahouki Vx only with <wyh> Pi
wyhpahouki Vt to switch
siqoota'i Vx only with <wyh> Pi
wyhsiqoota'i Vt to scrape
pihsita'a Vx only with <wyh> Pi
wyhpahouki Vt to throw away
kwinu'ghi Vt to swing/spin around (371d)
//wyhkwinu'ghi// Vt to swing around (smthg. tied to
a string)
toh Pi (meaning unclear; sometimes seems to indicate
violent motion)
//*noo/* allomorph of <noo> Vt 'to haul/carry
//toh*noo/* Vt to hit (smthg. thrown or shot at)
qopa Vx only with <toh> Pi
toghopa Vt to cut
pakita Vx only with <toh> Pi
tohpakita Vt to hit with fist
//*qopi/*, //qohpi/* allomorphs of <qopi> Vt,
Vr? 'to break (of supple object)
(362d)
//toh*qopi/* Vt to cut (timber)
//tohqohpi'i/* Vt to break with violent motion (371d)
cih Pi with point, end of long object
too Vx only in the following forms:
  nacihtoo Vi to walk with aid of cane/staff (321b)
cihtowyna'i Vt to push
    //'nika// allomorph of <'nika> Vi 'to enter'
    //cih'nika// Vt to insert with pointed object (223a)
    'witu Vx only with <cih> Pi
cihs'witu Vt to stir
    c'ika Vx only with <cih> Pi
cihs'ika Vt to point at (see also 411a)
saja Vt to cut (skin of sick person, to cause bleeding)
    //cihsa'jaki// Vt to pierce (patient's skin) with sharp point several times (to cause bleeding) (373a)
kyh Pi by biting
    //'jy// allomorph of <ni> Vt 'empty verb root'
    (367d)
    //kyh'jy// Vt to bite
cioho Vx only with <kyh> Pi
kyhioho Vt to chew
    //'noo// allomorph of <noo> Vt 'to carry'
    //kyh'noo// Vt to bite (223a)
    //qohpi// allomorph of <qopi> Vi', Vr' 'to break (of supple object)'
    //kyhqohpi'i// Vt to bite off a piece of (371d)
suh Pi with the mind, mentally
    mija Vi to go
suhmija Vt to think about
tapyha"i Vt (371b) only with <puh> Pb,
    <suh> Pi
suhtapyha"i Vt to know, understand
caa Vx only with <suh> Pi
suhoaa Vt to like
    si°jee Vx only with <suh> Pi
suhsi°jee Vt to dislike
    ma Pi pursuing

//hi// allomorph of <ni> Vt 'empty verb root'
     (367d)
//mahi//= Vt to pursue
    nywi Vt (one) to go/walk/wander (around)
manywi Vt to chase, pursue
    kihma Vi to come
makhma Vt to come after, in pursuit
    mija Vi to go
mamija Vt to go after, in pursuit (216a)

//"nika// allomorph of <'ika> Vi (to enter'
//ma"nika//= Vt (dog) to corner (small game) (in a
    crevice or tree)
Minor Classes

390. In this section are given the remaining morpheme classes. All of them except the imitatives (391) contain a very limited number of members.

391. Imitatives. The class I, "imitative stems" consists of forms which occur with either or both of the suffixes <hna' > in (31)d, <'i> IV (367c). Members of I also occur as frustums (i.e. in IC with <.> 398), where they are often accompanied by special intonation patterns and/or voice modifiers. Many members of I are monomorphemic (391o). Others consist of a morpheme repeated by itself, with (class Ia) or without (class Ib) intervening <+> (396c). Only a sample of the imitative morphemes is given below.

a. Ia. Members of this class occur with themselves, with intervening <+>, the constitutes being I.

pahky Ia only in

pahky+pahky I sound made by the pileated woodpecker pecking

pahky+pahkyhna' Nf pileated woodpecker

pahky+pahky'i V to make the sound /pahky+pahky/

pyhmy Ia only in

pyhmy+pyhmy I sound made by deer trampling through the forest
b. Ib. Members of this class occur with themselves, without intervening <+>, the constitutes belonging to class I.

qopo Ib only in
qopoqopo I cry of the western tanager
qopoqopohna' Mf western tanager
qopoqopo'i Vi to make the sound /qopoqopo/

"oto Ib only in
"oto"oto I cry of the turkey
"oto"otohna' Mf turkey

hawy Ib only in
hawyhay I cry of the wild goose
hawyhawyhna' Mf wild goose

oooh Ib only in
coohcooh I cry of the western bluebird
coohcoohhna' Mf western bluebird (223a)

c. I. Some of the monomorphemic members of I are listed below.

hahkwihsa I° sound of sneeze has been found only in
hahkwihsa'i Vi to sneeze
kyywo I sound made by the sun (in a myth)
kyywo'i Vi to make the sound /kyywo/
maa I sound made by mosquitoes
		<tawaa'> I cry of the spotted towhee, has the freely varying allomorphs //tawaa'/////tawaa'na//
	when occurring; as tristum; and the allomorph
//tawaa'// when occurring with <hna'> in
(which has the allomorph //'na'// when occurring with <tawaa'>)

//tawan'ona'// Nf spotted towhee (227f)

'uu'ui I cry of the roadrunner

'uu'uinha' Nf roadrunner

392. E, (E). Interjections. Most of the interjections are monomorphemic (morpheme class E, 383b); there are three, however, which are bimorphemic, the second morpheme in each being the same, and occurring only in these three forms. This morpheme is labeled (E) and is given in 383a.

a. (E). This class contains one morpheme, which occurs in IC with three morphemes, of two different classes, the constitutes being interjections.

"'ai (E) only with <?yny'> Nf 'strange or terrible being; white man', <?yty'y> Vi 'to be hot', <?ycy'y> Vi 'to be cold'

?yny'"'ai E exclamation of fear, or of wonder at something strange or fearful (236b)

//?yty'y"'ai// E exclamation of pain resulting from burning; or extreme heat (236a)

//?ycy'y"'ai// E exclamation of pain resulting from extreme cold
b. E. The interjections occur predominantly or always as frustums (except for \(\text{qatu'}_u\) E, Qn, Aq, which occurs also as Qn and Aq).

- manahu\={n} E hello
- tijaha E okay (in response to a suggestion or request)
- haaha'a E okay (in response to a suggestion or request; connotes somewhat less enthusiasm or willingness than the above form)
- hyyhy'\=y E yes
- qatu'\=u E, Qn, Aq no (see also 354a, 359a)
- *ea'a E exclamation of disgust or strong disapproval
- toki E, QI⁺ enough, right (as QI⁺; 'right, sufficient, appropriate')
- cawu E, Q1 good

393. Conjunctions. The morphemes which occur as conjunctions (classes C and Ce) are given in 393b. One morpheme which has been found only as a constituent of C is given in 393a.

- hC. The one member of this class occurs only with <ha> M 'interrogative-indefinite' (327) and <tu'\=i ha> M 'any', the constitutes being conjunctions.
b. C, Ce. Members of the two classes of conjunctions occur in IC with IN (indicative expressions - 430), the constituents also being IN. The two classes differ in their position of occurrence. The "independent conjunctions" (class C) precede the forms with which they occur, while the "enclitic conjunctions" (class Ce) occur either immediately preceding the first occurrence of ↔ in the other IC, or, if the other IC contains no ↔, following the other IC; in either case, the enclitic conjunction is preceded by the tactic juncture ~> (336b). Several of the conjunctions occur both independently and as enclitics. These are labeled C,Ce. Examples of the occurrence of conjunctions are given in 483.

jaihni C,Ce and (connects the frustum with which it occurs to the preceding)
poño Ce but (connects frustum with which it occurs to the preceding, with a sense of contrast)
tii Ce indeed (often indicates surprise, amusement, or approval)
tai Ce indeed (often indicates surprise and/or disapproval)
pyñy Ce interrojzative
hsan'a Ce interrogative
wa�a Ce interrogative
(The difference in meaning between the three interrogative morphemes is not clear.)
hnape Ce perhaps, apparently
This morpheme occurs following <jaqan> C, but occasionally occurs followed by <jaqan 'hnape>, the sequence occurring as an independent conjunction (459).
jaqan'hnape Ce perhaps, apparently
hnape'jaqan'hnape C perhaps, apparently (224d)
jaqan C, Ce perhaps, apparently (usually followed by <hnape> C, see above)
ja Ce quotative
Indicates that the event or condition described by the expression with which it occurs has been reported to the speaker to have taken place or to be in effect, but that the speaker has not verified it by his own observation.
hsapyhti Ce or <tu'i> Ce+ anyway, anyhow
This morpheme occurs also with <ha> H 'interrogative-indefinite' (327), the constitutes being members of class H with a general meaning 'any', and with itself, the constitute being an independent conjunction. Except when in these constructions, <tu'i> has the freely varying allomorphs //tu'i// //tu'ī//.
tu'ihə H any

tu'ihqeqh Nh anyone (323)
//tu'ihahno// L anywhere (348c)

For further examples, see 327.

tu'itu'i C although (459)

*ipehu C maybe

*naahmaty C apparently

394. op. This class consists of one morpheme, which has been found preceded by H (303h), and followed by H or Vi, with intervening ↔. The constitutes are OP (optative expressions).

hsahqwa op optative

Examples are given in 496.

395. F, "postfixes". The postfixes occur after members of several classes; the constitutes are tactically equivalent to the same forms occurring without F.

hsu F precisely (what the preceding form says), still (where time is involved) (Has a specialized use after locatives ending in <naŋ> xL (348b), the combination <naŋ hsu> being equivalent in translation to English 'along'.)

pojonaŋ L on the road

pojonaŋhsu L along the road
//pahkywatuhẽh// I at the edge of the water
   (385, 343c)
//pahkywatuhẽhhsu// I along the edge of the water
//nyyhsu// Np I myself
nopihʷ-ween L at home, in the house   (343a)
nopihʷ-weenhsu L right at home, in the house (and
   nowhere else)
tapewano T,Vi (to be) daytime   (358a)
tapewanohsu T still daytime   (231a)
hsyʔyʔ F only
   //nyyhstsyʔyʔ// Np only I
"tijat F also
   //nyytijat// Np I also
nopihʷ-weenhʔtijat Nf also that which is in the
   house   (319b)

396. Tactic junctures. The tactic junctures are mor-
phemes which have no meaning other than that their presence
is determined by the occurrence of certain constructions.

   a. <h> occurs between the ICONS of certain constructions
   as follows:
      (1) after Q1 or Qn before N'   (415h).
      (2) after Q1 before Vi or Vt   (467).
      (3) before VVa (374, 472) except where the
          auxiliary is <nywi> '(<s.>) around' or <moo> '(<pl.>) around'
and the preceding Vi ends in <naki> Vt 'to follow' or <°...ki> vVp 'hesitantly, intermittently'.

°anakinywi Vt (sg.) to follow him/her around
°anakimoo Vi (pl.) to follow him/her around
nywihnywi Vi (sg.) to wander around
//ny°wihkinywi// Vi (sg.) to wander around hesitant
moohmoo Vi (pl.) to wander around
//mo°ohkimoo// Vi (pl.) to wander around hesitant

(4) before nHh (335, 432, 417b, 451d, 452a).

b. <> occurs in two types of constructions, as
follows:

(1) after N' (303g) or Nh (424d) before nL or nQl
(446g, j; 452c, g), except:

(a) after stems ending in <hnuH> vHr+ 'instrument for ...ing' (319a) before <tuheH> nL 'under'
(343a): tyhkahnuHtuheH I under the table

(b) after stems ending in <tyH> vHf,lH (319a,b):

mijatyHni Ql like one who is/was going

(c) after stems ending in <hna> vHr 'act/object
of ...ing' (319a) (which has the allomorph //H//: when followed by nL, and does not occur before nQl):
//yhmijahweeh// I in your going, because you went (213d)

(2) before Ge (333b, 489b).

c. <-> occurs in several constructions. See 423, 434, 435, 437, 449, 453, 457, 458a, 471g, 474, 479, 484-489, 493, 494, 496.

397. X. This class contains a single member.

X (/s²z/)

This morpheme occurs only after <-> (396o), where it indicates that the speaker is hesitating as to how to proceed with the utterance. It may not be present, or may be present in different places, in repetitions of the utterance. (The morphophoneme //::// occurs only as the representation of this morpheme.) The occurrence of this morpheme is not considered in Chapter Four.

398. Z. This class contains one member, which occurs in IC with members of various classes, the constitutes being sentences.

Z (154)

This morpheme has been found with members of the following classes: IN (indicative expressions), IM (imperative expressions), OP (optative expressions), E (interjections), I (imitatives), N (nominals),
O (objective expressions), Ql (qualitatives), Qc (354c),
L (locatives), T (temporals), C (conjunctions). The
term frustum is used to refer to forms occurring in IC
with <>. 
CHAPTER FOUR

MORPHEME ARRANGEMENTS

401. This chapter gives a description of the most commonly occurring patterns of arrangement of the morphemes of Northfork Mono. The description is based on analysis according to immediate constituents, and is presented by means of a list of constructions, with accompanying examples or references to examples contained in chapter three.

The description is by no means intended to be complete. It attempts to cover the most commonly occurring patterns, and those which appear to be most basic and standard, including those which serve as the basis for the distributional classification of morphemes, but it does not go into a number of variations from what appears to be the norm, which occur with more or less frequency. Such variations seem to be of the greatest frequency in spontaneous, unpremeditated texts and conversation, especially under circumstances in which it is apparent that the speaker is not fully cognizant, at the beginning of a sentence, of how the sentence will end. This is often demonstrated by hesitations, false starts, new beginnings, and by words or phrases given as afterthoughts.
constituting sentences which follow. This characteristic of Northfork Mono is undoubtedly not an unusual one; it is probably the case that most languages, if not all, offer similar obstacles to the theoretically ideal goal of a complete description of morpheme arrangements.

The description here presented is not only insufficient to make possible the synthesis of any more than the simplest utterances with assurance of correctness; it is also insufficient, in itself, to account for all of the patterns of arrangement which have been found in the corpus.

402. The terms construction and frustum are used as indicated below.

a. A construction is described by specification of:
   (1) the distribution classes of forms which enter into it (i.e. the ICs), (2) the order in which these ICs occur, (3) the tactic juncture(s) (396) present (if any), and (4) the distribution class(es) to which the constitutes belong. The analysis of arrangements is carried out in such a way that the total number of constructions used for the description is as small as possible. (This is the basic criterion used for determination of immediate constituency.)

The symbolic devices used to describe constructions are given in 404.
b. The outer limit of the description of arrangements is the sentence. A sentence (on the morphemic level) is a constituent containing $<.>^2$ (328) as an IC. The other IC (which always precedes $<.>^2$) may be called a frustum. The class of frustums (which has, of course, a transfinite number of members) is made up of members of the following classes:

**Group One**

<table>
<thead>
<tr>
<th>Code</th>
<th>Expression</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN</td>
<td>Indicative expressions</td>
<td>(480)</td>
</tr>
<tr>
<td>IM</td>
<td>Imperative expressions</td>
<td>(491-495)</td>
</tr>
<tr>
<td>OP</td>
<td>Optative expressions</td>
<td>(496)</td>
</tr>
<tr>
<td>E</td>
<td>Interjections</td>
<td>(392b, 497)</td>
</tr>
<tr>
<td>I</td>
<td>Imitatives</td>
<td>(391c, 458)</td>
</tr>
</tbody>
</table>

**Group Two**

<table>
<thead>
<tr>
<th>Code</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Nominals</td>
</tr>
<tr>
<td>O</td>
<td>Objective expressions</td>
</tr>
<tr>
<td>Ql</td>
<td>Qualitatives</td>
</tr>
<tr>
<td>Qo</td>
<td>$&lt;$cyhkwya$&gt;$ Qo 'with effort, hard' (354c)</td>
</tr>
<tr>
<td>L</td>
<td>Locatives</td>
</tr>
<tr>
<td>T</td>
<td>Temporals</td>
</tr>
<tr>
<td>C</td>
<td>Conjunctions</td>
</tr>
</tbody>
</table>

Group one includes those forms which occur predominantly or very commonly as frustums. The forms of group two occur more commonly as constituents of frustums, but they can occur as frustums under somewhat special conditions, such as (1) in answers to questions, (2) in the amplification of an idea.
contained in a preceding sentence, (3) in response to various types of elicitation used by the linguistic field worker. A few other classes could be added as marginally qualifying for inclusion in group two, viz. Vi, Vt, (possibly Vtt), and Am.

c. The main body of this chapter (410-430) is devoted to constructions whose constitutes are frustums or constituents of frustums. Many of these constructions are already described and illustrated in chapter three. (These are listed in the present chapter for the sake of providing a complete and orderly list of all the constructions which have been analyzed.) In the listing of such constructions, references are given by number to the place(s) in chapter three where examples and further details may be found. In some cases, reference is made to examples given in chapter three, but additional ones are provided under the statement of the construction. References of the type indicated above are given without enclosure in parentheses. Other kinds of cross-references are distinguished from these by enclosure in parentheses, following the practice of previous chapters.

403. Distribution classes may consist of unit morphemes only, of composite forms only, or of both. Those which contain unit morphemes are designated by the labels listed in 303. Those which contain composite forms only are defined by the constructions in which they are involved, and are
labeled as indicated in the statements of these constructions. Three cover symbols used for larger groupings of nominal forms are:

\[ N = N_f \text{ plus } N_g \text{ plus } N_d \text{ plus } N_p \text{ plus } N_h. \]

\[ N' = N_r \text{ plus those members of } N_f \text{ which are not constitutes of the constructions of 416.} \]

\[ N_d^P = N_p \text{ plus } N_d. \]

404. The notational devices used to describe the constructions are as follows:

a. In the symbolic representation of constructions, the labels representing the classes of ICs are given, in the order in which the ICs occur, with an intervening tactic juncture where one occurs, at the left of the symbol / . At the right of the / is given the label representing the class to which the constitutes belong. If the constitutes comprise a subclass of a class represented which has definite limitations on its distribution relative to other members of that class, the symbol is accompanied by \(^{\circ}\), and a special statement is made concerning the distribution of the constitutes (cf. 303e).

b. The symbol \(^{\circ}\), used with distribution-class symbols representing IC classes, signifies that the forms covered by the construction may be members of the class designated which are constitutes of some or all of the constructions listed in
preceding articles of the chapter (in addition to unit morphemes, if any), but not constitutes of constructions listed in following articles, nor (unless there is an accompanying statement to the contrary) constitutes of the construction itself in which the symbol occurs. (For purposes of implementing this definition, an article of the chapter may be defined as any portion of it headed by a numeral which is not underlined (e.g. 412). Subdivisions of articles are headed by letters of the alphabet; and the coverage of symbols accompanied by * does not extend to preceding constructions of such subdivisions unless statement is made to the contrary in particular instances.)

c. An asterisk * accompanying a distribution-class symbol in the statement of a construction signifies that the members of the class designated which occur in the construction constitute a definable subclass of that class; the conditions of limitation are given in a statement immediately following the symbolic characterization of the construction (e.g. 411a).

An asterisk accompanying the symbol for a tactic juncture indicates that this juncture is not present when certain specific morphemes are involved as constituents. The details are given in a following statement (e.g. 472c).
d. Where neither "nor" is used accompanying a distribution-class label, there may nevertheless be (and usually there are) restrictions on the extent to which forms belonging to the class designated occur in the construction; but the restrictions are not of such a nature as to be readily statable or discoverable. They usually involve possibilities of semantic combination. Such restrictions are for the most part not described, but it may be taken as implied that limitations exist, except where both of the IC classes contain only one or a very few members. It can be said, however, that, unless a statement is made to the contrary, a constituent of a construction does not occur as a constituent in the same construction.

e. Two commas preceding a class symbol signify that members of that class, when occurring in that construction, occur after the first word of the other IC. In each of the constructions of this type in Northfork, a tactic juncture intervenes between this "enclitic" and the first word of the other IC. Thus the symbol for the tactic juncture involved is given between the ,, and the class symbol of the "enclitic" IC, e.g.

`` "Ce IN" / IN (489b)

That is, the enclitic conjunction (class Ce) occurs after the first word of the indicative expression (class IN), with
intervening <"". (If the indicative expression contains only one word, the enclitic conjunction follows it.)

(A word, on the morphemic level, is a sequence of morphemes occurring between two occurrences of any of the following: <+> <"" <,> <> #, except <+> when it occurs as tactic juncture in construction 453a.)

f. In the citing of examples, ICS are separated by spaces, and tactic junctures, where they occur, are separated by spaces from each of the ICS. (This is in contrast to the practice of chapter three, in which spaces separate morphemes, without regard to immediate constituency.)

410 Noun Stems

410. Constitutes of constructions of this section occur as ICS in one or more of the constructions of: 410, 430, 446, 452, 457, 463, 464, 484, 486, 487, 494, 496.

The symbol N' is used to represent the class consisting of Nr (restricted noun stems) plus those members of Nf which are not constitutes of any of the constructions of 416.

411. a. Vt* vNr* / Nbr where Vt* includes only <cih cuka> 'to point at' (465e), vNr* includes only <hnuH> 'instrument for ...ing' (312h).
<cihoku a hnuñ> Nbr 'pointer' has been found only in
<mah cihoku a hnuñ> Nr(P) index finger (4110)
<ta h cihoku a hnuñ> Nr(P) big toe

b. Pb* Nbb / Nf, Nbr where Pb* includes only <pa>
'water, liquid'. Nbb contains only one member, <hkwi>
(fish). 311a.

c. Pb* Nbr* / Nr where only certain combinations of
these forms occur, as described in 311b.

d. Pb* Nbr* / Nf where only certain combinations of
these morphemes occur, as described in 311c.

412. a. Nu* nNj / Nr(pY) where Nu* includes only
<ehsi> 'gray'. 331d.

b. Nf* nNj* / Nf where only certain combinations
occur, as described in 331a. One of the constitutes,
<yny> Nf*, occurs only with <ni> nQ1 'like' (355).

c. Nr* nN* / Nr(P)* where Nr* includes only <pija>
'mother'. 331b.

d. Nr* nN* / Nf where Nr* includes only <nahqa> 'ear'.
331b.

e. Nf* nN* / Nf where Nf* includes only <co°ahpe>
'ghost'. 331b.
f. \( N_r^* N_r N_\text{No} / N_f - N_r(p_Y) \) where \( N_r^* \) includes only \(<\text{mahqa}> \) 'ear'. 331c.

413. a. \( N_t N_\text{Nt} / N_f \) 313a-c, 332.

b. \( N_t n N_\text{Nt} / N_f \) 313d, 332.

c. \( N_t n N_n / N_f \) 313d, 332.

d. \( N_n n N_n / N_f \) 313e, 332.

414. a. \( N_f^* N_f^* v N_r^* / N_f \) where the first \( N_f^* \) includes only \(<p_a h k w i> \) 'fish' (411b), the second \( N_f^* \) includes only \(<p_o t o> \) 'staff, pole, digging stick', \( v N_r^* \) includes only \(<h n u \tilde{n}> \) 'instrument for ...ing'.

\(<p_a h k w i \ p o t o \ h n u \tilde{n}> N_f \) fishing pole  (231a)

b. \( N_t^* v N_r^* / N_f \) where \( N_t^* \) includes only \(<s a h q w a^*a> \) '(firm tree)', \( v N_r^* \) includes only \(<h n u \tilde{n}> \) 'instrument for ...ing' (which has the allomorph \(/\tilde{h} n u// \) when occurring in this construction). 313c.

c. \( V_i^* v N_r / N_r^+ \) where \( V_i^* \) includes unit morphemes and constitutes of some constructions of 462-465, \( v N_r^* \) includes only \(<h n u \tilde{n}> \) 'instrument for ...ing'. 319a.

d. \( V_t^* v N_r^* / N_r^+ \) where \( V_t^* \) includes unit morphemes and constitutes of some constructions of 462-465, \( v N_r^* \) includes only \(<h n u \tilde{n}> \) 'instrument for ...ing'. 319a.
ë. $V_1^* vNf^*/Nf$ where $V_1^*$ includes unit morphemes and constitutes of some constructions of 462-465, $vNf^*$ includes $<pe>$ 'that which is ...ed', $<s>$ 'one who ...s', $<pecy>$ 'one who ...s excessively'. 319a.

f. $Vt^* vNf^*/Nf$ where $Vt^*$ includes unit morphemes and constitutes of some constructions of 462-465, $vNf^*$ includes $<s>$ 'one who ...s', and probably $<pecy>$ 'one who ...s excessively' (examples of the latter have not been found, but are believed possible). 319a.

g. $Vtt^* vNf^*/Nf$ where $Vtt^*$ apparently includes only unit morphemes, $vNf^*$ includes $<s>$ 'one who ...s' and probably $<pecy>$ 'one who ...s excessively' (examples of the latter have not been found, but are believed possible). 319a.

h. $V_1^* vNf^*/Nf$ where $V_1^*$ includes only $<pa hapi>$ 'to swim' (4653), $vNf^*$ includes only $<hoi>$ (313a). 319a.

i. $K^* vNf^*/Nf$ where $K^*$ includes only $<tyh ohi>$ '(left)' (441a), $vNf^*$ includes only $<hoi>$ (313a). 319a.

j. $H hNr/Nr(P,pY)$ 319e, 327.

k. $U^* U^*/Nf$ where $U^*$ includes only $<ahoa pono>$ 'tan, brown, copper-colored' (461a). 419f.
415. Compounds.

a. $N^* N^* / Nf$

   <pa hkiwi> Nf, Nbr fish, trout (411b)
   //htyh pih// <tyh pih> Nf rock (411d)
   //pahkwi htyhpih// Nf sinker (on fish-line)

   <wihtuwa> Nf bowl
   <tyhpihn wihtuwa> Nf stone bowl

   <wihsi> Nr(P,pi) string
   <pahkwi wihsi> Nf fish-line

   <tyhka 'r> Nf' eater (414f) occurs only in 415a
   <pahkwi tyhka> Nf crane; "fish-eater"

   <kwica> Nr(pi) sp. larvae (which grow in Mono Lake)
   <kwicoa tyhka> Nf Mono Lake Paviotso: "larvae-eaters"

   <tyhka hnu<s> Nr+ table; instrument for eating (414c)
   <wih<i> Nf 'knife'

   <tyhkahnu<s wih<i> Nf knife (of the type used in eating)
   //cih'noo hnu<s> // cihnnoo hnu<s> Nr+ instrument for
carrying with pointed object (414d)

   <tyhkahnu<s cihnnoohnu<s> Nf fork

b. Nu Nf / Nf (312)

   <tohc<i> Nu white

   //htyh pih// <tyh pih> Nf rock (411d)
   //tohc<i htyhpih// Nf white rock
<puhi> Nu blue/green
<hwawahu> Nf money
<puhi hwawahu> Nf blue-green money (beads cut from abalone shell)
<qemy> Nf" occurs only in
<puhi qemy> Nf abalone shell

c. Nu" h nNh" / Nf where Nu" includes only <"ahqa> 'red', nNh" includes only <qo"jo> nNh" (335). 335.
d. No* Nf* / Nf where only certain combinations of these forms occur, as described in 314a.
e. Nw* Nf* / Nf where Nw* includes only <too> 'winter, year' (319), and Nf* includes only <no pih> 'house' (41ld).
<too nopih> Nf winter-house

f. Vi* N'i'/ Nf where Vi* apparently includes only unit morphemes. This is not a commonly occurring construction; only a few members of Vi and N' occur in it.
<tyyja Vi to be afraid
<no pih> Nf house, home (41ld)
<tyyja nopih> Nf dwelling-place which offers protection from attackers: "afraid-home"

//jaqak// <jaqa> Vi to cry
<pu pih> //puhsi// Nr(P) eye (411c)
//jukah puhsi// Nf crybaby
g. \( Vt^* N^* / Nf \) where \( Vt^* \) apparently includes only unit morphemes. This is a rarely occurring construction, in which only a few members of \( Vt \) and \( N^* \) are involved.

//qoih// <qoi> Vt to kill several

<nana> Nf man, male

//qoih nana// Nf hunter

h. \( Q^* h N^* / Nf \) where \( Q^* \) includes a few members of \( Q1 \) and \( Qn \) (but not \( Qc \)). Only a few members of \( N^* \) occur in this construction.

//oco// <cawu> Q1 good, well

<pa hkwí> Nf, fir fish, trout (411b)

//oco h pakhwi// Nf trout; native trout (as opposed to those brought in by white men)

<nyyhmy> Nf person, Indian, Mono

<oawu> Q1 good, well

<cawu h nyyhmy> Nf full-blooded Mono/Indian

<waha> Qn two

<ta pe> \( M_{r}(t) \) sun, day (411c)

<waha h tape> Nf 'two days'

<typici> Q1 important, great

<huù > Nf' flower, river (414a)

<typici h huù > Nf San Joaquin River

i. \( nL^* Nf^* / Nf \) where \( nL^* \) includes only <tuheʃ> 'under' and \( Nf^* \) includes only <nato> 'shirt', <qahniha>
'trousers, <tuheĩ> has the allomorph //tuhĩ// when occurring in this construction.

//tuhĩ nato'وى // NF undershirt
//tuhĩ qahnihsu'وى // NF underwear

416. a. ⱪ nNf / NF The members of ⱪ occurring in this construction are cited with indication of the respective allomorphs of <pi> nNf 'absolutive' with which they occur, in parentheses following the distribution-class label. 333, 316.

b. Pb* ⱪ / NF where Pb* includes only <ta> 'sun, heavenly body', and ⱪ includes only <ta pe> 'sun, day' and <ta myʔa> 'moon, month' (411c). 311b, 385.

c. Nw* nNf / Na,Nf' where Nw* includes only <too> 'winter, year', <toqa> 'night'. 315. (The constitutes occur as Na in 457.)

417. a. NF' nNl / N1 Only a few members of NF occur in this construction. 334.

b. Nx h nNh* h nWn* / NF' where nNh* includes only <oǐ> 'diminutive'. The constitutes occurs only with <ni> nQi 'like' (355, 452o). 314b.
c. Pq Nrf / Nf where Nrf includes the names of some body parts. The constitutes usually or always occur with <noh> 'very' (383, 410b). 381.

418. a. Pq Nf / Nf 382.

b. Pn Nrf / Nf 383.

419. a. Vi vnrf / Nrf(P) where vnrf includes only <hna> 'act/object of ...ing'. 319a.

b. Vi vnrf / Nf where vnrf includes <tyh> 'neutral agent', <hpy> 'product of the action', <hty> 'customary/former agent'. Vi includes unit morphemes, constitutes of constructions of 460, and those of certain constructions of 470, depending on the suffix involved: for <hpy>, 473, 475; for <hty>, 471-474; for <tyh>, all constructions with Vi constitutes except 477 where vVg is <hnaa> 'already'. 319a.

c. Qn qN / Nq where Qn includes Ql and Qn, but not 4c (354c). 319b.

d. Qn qh / Nf where Qn includes <symy> 'one', <Rh symy> 'one-distributive', <Rh waha> 'two distributive'; qh includes <h..> qN (313b). 319b.

5. L1N / Nf 319b.
f. T° lN° / Nf where T° apparently includes only <mi°i°i°> 'nowadays'; lN° includes only <tyh> lN, vNf 'neutral agent'. <mi°i°i°> has the allomorph //mi°ih// when occurring in this construction.

//mi°ih tyh// Nf those of nowadays, contemporaries

g. Qc qcN / Nf 319c.

h. I in / Nf 319d.

420 Pronominal Forms

420. In this section are listed constructions in which members of the classes given in 320 appear as ICs, and whose constitutes are either Pp (421-423), N (424-425), or H (426). The class N is made up of Nf, Np, Nd, Nh, and Nq.

421. a. Pp° pp / Pp° constitutes occur in construction 424a (i.e. with <my> pN) only if the constitutes of that construction occur in construction 436b. 322b.

b. Pp° Pr / Pp° where Pp° includes only <°a> 'third person'. The constitute indicates zero possessor and occurs only with vN which are constitutes of 414c, d and 413a (i.e. 'verbal nouns' in <hnuh> vN° 'instrument for ...ing' and <hna> vN° 'act/object of ...ing' 319a).
<qahty> Vi, vV to sit, stay
<qahty hnuh> Mr+ chair (414c)
<"yh qahtynnuh> Nf thy chair (431a)
<"a qahtynnuh> //ah qahtynnuh/ Nf his/her chair
<"ana qahtynnuh> //ahna qahtynnuh/ Nf a/the chair
<ceehpahnihi> Nf magician
<ceehpahnihi jee> Vi to be/act like a magician
(463a, 367a)
<ceehpahnihi jee hna> Mr(P) act/object of being
(like) a magician; magic; cinema, television
<"yh ceehpahnihi jeehna> Nf thy magic; thy television set
(431a)
//ahnaceehpahnihi jeehna/ Nf magic; cinema, television

422. Pd Pr / Pdr
<brh> Pd distributive (382)
<na> Pr reflexive (321b)
<brh na> Pdr reciprocal (382)

423. a. Op* + Pp* / Pp where only certain combinations of Op (436b) and Pp occur. The conditions of this limitation are that the same person morpheme (321) be contained in both members, and that if <ni> pp 'plur-1' (322b, 421a) occurs in one member, it occur also in the other. The occurrence of a constituent of this construction is associated
with greater emphasis upon the person signified than in the case of the Pp morphemes or the constitutes of 42la occurring without Op. (For Op forms, see 323.)

<ny puhku> // *i puhku// Nf my dog (43la)
<nymyhkana+n y puhku> // nymyhkana+*i puhku// If my dog

b. Od + Pp" / Pp where Pp" includes only <"a> 'third person' and <"a ni> 'third person plural' (42la), the latter occurring if <my> nMm 'animate plural' is present in the member of Od (436o) with which it occurs.

//mahkahuNa+"ah puhku// Nf that one's dog (43la)
//mahkahumyNa+"aah puhku// those people's dog

c. Oh + Pp" / Pp where Pp" includes only <"a> 'third person'.

<hahkaNa + "a> //hahkaa + "ah// Pp whose, someone's
whom, someone (obj.) (424d, 436d)
//hahkaa+"ah puhku// Nf whose/someone's dog (43la)

d. On + Pp" / Pp where Pp" generally includes only <"a> 'third person' and <"a ni> 'third person plural' (42la); one example has been found, however, of <"yh ni> Pp 'second person plural' occurring in this construction.

<pohpoina+"a> Pp Poipoi's; Poipoi (obj.)
//pohpoina+"ah puhku// Nf Poipoi's dog (43la)
//pohpoina+"ah puhku na+"ah qwaci// Nf Poipoi's dog's tail
<tayhyhna> Nf meat, food
<?yny' Na> Of white man (obj.)
//?yny'Na+?yih tayhyhna// Nf you white men's food

e. Oq* + Pp* / Pp where Oq* includes at least
<nasymyhtu Na> //naysymyhtu ku// 'all-obj.' (436f), and Pp* includes only <a> 'third person'.
<nasymyhtu Na + a> Pp everyone's; everyone (obj.)
//naysymyhtu ku+a puhku// Nf everyone's dog (431a)

424. a. Pp* pN / Np where Pp* includes unit morphemes (321a) and constitutes of 421a. 323.

b. Pr pN / Np* constitute has been found only with
<hsu> P 'precisely, still' (395, 433), <hkwa'> nNp 'plural' (322a, 425); the constitute <nayn hkwa'> Np* (425) has been found only with <hsu> P.

<nayn> /puy// Np* (321b, 323)

c. D dN / Nd 326.

d. H hN / Nh 3281

425. Np* nNp / Np* constitutes does not occur in 436b.

426. Cse* H / H where Cse* includes only <tu>i
'anyway' (333b). 327, 393b.
430. Constitutes of constructions of 431-435 and 438 occur as ICs in one or more of the constructions of: 438, 446, 452, 434, 436, 437, 496. Constitutes of 436, 437, and 439 occur as ICs in one or more of the constructions of: 434, 437, 439, 423, 471g, 485.

N' is used as a cover symbol for the class consisting of Nr plus those members of Nf which are not constitutes of 416. The class N includes Nf plus Np plus Nh plus Nq.

Similarly, the class O includes Of plus Op plus Od plus Oh plus Oq.

431. a. P_LOWER_P N' / Nf (321, 421, 423, 316, 318, 410)
Note that Np, Nh, Nd, Nq differ from Nr and Nf in that they do not occur in this construction. 321, 322, 423.

b. Pdr Nr* / Nf where Nr* includes terms of relationship.

<Rh na> Pdr reciprocal (422)
<pyhni'> Nr(P) younger sister
<Rhna pyhni'> Nf sisters; sister and brother (where the sister is the younger)
<nawa> Nr(P) father
<Rhna nawa> Nf father and child
<pety> Nr(P) daughter
<Rhna pety> Nf parent and daughter
<pohso'> Nr(P) friend, partner, cousin of same sex
<Rhna pohso'> Nf friends, partners, cousins of same sex

432. a. Nf h nNh / Nf (335). Limitations on the occurrence of four members of nNh (those marked nNh") are described in 335. A very few forms (as noted in 335) which are constitutes of this construction occur as constituents in it, e.g.

<tuwahpi' h ci'> Nf child-dim.
<tuwahpi'hoci' h ci'> Nf child-dim.
<Rhouku' h ci'> Nf little old men
<Rhouku'hoci' h pa'wo> Nf darn little old men

b. Np h nNh" / Np where nNh" includes only <ci'> 'dim'.

<ny my> //ny y// Np I
//nyy h ci'// Np little old me

c. Nd h nNh" / Nd where nNh" includes only <ci'> 'dim.' (335).

<mahu h ci'> Nd that-dim.

d. Nh h nNh" / Nh where nNh" includes only <ci'> 'dim'.

<naqem h ci'> Nh who/someone-dim.
433. a. \textit{Nf'' nNm} / Nf where Nf'' includes names of animate beings, as described in 336. \textit{<my> nNm precedes nNh} (335, 432a) when both suffixes occur with \textit{<nana> Nf} 'man, male', \textit{<na''a> Nf}'' 'boy', or combinations of \textit{Pp} and \textit{<tuwah> Nr(P,pi')} 'child, son' (431a). 336.

b. \textit{Nd nNm} / \textit{Nd} 336.

434. \textit{Oq + Nq''} / Nq where Nq'' includes only those constitutes of 419c in which \textit{<ke> nQl} 'having' (355) is an IC of the constituent Ql.

\textit{<nopih ~ ke> Ql house-having} (452c)
\textit{<nopih''ke htu> Nq one who has a house} (419c)
\textit{<oawu htu> Nq good (one)} (419c)
\textit{<oawuhtu Na> //oawuhku// Oq good one-obj.} (436f)
\textit{<wahahtu Na> //wahahku// Oq two-obj.} (436f)
\textit{//oawuhku + nopih''kei// Nq one who has a good house}
\textit{//wahahku + nopih''kei// Nq one who has two houses}
\textit{//qatu''uhku + nopih''kei// Nq one who has no house}

435. a. \textit{Nd + Nf''} / Nf

\textit{<ma hu> Nd that} (424c)
\textit{<no pih> Nf house} (411d)
\textit{<mahu + nopih> Nf that house}
b. $Nq + Nf^* / Nf$

$<$cawu htu$ Nq good (one) (419o)$

$<$cawuhtu + nopih$ Nf good house

$<$wahahtu + nopih$ Nf two houses.

436. The class 0 includes Of, Op, Od, Oh, Oq.

a. $Nf^* n0 / Of$ 337a.


c. $Nd o n0 / Od$ where the position of $<hka>$ o is immediately following the constituent D (325) of Nd (326).

326, 329, 337a.

d. $H o n0 / Oh$ 327, 329, 337a.

e. $H h0 / Oh$ 327, 337b.

f. $Nq n0 / Oq$ 319b, 337a.

437. a. $Od + Of / Of$

$<$ma hka hu Na$ Od that-obj. (436c)$

$<$nopih Na$ Of house-obj. (436a)$

$<$mahkahuNa + nopihNa$ Of that house-obj.$

b. $Oq + Of / Of$

$<$cawuhtu Na$ //cawuhku$ Oq good-obj.$

$<$cawuhku + nopihNa$ Of good house-obj.$
//wahshku + nophina// of two houses-obj.

438. N F / N

where the constitutes are of the same class (Mf, Mp, Nd, etc.) as the N constituent. 395.

<nobi 'yny'> Mf very much a white man (418b)
<nobi'yyn' hay'ya> Mf entirely a white man, nothing but a white man (said of an Indian who has entirely given up his native culture for that of the white man)

440 Locative Expressions

440. Constitutes of the constructions listed in this section are L (locatives) or constituents of L. Forms belonging to class L occur in one or more of the constructions of: 419a, 441c, 445d, 446n, 446v, 447-449, 474b, 487.

441. a. (Kt) Ql* / K where Ql* includes only <cawu>'good, well' and <'ohi>'(left)'. 341a.

b. (Kh) Pb* / K where Pb* includes only <pih>'buttocks, back'. 341b.

c. L* (Km) / K where L* includes only <ha wuhta>'in what/some direction'. 341c.
d. $D^{\kappa}(pK) / pK$ where $D^{\kappa}$ includes \(<i> 'this', <u> 'that'. 344. (The class $pK$ consists of these two constitutes plus \(<qwa> '(beyond)' (343a). Members of $pK$ occur only in 442a and/or 443a.)

442. a. $pK^{\kappa} x / (pL)$ where $pK^{\kappa}$ includes only \(<qwa> '(beyond)', 343a.

b. $D^{\kappa} xL / (pL)$ where $D^{\kappa}$ includes \(<i> 'this' and <u> 'that'. The constitutes occur as (pL) in 443b, 445b (the same construction, with regard to these two forms). (Cf. 446u.) 325, 343c.

443. a. $pK kL / pL$ (346) (The class $pK$ consists of \(<qwa> '(beyond)' (343a) and the two constitutes of 441d.)

\(<inaah hnahqweh> pL$ on this side of

\(<unaah hnahqweh> pL$ on the other side of

\(<qwa hnahqweh> pL$ beyond

b. \((pL)^{\kappa} nL^{\kappa} / pL$ where $(pL)^{\kappa}$ includes \(<qo> 'front' (343c), \(<kywa> 'sideI (343c), \,<qwa tyh> '(beyond)' (442a), \,<ina> 'here' (442b), <u na>? > 'there' (442b); and where $nL^{\kappa}$ includes \(<wee> 'in, at', \,<paah> 'by', <tuheh> 'under'; with only the following combinations occurring:

\(<qo wee> pL, L in front (of), before (445b)

\(<kywa paah> pL$ beside, near
<kywa tuhe> pL contiguous to
<qwaatyah woeh> pL beyond
<"ina" paah> pL, L on this side (of)
<"una" paah> pL, L on the other side (of)

c. (pL)* nL / pL where (pL)* includes <qope> 'front' and <kwita> 'bottom' (343c).
<br> <qope nañ> pL in front of
<br> <kwita nañ> pL at the bottom of

d. pL (A) / pL where pL includes <kywa paah> 'beside, near' (443b), and possibly one or more other forms; (A) occurs between the two ICs of pL*. (353a).
<br> <kywa ' paah> pL beside (and very close to)

e. Pr L* / pL* where L* includes only <typihi nañ> 'at the middle' (445c); the constitute apparently occurs only with those members of PP which contain <ni> PP 'plural' (322b, 421a). 345, 348c.
<br> <"ani natypihinañ> //"aihnahtypihinañ// L between them, in their midst (446a)

444. a. Pb* nL / nL, T- where Pb* includes only <pih> 'buttocks, back' (305).
<br> <pih nañ> nL, T- behind, after

b. (PK) nL* / nL where nL* includes only <paah> 'by'.
<br> <naah paah> nL behind
c. Pd $\mathcal{L}^*$ / $\mathcal{P}L^-$ where $\mathcal{P}L^*$ includes $<\text{kywa tuheñ}>$ (contiguous to) (443b), $<\text{qope nañ}>$ 'in front of' (443c), and possibly others. The constitutes occur only with Pdr (442, 446b) (and possibly also with Pr). 382.

d. Pd $\mathcal{N}^*$ / $\mathcal{N}^-$ where $\mathcal{N}^*$ includes $<\text{pañañ}>$ 'on top of', $<\text{pih nañ}>$ 'behind, after' (444a), $<\text{tuheñ}>$ 'under', and possibly others. The constitutes occur only with Pr and/or Pdr (446e, f). 382.

445. a. $\mathcal{K} \mathcal{L} / \mathcal{L}$ (441a-c, 342, 346.) 341, 342.

b. $(\mathcal{P}L)^*$ $\mathcal{N}^*$ / $\mathcal{L}, \mathcal{P}L$ where $(\mathcal{P}L)^*$ includes $<\text{qope}>$ 'front' (343c), $<\text{?i nañ}>$ 'here' (442b), and $<\text{u nañ}>$ 'there' (442b); and where $\mathcal{N}^*$ includes $<\text{weeh}>$ 'in, at' and $<\text{paah}>$ 'by'; with only the following combinations occurring (all of them occur also as P, cf. 443b):

- $<\text{qope weeh} \mathcal{L}, \mathcal{P}L$ in front (of), before
- $<\text{?inañ paah} \mathcal{L}, \mathcal{P}L$ on this side (of)
- $<\text{?inañ paah} \mathcal{L}, \mathcal{P}L$ on the other side (of)

c. $(\mathcal{L}) x \mathcal{L} / \mathcal{L}^-$ (The two IC classes contain a single member each: $<\text{typihì}>$ $(\mathcal{L})$ 'middle' (345), $<\text{nañ}> x \mathcal{L}$ 'at, on'. The constitute occurs only with $<\text{na}>$ Pr 'reflexive' (in 443e) and with $<\text{tyñ}> 1N, vllf$ (319b) (in 413e).

$\text{typihì nañ} \mathcal{L}^-$ at the middle

e. Pn / L. where nL includes <Rh p'ah> 'distributively on top of' (444d), <Rh p'ah> 'distributively behind, after' (444d), and possibly others. 382.
f. Pdr nL* / L where nL* includes <paah> 'on top of' (349a), <ah paah> 'distributively on top of' (444d), <Rh tuheh> 'distributively under' (444d), and probably others. 392.

g. Nf ~ nL / L ~ is not present after those members of Nf which end in <tyh> vNf,ln (313a, b; 413b, e, f) or <hna> vNl 'act/object of ...ing' (419a, 431a); nor after members of Nf which end in <hmuh> vNl+ 'instrument for ...ing' (414a-d) if the member of nL which follows is <tuheh> 'under'. 348a, 396b.

h. NL* nL* / L where each member of NL occurs with one specific member of nL. Members of NL (317) are cited with an indication in parentheses of which member of nL each occurs with. 317.

i. D nL dN / L 326.

j. Nh ~ nL* / L where nL* includes <paah> 'by' and possibly other forms.

<haqe'n ~ paah> L by whom/someone

k. Nq~ nL / L where Nq~ includes those constitutes of 419c in which members of Ql (but not Qn) are ICs.

<cawuhtu weeh> //cawuh weeh// L in a good (one) //papah weeh// L in a big (one)
l. Qn nL" / L where nL" includes only <paah> 'by'.

m. nL" nL" / L where only the following has been found:
   <tukuh> nL to, through, into
   <paah> nL by
   <tukuh paah> L straight (up)

n. L nL / L
   <typewuh> L (way) down below; in the San Joaquin Valley
   <tukuh> nL to, through
   <typewuh tukuh> L down to the Valley
   <nopih ~ pa'ah> L on top of the house (446g)
   <nopih-pa'ah tukuh> L to the top of the house
   <wynyhpY ~ ahqah> L among the trees
   <wynyhpY~ahqah weeh> L in (the area) among the trees

o. D" dL / L where D" includes <i> 'this' and <u> 'that', of which only the former has been found with one of the members of dL (namely <peh>). 348b.

p. H dL" / L where dL" includes only <wuhtah> 'in ... direction'. 348b.

q. Nr" xL / L where Nr" includes <ty pih> 'earth' (411c), <pa waha> 'meadow' (411c), and perhaps a few other forms. 348c.
r. Nf' xL / L  where Nf' includes <pojo> 'road' and perhaps a few other forms. 348c.

s. Ni' xL / L  where Ni' includes a few morphemes; these are listed in the lexicon as Ni(nañ).
    <moonih> Ni(nañ) Finegold
    <moonih nañ> L at Finegold
    <moonihnañ tyñ> Nf (that which is at) Finegold (419e)

t. H xL / L  348c.

u. D' xL / L  where D' includes <i> 'this' and <ma> 'that' (which has the allomorph //maa// when occurring in this construction). 325, 348c.

v. L' xL / L  where L' includes <ijañ> 'here' and <ijañ> 'there'. 348c.

w. Qn' xL / L'  where Qn' includes <waha> 'two' and perhaps others. The constitute has been found only with <pañañ> nL,L 'on top of' (446n). 348c.

447. Pn L' / L  where L' includes a few members of L.
    <nohi qwena'a> L very distant
    <nohi panañ> L very much on top

448. L' F / L  395.
449. $L^* + L^* / L$, where the first $L^*$ includes constituents of 4461, k, (i.e. those in which D or Nq occur as ICs), and the second $L^*$ includes constituents of 446g (i.e. those in which Nf is an IC); with the combinations subject to the condition that the same member of nL occur as an IC of each of the ICs.

<ma weeh hu> //maweehhuñ// L in that (4461)
<nopih ~ weeh> L in the house (446g)
//maweehhuñ + nopih~weeh// L in that house
<papahtu weeh> L in the big (one) (446k)
<papahtuweeh + nopih~weeh> L in the big house

450 Miscellaneous Forms

4500 The constructions listed in this section involve several types of classes. Constitutes of the constructions of 451-454 are members of the class Q (which has the three subclasses Q1, Qn, Qc). Constitutes of the constructions of 454 are T- (occurring as ICs in 455a). Those of the constructions of 454-457 are T (temporals). Constitutes of 458 are I (imitatives), while those of 459 are C (independent conjunctions).

Forms of class Q occur in one or more constructions of: 415h, 419, 441a, 446, 451-453, 455f, 457, 467, 474a. Members of class T occur in one or more constructions of: 419f, 456,
479a, 430a, 494b. The occurrence of I and C is described in 391 and 393b, respectively.

451. a. (Qn) Qn* / Qn where Qn* includes <pahì> 'three' (occurring with one member of (Qn), <nas>) and <symy> 'one' (occurring with the other two members of (Qn), <taah>, <wooh>). 351a.

b. Pr Qn* / Qn where Qn* includes only <symy> (which has the allomorph //sy°my// when occurring in this construction). 321b(8), 354a.

c. Qn* qQn / Qn where Qn* includes <symy> 'one', <waha> 'two', <pahì> 'three', <wacy> 'four', <manyki> 'five', <maa pahì> 'six' (451a), <taah symy> 'seven' (451a), <wooh symy> 'eight' (451a), <qwanyhki> 'nine'. 351b.

d. Qn- h nNh h nNh / Qn where nNh includes only <ci> 'diminutive'. 351c.

e. Pn Qn* / Qn where Qn* includes <ewa> 'much, many' and <na symy> //nahsy°my// 'all, altogether' (451b).

<nohi ewa> //nohe ewa// Qn very much /many //nohi nahsy°my// Qn all (without exception), entirely

f. H hA / Qn,T 327, 353b.
452. a. Ql- h nNh* h nNh* / Ql where nNh* includes only <c1> 'diminutive'. 352.

b. Pp Ql** / Ql where Ql** includes <toki> 'right' and <hohma> 'above'. 354b.

c. N' ** nQl / Ql <~> is not present after members of Nf which end in <tyh> vNf,1N (319a, b; 413b, e, f). 355.

d. Nd nQl* / Ql where nQl* includes only <ni> 'like'.

nQl immediately follows the constituent D of Nd (424c) in these forms. When the constituents occur in 453a or 413o, the morpheme <hu> dN (326) occurs after the other suffixes.

<ma hu> Nd that (one) (424c)
<ma ni hu> Ql like that
<ma ni 'hu> //mani'hi// Ql just like that (453a)
<ma ni htu Na hu> //manihkuh// Oq like that-obj.

(436f)

e. Pp* nQl** / Ql where Pp* includes unit morphemes except <tyh> 'subj. third pers.', and constitutes of 421a; and where nQl* includes <ni> 'like' and <ho> 'with'. 355.

f. Pr nQl* / Ql where nQl* includes only <ni> 'like'

(which has the allomorph //mahani// when occurring with <na> Pr 'reflexive'). 355.

g. Nh - nQl** / Ql where nQl* includes <ho> 'with' and <ni> 'like'. 355.
453. In this article, the coverage of Q1 extends to constitutes of preceding constructions of this article as well as to unit morphemes and constitutes of constructions of 452 (the only preceding article listing constructions whose constitutes are Q1).

a. Q1^~ (-A) / Q1 353a.

b. Pn Q1^~ / Q1 383.

c. Pn Qc / Qc 383.

d. Aq + Q1^~ / Q1 353a.

\(<\text{qatu}^u + \text{nohicawu}\>\) Q1 not very good

e. Aq + Qc^~ / Qc

\(<\text{qatu}^u + \text{cyhkwyta}\>\) Qc not hard

\(<\text{qatu}^u + \text{nohicyhkwyta}\>\) Qc not very hard

f. Aq + Qn^~ / Qn where Qn^ includes at least

\(<\text{ha ihno}^o\>\) 'how many, some' (451f), \(<\text{ewa}\>\) 'many, much',

\(<\text{nohi}^\text{ewa}\>\) 'very many/much' (451e).

\(<\text{qatu}^u + \text{hainho}^o\>\) //\text{qatu}^u + hino^o// Qn no plural amount, not several

\(<\text{qatu}^u + \text{ewa}\>\) Qn not many/much

\(<\text{qatu}^u + \text{nohi}^\text{ewa}\>\) Qn not very many/much

454. a. T^~ t / T- where T^ includes only \(<\text{mowahu}\>

'now, soon'. 356b.
b. $T^{-}\text{–} (-A) / T_{-}$ where $T^{-}\text{–}$ includes only $<\text{pyty}>$

'(after a while)'. 353a, 356a.

455. See also 451f.

a. $T_{-} (T) / T$ 356.

b. $\text{Nw nT} / T, \text{Vi}$ 315, 358a.

c. $\text{Vi vT} / T$ 358b.

d. $\text{Pp Vi vT} / T$ 358b.

e. $\text{Qn qT} / T$ For limitations on the occurrence of two of the members of qT, see 358c. 358c.

456. $T^* \text{F} / T$ 395.

$<\text{symy nahpy}> T$ once (455e)

$<\text{hsy\'y\'h}> F$ only (395)

$<\text{symynahpy hsy\'y\'h}> T$ only once

457. $\text{Nq + Na} / T$

$<\text{too pi}> //\text{too pe}// \text{Na,Nf}^* \text{ a year, a winter (416c)}$

$//\text{sy\'my} + \text{toope}// T$ for one year, for one winter

cf. $//\text{sy\'my} + \text{toope}// \text{Nf}^* \text{ one year, one winter (435b)}$

$//\text{wah\'ahu} + \text{toqape}// T$ for two nights
458. a. \( \text{Ia}^* + \text{Ia}^* / \text{I} \) where the two Ia constituents are morphemically identical. 391a.

b. \( \text{Ib}^* \text{Ib}^* / \text{I} \) where the two Ib constituents are morphemically identical. 392b.

459. \( \text{Ce}^* \text{Ce}^* / \text{C} \) where only the two combinations given below occur. (Other sequences of members of Ce are treated as repeated occurrences of construction 439b.)

\(<\text{tu}'i \text{tu}'i> \text{C although}
\text{<hnape jaqah'hnape}> \text{C perhaps, apparently}

460 Verb Stems

460. Constituents of the constructions of 461 occur only in construction 463d (with one exception, see 414k); they are labeled U. Constituents of the other constructions of this section are Vi, Vt, Vtt, or Vx; they occur as constituents in one or more of the constructions of: 414, 415, 419, 455, 460, 470, 480, 490.

461. a. \( \text{nu nu} / \text{U} \) 312, 361a.

b. \( \text{(U) -U} / \text{U} \) 361b, c.

c. \( \text{U- (U)} / \text{U} \) 361b, d.
d. \( \text{Hu}^* \) (U) / U where \( \text{Nu}^* \) includes \(<\text{o}\text{ha}>\) 'yellow' (312) and possibly others. 361b.

e. \( \text{Pb}^* \) pU / U where \( \text{Pb}^* \) includes only \(<\text{puh}>\) 'eyes' (385). 361c.

462. a. \( \text{Pl}^* \) pV / Vt where \( \text{Pl}^* \) includes \(<\text{kyh}>\) 'biting', \(<\text{wyh}>\) 'whipping!', and \(<\text{ma}>\) 'pursuing' (386). 367d.

b. \( \text{Pb}^* \) pV / Vt where \( \text{Pb}^* \) includes only \(<\text{puh}>\) 'eyes' (385).

\(<\text{puh ni}>\) //\(<\text{nyi}>\) Vt to see (367d)

c. Vt\( ^* \) vVt\( * \) / Vi where Vt\( * \) and vVt\( * \) each include two morphemes, each occurring with one of the others, as follows (371a):

<br>\(<\text{nahqa i}>\) Vi to make a sound
<br>\(<\text{ekhi h..}>\) //\(<\text{ehki}>\) Vi to eat acorn

d. \( \text{Vi}^* \) vV\( * \) / Vt where \( \text{Vi}^* \) includes \(<\text{jatuha}>\) 'to talk', \(<\text{ta pyha}>\) 'to get light', and \(<\text{jaqa}>\) 'to cry'. 371b.

e. \( \text{Vi}^* \) vVtt / Vtt\( * \) where \( \text{Vi}^* \) includes only \(<\text{waci}>\) 'to be lost/hidden'. The constitute occurs only with \(<\text{n}>\) Pr 'reflexive' (321b, 471b). 371c.

f. \( \text{V}^*\text{x} \text{vVr}\( * \) / Vx where vVr\( * \) includes only \(<\text{o}i>\) 'punctual' (371d). 362b, 371d.
g. \( \text{Vr vVr}^* / \text{Vi} \) where \( \text{vVr}^* \) includes only <\text{qhi}> 'durative' (371d). 362c, 371d.

h. \( \text{Vr}^* \text{vVr} / \text{Vi} \) 362d, 371d.

i. \( \text{Vt vVr}^* / \text{Vt} \) where \( \text{vVr}^* \) includes only <\text{qi}> 'punctual' (371d). 362e.

463. a. \( \text{Ni}^* \text{nVi} / \text{Vi} \) where \( \text{Ni}^* \) includes unit morphemes and constitutes of construction of 411-414. 367a.

b. \( \text{Nu}^* \text{nVi}^* / \text{Vi} \) where \( \text{Nu}^* \) includes only <\text{puhi}> 'blue/green' (312) and \( \text{nVi}^* \) includes only <\text{tuwa}> 'to become (like)'.

<\text{puhi tuwa}> \text{Vi} to be green

c. \( \text{Ni}^* \text{nVt} / \text{Vt} \) where \( \text{Ni}^* \) includes unit morphemes and constitutes of some constructions of 411-414. 367a.

d. \( \text{U uV} / \text{Vi} \) (461, 361, 367b). 367b.

e. \( \text{I IV} / \text{Vi} \) (391, 458, 367c). 391, 367c.

464. This article treats compounds of verb stems with preceding noun or verb stems. In the constructions of 464a-g (noun plus verb compounds), the symbols \( \text{Vi} \) and \( \text{Vt} \) represent roots (i.e. monomorphemic members of \( \text{Vi} \) and \( \text{Vt} \)) and, in addition, a few bimorphemic verb stems. The occurrence of bimorphemic verb stems in these constructions is mentioned for
those in which they have been found; it is probable that there are others in addition to those mentioned, and that bimorphemic verb stems occur in other constructions than the three mentioned below in which they have been found. The noun stems involved are either roots or constitutes of 411b-d; this statement is to be taken as defining the limitation of occurrence of noun stems in these constructions, in lieu of asterisks accompanying the symbols Nr and Nf with separate explanations for each construction.

In verb plus verb compounds (464h-n), the members are usually monomorphemic. There are, however, a few cases in which the first member is a constitute of 462a, b, or 465e; and a few in which the second member is a constitute of 462a, b, f-i. These statements are to be taken as explanations of the asterisked symbols of 464h-n, with the further qualification that only a small number of verb stems occur in each of the constructions listed. A few verb roots (e.g. <pihty> Vi 'to arrive', <kija> Vtt 'to give') have allomorphs with initial //h// when occurring in these constructions (//hpihty//, //hkija//); <wahci> Vi 'to be lost/hidden' has the allomorph //wacih// when followed by Vi or Vt.

a. Nr Vi* / Vi where Vi* includes a few verb roots.
   <nahqa> Mr(P), Vt, Nu car; to hear
   <qahma> Vi to ache; to taste
   <nahqa qahma> Vi to have an earache
<ta pe> Nₙₚₕₜₐ) sun, day (41lc)
<cipuhi> Vi to climb
<tape cipuhi> Vi sun to rise
<toja> Nₙₚₑₚ_i) mountain
<nywi> Vi (one) to wander
<toja nywi> Vi to hunt, go hunting
<kuh tuhsi> Nₙₚₑₚ_Y) dust (41lc)
<huu> Vi (water) to flow
<kuhtuhsi huu> Vi (flowing water) to be muddy

b. Nₙ Viₚ / Vi where Viₚ includes a few roots and at least one bimorphemic stem: <nopih ~ Vi 'to dwell' (463a).

<wijah> Nₙ black oak acorns; acorns
<wijah nopih~> Vi to go camping for acorns
<pa hsaaky> Nₙ bridge (41ld)
<mija> Vi to go
<pahsaky nija> Vi to go on/over a bridge

c. Nₙ Vₚ / Vi where Vₚ includes a few roots.

<pa hsiwah> Nₙ(pY) sand (41lc)

<noo> Vt to haul
<pahsiwah noo> Vi to haul sand
<mah pih> //mah "ja// Nₙ(p,p_i) hand, glove (41lc)

<maa> Vt to obtain, to buy

//mah "ja maa// Vi to buy gloves
d. Nf Vt$^*$ / Vi where Vt$^*$ includes a few roots and at least one bimorphemic stem: <ma ni> //mah// Vt 'to pursue' (462a).

<ahpohsowa> Nf,Nt manzanita berries

//ahpohsowa mahi// Vi to go to get manzanita berries
//wijah mahi// Vi to go to get acorns

<ttyhna> Nf meat, food

<ttyhna maa> Vi to buy/obtain meat

e. Nr Vt$^*$ / Vt where Vt$^*$ includes a few verb roots and at least one bimorphemic stem: <cih saja> Vt 'to prick (the skin) in order to cause bleeding' (465e).

<mupih> Nr(P) nose (411c)

<mupih cihsaja> Vt$^*$ to prick the nasal septum of (someone) to cause nosebleed (apparently always occurs with <*,*ki> vVp 'intermittently' (373a))

<nahqa> Nr(P),Nu,Vt ear; to hear

<tona> Vt to pierce

<nahqa tona> Vt to pierce the earlobes of (someone)

f. Nf Vt$^*$ / Vt where Vt$^*$ includes a few verb roots.

<pa hkwi> Nf,Nbr fish (411b)

<tyky> Vt to put, place

<pahkwi tyky> Vt$^*$ to put fish (in spring) (apparently always occurs with <ty> Ft 'indefinite object')
<etth> If bow, gun
<etth maa> Vt, Vi to get a gun (from)

5. Nf* Vtt* / Vt where Vtt* includes only <mahqa> 'to give', and Nf* includes the names of items of food or drink.

<wijah mahqa> Vt to give acorns to

h. Vi* Vi* / Vi
   <ooki> Vi to celebrate
   <mija> Vi to go'
   <ooki mija> Vi to go somewhere to celebrate, to go to celebration
   <munaa> Vi to go/come to the top of a hill
   <pihty> //hpihty// Vi to arrive
   <munaa hpihty// Vi to arrive at top of hill
   <waawi> Vi to go/come downhill
   //waawi hpihty// Vi to arrive at bottom of hill
   <wahoi> //wacih// Vi to be lost/hidden
   <jatuha> Vi to talk
   //wacih jatuha// Vi to whisper

i. Vi* Vt* / Vi
   <ma ni> //mahii// Vt to pursue (462a)
   //ooki mahii// Vi to go eagerly to a celebration
j. \( Vt^{*} Vt^{*} / Vt \)
   <pee> \( Vt \) to call (someonetto one's presence)
   //wacih pee// \( Vt \) to beckon to
   <tyky> \( Vt \) to put, place
   //wacih tyky// \( Vt \) to place in hidin\( \_3 \), to hide
   <tyhka> \( Vi,Vt \) to eat
   <puh ni> //puh "ni"// \( Vt \) to see
   //tyhka puh"ni// \( Vt \) to serve food to

k. \( Vt^{*} Vi^{*} / Vt \)
   <tyyja> \( Vt \) to be afraid of
   <tyyja mijja> \( Vt \) to go away from in fear
   <cipuhi> \( Vt \) to climb
   <tyyja cipuhi> \( Vt \) to climb something or to run away to
       escape from (feared being)
   //puh"ni hpihty// \( Vt \) to see (someone) arrive

l. \( Vt^{*} Vt^{*} / Vt \)
   <cih too> \( Vt^{-} (465a) \) has been found only with
   <na> Pr 'reflexive' (321, 471a) and with
   <wyna "i> \( Vt \)'to throw' (4621)
   <cihtoo wyna"i> \( Vt \) to push

m. \( Vi^{*} Vtt^{*} / Vt \)
   <johci> \( Vi \) to fly, to rise/arise
   <tywy> //htywy// \( Vtt \) to ask (someone) for (smth\( \_3 \))
   //johci htywy// \( Vt \) to ask (someone) to get up
n. Vt* Vtt* / Vtt

<kita> Vt to carry/hold in arms
<kija> //hkija// Vtt to give (someone something)
//hita hkija// Vtt to carry (smthg.) to (someone)

465. a. Vi* vVt / Vt where Vi* includes roots, constitutes of 462-464, and a few constitutes of 465g. (There are, on the other hand, a few examples of constitutes of 465a occurring as constituents in 465h, q.v.) 372a.

<wojo qhi> Vi (several objects) to be lined up (462g)
<wojoqhi hky> Vt to line up (several objects)
<hupija tu> Vi to sing, make music (463a)
<hupijatu hky> Vt to cause to sing; to sing for
<puhipono k1> Vi (one) to be blue (463d)
<puhiponoki hky> Vt to cause to be/get blue
<tahtopa> Vi to remove (one's own) shoes (465g)
<tahtopa hky> Vt to cause (someone) to take off (his) shoes, to take off (someone else's) shoes

b. Vt* vVt / Vtt where Vt* includes roots, constitutes of some constructions of 462-464, and a few constitutes of 465d-f, h. (But there are also a few cases in which constitutes of this construction occur as ICs in 465f, h.) 372a.

<khy ni> //khy "jy// Vt to bite (462a)
//khy"jy hky// Vtt to cause to bite
<wyha w:i> Vt to throw  (462i)
//wyna?i hky'/// Vtt to cause to throw
<cihtoo wyna?i> Vt to push  (4641)
<cihtoowyna?i hky'> Vtt to cause to push
<cah myhna> Vt to change, turn over  (465d)
<cahmynna hky'> Vtt to cause to change, turn over
<p tyky> Vt to put in water  (465h)
<patykky hky'> Vtt to put in water for (someone); to cause (someone) to put (smthg.) in water

c. Vt* vWv / Vt  where Vt* includes only <puha "a> Vt 'to cast a spell upon, to bewitch' (4630).
<puha"a wi> Vt to doctor, heal, cure

d. Pi Vi* / Vt  where Vi* includes roots and constitutes of 462g, h.  386.

 e. Pi Vx / Vt  (363, 462f).  386.

 f. Pi Vt* / Vt  where Vt* includes roots and constitutes of 462d, i; 4641 (and possibly 464j, k); and 465a; in addition, one example has been found (see below) in which a constitute of 465e occurs as a constituent in this construction, and it appears possible that other such cases exist.  386.

<cihtoo wyna?i> Vt to push  (4641)
<wyh cihtoowyna?i> Vt to push with sidewise motion; to crowd against
<qahty hky"> //qaty hky'// Vt' has been found only in:
//wyh qatyhky'// Vt" to stack (wood) always preceded by <ty> Pt 'indefinite object' (324, 468)
<mija hky'> Vt" to cause to go (465a) has been found only with <oah> Pi 'by pulling'
<cah mijahky'> Vt to drive (horse or car)
<tohi> Vx only with <cih> Pi 'with point'
<cih tohi> Vt" (465c) has been found only with <wyh> Pi 'with sidewise motion'
<wyh cih tohi> Vt to strike (a match)

g. Pb Vi" / Vi where Vi" includes a few roots, and at least one constitute of each of the constructions of 462g and 463a (and possibly also with constitutes of 462h). 385.
<qawino Rhi> Vi" (462g) only with <ooh> Pb 'head'
:ooh qawinoRhi> Vi to shake the head back and forth
<tyja wi> Vi to die (463a)
<kuh tyjawi> Vi to be burned to death

h. Pb Vt" / Vt where Vt" includes a few roots and a few constitutes of 462d, 1, 465a. 385.
<ouhpa hky'> Vt to cause to sink/go down (465a)
<mah ouhpanky'> Vt to push down with the hand

466. a. Vi" vVP / Vi 373a.
b. \(Vt^* vVp / Vt\) 373a.

c. \(Vtt^* vVp / Vtt\) 373a.

d. \(Vt^* vTV / Vt\) where \(Vt^*\) includes a few roots, and a few constitutes of some of the preceding articles, as well as constitutes of 467b. This construction occurs only occasionally. 373b.

e. \(Vtt^* vTV / Vtt\) Examples of this construction have not been found, presumably because of the infrequent occurrence of \(<ta> vTV; but the construction is listed because it is believed that a larger corpus would show examples, since there are no apparent restrictions on the possibility of their occurrence.

467. a. \(Ql^* h Vi^* / Vi\) where \(Ql^*\) includes \(<cawu> //cawu//, //coo// 'good, well', <syhta> 'bad', <toki> 'right' (which has the alloseme 'right now, right in the act of \(\ldots\)ing' when occurring in this construction), and those constitutes of 452c of which \(<ni> nQi 'like' is an I6.

\(<qahma> Vi\) to taste; to ache

\(<cawu h qahma> Vi\) to taste good

\(<syhta h qahma> Vi\) to taste bad

\(<naahma> Vi\) to feel

\(<cawu h naahma> Vi\) to feel good
<tyhka> Vi, Vt to eat
<toki h tyhka> Vi, Vt to be right in the act of eating
(right now, or at the time established by the context)
<wynyhpYNa + cihcuka> Vi to point at a tree (471g)
<wynyhpYNa+cihcuka ty̱> Nf one who is/was pointing at a tree (419b)
<wynyhpYNa+cihcukaty̱ni ni> Q1 like one who is/was pointing at a tree (432c)
<wynyhpYNa+cihcukaty̱ni h mane> Vi to be like one who is/was pointing at a tree, to act as if pointing at a tree, to seem to be pointing at a tree

b. Q1* h Vt* / Vt where Q1* includes <cawu> //cawu//, //ooo// 'good, well' and <toki> 'right' (see above, 467a).
<cih kypana> Vt to lock (465e)
//ooo h cihkypana// Vt to lock well
<tyhka> Vt, Vi to eat
<toki h tyhka> Vt, Vi to be right in the act of eating

468. a. Vt Vt* / Vi 324.
b. Pt Vtt* / Vt 324.
469. a. Pa Vi^t / Vi where Vi^t includes at least <pojo ha> 'to run' (463a) (no other verbal form has been found as an IC of this construction).

//R pojoha// Vi (several) to run (in different places or directions) (382)

b. Pa Vi^t / Vi where Vi^t includes at least <suwahqa> 'to breathe' (no other verbal form has been found as an IC of this construction). 381.

c. Pb^t pPa / Pa^- where Pb^t includes only <pih> 'buttocks, back'. The constitute has been found only with <qooni> Vi 'to return' (469d). 384a.

d. Pa Vi^- / Vi For limitations on the distribution of some of the members of Pa (namely those labeled Pa^-), see 384. 384b.

e. Pa Vt^- / Vt For limitations on the distribution of some of the members of Pa, see 384b. 384b.

f. Pa Vtt^- / Vtt For limitations on the distribution of some of the members of Pa, see 384b. 384b.

g. Pn Vi^- / Vi 383.

h. Pn Vt^- / Vt 383.

i. Pn Vtt^- / Vtt 383.
470. Verbal Expressions

470. Constitutes of the constructions of this section occur as ICs in one or more constructions of 470, 480, and 490. In addition, some of them occur as ICs in 419a, b, and 455c, d.

471. In this article, the symbol \( Vt^* \) is used to designate classes including not only constitutes of preceding articles (i.e. of 462) but also constitutes of preceding constructions of 461 itself.

a. \( Pr \ Vt^* / Vi \) 321b.

b. \( Pr \ Vtt^* / Vt,Vi \) The constitutes generally occur as \( Vt \) (as constituents in one of the following constructions), but can occur as \( Vi \) (i.e. without a second object). 321b.

c. \( Pdr \ Vt^* / Vi \) 321b.

d. \( Pdr \ Vtt^* / Vt,Vi \) (Cf. 471b, f.) 321b.

- \(<\text{cah myhna}> Vt \text{ to turn over, change} \) (465d)
- \(<\text{cahmyhna hky'}> Vtt \text{ to cause to change/turn over} \) (465b)

- \(<\text{Rhna cahmyhnahky'}> Vt \text{ to cause to change each other} \)

e. \( Pp \ Vt^* / Vi \) 321a, 322.

- \(<\text{a Rhnacahmyhnahky'}> Vi \text{ to cause them to change (position with) each other} \)
<qahoo'na> Mf box

<qahoo'naNa + *a> Pt box (obj.) (423d)

<qahoo'naNa*a cahmyhna> Vi to turn over the box

<qahoo'naNa*a Rhnacahmyhnahky> Vi to cause the boxes to change (position with) each other, i.e. to interchange the positions of the boxes

Further examples are given in 471g.

f. Pt Vtt / Vt,Vi The constitutes occur either as Vt in 471g, or as Vi. (This it is possible for Vtt to occur with only one object. There are never two occurrences of Pt in a single verb form.)

<nohqaqa> Vtt to steal (smthg.) from (someone)

(366)

<nay nohqaqa> //*i nohqaqa// Vt,Vi to steal (smthg.) from me

<pahi hky> Vtt to haul (smthg.) for (someone); to cause (someone) to haul smthg.) (465b)

//*i pahi hky> // Vt,Vi to haul (smthg.) for me

<kija> Vtt to give (smthg.) to (someone)

//*i kija> / Vt,Vi to give (smthg.) to me

G. O + Vt / Vi The occurrence of O (436) as object of Vt (except those members of Vt which are constitutes of 471f, for which no choice is possible), as as opposed to O + Pt/Pt (423) is related to a subtle difference in meaning, which can
roughly be described as follows: where O+Pp/Pp occurs (471e), there is a more definite or complete participation of the entity designated as object; the occurrence of O alone (471g) is related to partial or limited participation as goal of the action. In translation into English, O+Pp/Pp can usually be rendered as "the ...", while O can be rendered "a ..." or "some ...".

<pa pih/> //pa tả// Of water (411d)
<hipi> Vt,Vi to drink
//pajaña + hipi// Vi to drink some water
//pajaña+a hipi// Vi to drink the water (e.g. all of the water in the cup) (471e)
<puhku Na> Of dog (obj.) (436a)
<puh ni> //puh ˜ni// Vt to see (462b)
//puhkuNa + puh˜ni// Vi to see a dog
//puhkuNa+a puh˜ni// Vi to see the dog (471e)
<pahsiwahpY Na> Of sand (obj.) (436a)
<puh hai> Vt to look for (465h)
<pahsiwahpYNa + puhhai> Vi to look for sand
<nwihu Na> //*iwihu Na// Of my knife (obj.)
<wa ˜i> Vt to find
//*iwihuNa+a wa ˜i> Vt to find my knife (471e)
//*iwihuNa + ˜ihoqqa// Vi to steal my knife from me (cf. 471f)
<pahsiwahpYNa + ˜ipanikhya// Vi to haul sand for me
//puhkuNa + ˜ikija// Vi to give me a/the dog (cf. 471f)
472. a. \( \text{v}^a \text{vVr}^* \)/\( \text{vVa} \) where \( \text{vVr}^* \) includes only \\
<\( ^*i \) 'punctual'. 362a.

b. \( \text{Vi}^* \text{vVo}^* \)/\( \text{vVa} \) where \( \text{Vi}^* \) includes only <\( \text{mija} \) 'to go' and <\( \text{mija} \ ^*\text{ki} \) 'to go hesitantly' (466a); and where \\
\( \text{vVo}^* \) includes only <\( \text{poto} \) 'back and forth'. (<\( \text{mija} \) does \\
not occur by itself as an auxiliary.)

mijapoto \( \text{vVa} \) \( \text{Vi} \) to go back and forth  (473b)

//mi\( ^* \)jahki poto// \( \text{vVa} \) \( \text{Vi} \) to go back and forth hesitantly

c. \( \text{Vi}^* \text{h}^* \text{vVa} \)/\( \text{Vi} \) \( \text{h} \) is not present when the \\
auxiliary is <\( \text{nywi} \) '(sg.) around' or <\( \text{moo} \) '\( \text{mp} \) pl.) around' \\
if the preceding \( \text{Vi} \) ends in <\( \text{naki} \) \( \text{Vt} \) 'to follow' or <\( \text{\( ^*\)ki} \) \\
\( \text{vVo} \) 'hesitantly, intermittently'. 374, 362a, 396a.

<\( \text{hahkwihsa}\)\( ^*\)i h mijapoto> \( \text{Vi} \) to go back and forth \\
sneezing  (463e)

<\( \text{qooni} \) h mijapoto> \( \text{Vi} \) to keep going away and returning \\
<\( ^*\text{aoahqoonihky} \) h mijapott\( ^*\)> \( \text{Vi} \) to cause it to go back \\
and forth (hither and thither)  (471e)

<\( \text{pohpi} \) \( \text{Vi} \) to go across \\
//pohpi h mi\( ^* \)jahkipoto// \( \text{Vi} \) to keep crossing back and \\
forth

d. \( \text{Vi}^* \text{h vVa}^* \)/\( \text{Vi} \) where \( \text{Vi}^* \) includes constitutes of \\
472c not containing <\( \text{qahy} \) \( \text{vVa} \) \( \text{Vi} \) 'to sit, stay' as the \\
auxiliary; and where \( \text{vVa}^* \) includes only <\( \text{qahy} \) (which is \\
used in this situation for both singular and plural subjects).
<quapi h tyky> Vi (several) to be lying (472c)
<quapihntyky h qahty> Vi (several) to keep on lying
<qahtyhtyky h qahty> Vi (one) to keep on sitting

473. In this article, Vi includes constitutes of constructions listed above in 473 itself, as well as constitutes of constructions listed in preceding articles.

a. Vi vVb / Vi 375a.
b. Vi vVo / Vi 375b.
c. Vi vVd / Vi 375c.
d. Vi vVe / Vi 375d.

474. In 474b, Vi includes some constitutes of 474a, as well as constitutes of preceding articles.

a. Q + Vi / Vi The class Q includes Qn (354a, 451, 453f), Ql (354b, 452, 453), and Qc (354c, 453). Of the members of Qn, only <'ewa> 'much, many' and <na symy> 'all' (451b) have been found in this construction.
   <cyhkwыта> Qc with effort, hard
   <tawano hu> Vi to get to be spring (473a)
   <cyhkwыта + tawanohu> Vi to get to be late in spring
   <nohi cawu> Ql very good/well (453b)
   <tyhka h mai> Vi to be (in process of) eating (472c)
   <nohicawu + tyhkahmai> Vi to be eating very well
<"ihsa' ni> C1 coyote-like (452c)
<sunawi> Vt to appear, look
<"ihsa'ni + sunawi> Vi to look like a coyote
<"eva> Qn much, many
<tyhoi> Vi, Vt to dig
<"eva + tyhoi> Vi to dig a lot

<na sym> Qn all, altogether, entirely (451b)
<mija qoi> Vi to go collectively (473c)

//nahsy?my + mijaqoi// Vi all to go together

b. L + Vi' / Vi
<"ija? na? L there (446v)
<nohicawu + tykhahmai> Vi to be eating very well
(474a)
<"ija?na? + nohicawu+tykhahmai> Vi to be eating very well there
<hana? tuku? //hahnoh tuku?// L to where/somewhere
(446n)
<mija h mai> Vi to be (in process of) going, to have gone ... so far (and be continuing
to go)

//hahnohtuku? + mijahmai// Vi to have gone to where/some-
where so far
<"anaqahtyhnun - weh> //"ahnaqahtyhnun - weh// L in a/the chair (446g)
<qahty h tyky> Vi to be sitting (472c)
Vi to be sitting in the chair

<waompaaawi> Vi to split it (471e)

<wihi hmañ> I with a/the knife (446g)

<wihi hmañ + waompaaawi> Vi to split it with a/the knife

475. Vi vwk / Vi,IN The constitutes occur as Vi in 476-478, 455c-d, and 419a-b, but not in 479, 431-482, 431, 496. When not occurring as Vi, they occur as IN (480). 376.

476. a. vv vVF* / vVF where vVF* includes <ki> 'come' and <kaa> 'go'. 377a.

b. Vi vVF / Vi 377.

477. Vi vVG / Vi The constitutes are limited in their occurrence in following constructions as follows:
where vVG is <hkwa> 'distant future', the constitutes do not occur with <waih> vWw 'near future' (478), <hpy> vIN 'perfect tense' (482), or <hnapì> vIN 'emphatic imperative' (492); where vVG is <hmaa> 'already', the constitutes do not occur with <waih> vWw (473), <hti> vIN 'neutral tense' (482), or <hnapì> vIN (492); where vVG is <tuwa> 'could, would', the constitutes do not occur with <hti> vIN (482) or <hnapì> vIN (492). 378.
478. **Vi**' vww / IN,**Vi**'  The constitutes occur as **Vi** in 455c-d and 413a-b (but not in 479, 432). When not occurring in 413a-b, 446c-d they are IN. 379a.

479. a. **T + Vi**' / **Vi**

<°a tokihtapiañk'aa neñ> //°a tokihtapenakaana//

**T** as it was/is going on towards noon, shortly before noon  (455d)

<johoi> **Vi** to fly, to arise (from bed)

//°atohkihtapenakaana + johoi// **Vi** to get up shortly before noon
cf. //°atohkihtapenakaana+johoi hsi// **T** having gotten up shortly before noon  (455o)

<ny muhsinahti neñ> //°imuhsinahtina// **T** while I am/was stooping and dodging while going along  (455d)

<ny cihipatiti'i> //°icihipati'i// **Vi** to poke me in the eye with pointed object  (471e)

//°imuhsinahtina + °icihipati'i// **Vi** to poke me in the eye with pointed object (e.g. twig) while I am/was going along stooping and dodging (e.g. through the brush)

<mowahu> **T** now, soon

<tawuhna~weeh + mija> **Vi** to go to town  (474b)

<mowahu + tawuhna~weeh+mija> **Vi** to go to town now/soon
<p>Vi to be going to pound acorns (in near future) (470) (as IN: 'will pound acorns in near future')</p>

<mowahu + pohtawaih> Vi to be going to pound acorns now

b. Aq + Vi<sup>i</sup> / Vi

<qatu<sup>a</sup>u + miha> Vi not to go

cf. <qatu<sup>a</sup>u+mija hna> Nr(P) act of not going (419a)

<qatu<sup>a</sup>u + a mijaha> /qatu<sup>a</sup>u+ mahmija hna// Nf his failure to go, the fact that he is/did not going/go (431a)

---

480. Indicative Expressions.

480. Constitutes of the constructions of this section are members of the class IN. Some members of IN occur as constituents in constructions of 480. All of them occur in immediate constituency with <.> Z (398), the constitutes being sentences.

481. a. Vi<sup>i</sup> wkn / IN,Vi<sup>i</sup> where Vi<sup>i</sup> includes roots and constitutes of 460 and 471-474. (This is the same construction as 475, q.v.) 376.
b. $\text{VI}^* \text{vǐ:w} / \text{IN, VI}^-$ where $\text{VI}^*$ includes roots and constitutes of 460 and 471-477. (This is the same construction as 478, q.v.) 379a.

482. $\text{VI vIN} / \text{IN}$ (As stated in 475, 478, VI of this construction does not include constitutes of those articles.) For limitations on the occurrence of constitutes of 477 in this construction, see 477. 377, 378.

<qahoo*naNa*+aRhnaaahmytnahky*'> VI to interchange the positions of the boxes (471e)
<qahoo*naNa*+aRhnaaahmytnahky*' hti> IN interchanged the positions of the boxes
<ny nohqaqa> //"i nohqaqa// VI, Vt to steal (smthg.) from me (471f)
//"inhqaqa hpy// IN has stolen (it) from me
//pajaaNa + hipi// VI to drink some water (471g)
//pajaaNa+hipi hti// IN drank some water
<qwapihtyky h qahty> VI (several) to keep on lying (472d)
<qwapihtykyhqahty hti> IN (several) keep/kept on lying
<"ihsa'-ni + sunawi> VI to look like a coyote (474a)
<"ihsa'-ni+sunawi hti> IN looks/looked like a coyote
//"ahnaaahmytnuuh'-weeh + qahtyhtyky// VI to be sittin'; in a/the chair (474b)
IN is/was sitting in a/the chair.

Vi to get up shortly before noon (479a)

IN got up shortly before noon.

Vi not to go (479b)

IN didn't go, is not going.

IN\* nql\* qn / IN  where IN\* includes only those constitutes of 482 of which the vIN constituent is <hpy> 'perfect tense' (379b), and nql\* includes only <ke> 'having' (355). The sequence <hpy> vIN followed by <ke> nql followed by <htu> qN (which occurs only in constitutes of this construction) indicates distant past time.

IN has stolen it from me (482)

IN stole it from me a long time ago

IN went a long time ago

IN saw it a long time ago

IN\* + IN\* / IN where IN\* includes Nf, Wh, Nq but not Np, Nd.

IN interchanged the positions of the boxes (482)
<poihpoi + qa hoop' naHa + akiHnaacahmyhnhaky'hti> IN Poipoi
interchanged the positions of the boxes

//°inoHqaqahpy ke htu// IN stole it from me a long
time ago (433)

//poihpoi + °inoHqaqahpykehtu// IN Poipoi stole it from
me a long time ago

<waha htu> Nq two (419c)

<kigma hti> IN came/is coming (482)

<wahahtu + kihmahtti> IN two (e.g. people) came, two are
coming

<haqeh + kihmahtti> IN who/someone came/is coming

b. \( N_{\alpha}^P + \text{IN}^c / \text{IN}^c \) (403). The constitutes generally
occur only in 488 or 489. Some occurrences have been found
of constitutes of this construction occurring in IC with
<..> Z, but the order of 484c is preferred under these
circumstances.

//mahu + °inoHqaqahpy// IN° that one has stolen it from
me (489a)

//°ipehu + mahu°inoHqaqahpy// IN maybe that one
has stolen it from me (489a)

//mahu - tai +°inoHqaqahpy// IN that one has stolen
it from me! (433b)

//qatu°u + mahu°inoHqaqahi// IN that one didn't
steal it from me (488b)
c. "\( N^p_1 ~ I^k \) / IN" (404c) If the \( N^p_1 \) constituent is \(<ta ~ my> // taa// Np ~ 'we (incl.)' (424a) or \(<tamy ~ hkwa'> // taa ~ hkwa'// Np ~ 'we (incl.)' (425), \(<->\) appears as tactic juncture instead of \(<->\). The constituents of this construction do not occur in 488 or 489.

//qahoo~naNa + nyy + aRhnacahmyhnahky'hti// IN" I interchanged the positions of the boxes

//"inohqaqahpy + mahu// IN" that one has stolen it from me

//"ahnaqahtyhnuN~weeh+qahty waih// IN" will sit in a/the chair (472)

//"ahnaqahtyhnuN~weeh + nyy +qahtywaih// IN" I'm going to sit in the chair

//nopih~weeh+mija waih// IN will go home (482)

//nopih~weeh ~ taa +mijawaih// IN" we shall go home, let's go home

//nopih~weeh + nyy +mijawaih// IN" I shall go home

485. Of" + Np" / IN where Of" includes at least <hiihpYNa> //hiihpYNa// 'what/something-obj.' (436a); and where Np" includes at least \(<yymy ~ my> //"yy// 'thou' (424a) and \(<yymy ~ hkwa'> //"yyhkwa'// 'y'all' (425).

//hiihpYNa + "yy// IN what art thou (doing)?

//hiihpYNa + "yyhkwa'// IN what are y'all (doing)?
486. "Noun plus Noun Predications". The constructions of this article are of the general type N + N / IN. One of the ICs (referred to as N₁ in what follows) designates a particular entity, while the other (referred to as N₂) designates either a class of entities of which N₁ is asserted to be a member, or an entity (often of temporary existence) which is equated to N₁. In translation into English, these expressions can usually be rendered: "N₁ is a/the 'N₂'" (although such translations are often not as effective as other possible ones in particular cases). In 486b, the Nq constituent has the meaning N₂. In the other constructions, the constituent represented by the second N of the formula is N₂.

a. Nf + Nf / IN

<nobi tynpepi> //nobi tynpepY// Nf one who talks too much (418b)
//poihpoin + nobitynpepY// IN Poipoi talks too much
//pa'jaña + hipi// Vi to drink some water (471b)
//pa'jaña+hipit yA// Nf one who is drinking water (419b)
//poihpoin + pa'jaña+hipityA// IN Poipoi is drinking water
<nubi hty'N> Nf coward (419b)
<nubu phuNk> //o'ni phuNk// Nf my dog (431a)
IN my dog is a coward, my dog is cowardly
IN but my dog is a coward (489b)
If my house (§31a)
Of my house-obj. (436a)
P my house (obj.) (423d)
Beyond (443b)
L beyond my house (446a)
That which is beyond my house (419e)
Sourberries
IN beyond my house are (some) sourberries

b. Nq + Nf / IN

NI strange, fearful (452c)
NI strange/fearful one (419c)
Mr(P) illness (413a)
Mr his/her illness (431a)
IN his/her illness is strange
<qat'uuhtu> "he has no money"
//niihkwamas'ic // 1 no (excl.) money-dim.
(434a)
//qat'uuhtu' + niihkwamas'ic // we have no money (dim.)
is none/non-existent; i.e. we have no money

c. Nh + Nh / IN
// haqeq' + ?y// 13 occurs in
//haqeq' - waa + ?y// 13 who art thou? (430b)
//haqeq' + kihmacyh // 13 who's core is coming
//haqeq' - waa + kihmacyh // who is coming?
//haqeq' - waa + mahu // 13 who is that?

d. Constructions 436d and 436e are alternants whose occurrence is determined by the same conditions as those which are involved in the occurrence of 404b, c.

Nd + N* / IN- where N* includes Nh, Nh. The constituents generally occur only in 433 or 434.
//pa'jaNa+hipityh// Nh one who is drinking water
(419b)
//nyy+ pa'jaNa+hipityh // IN- I am drinking water
//nyy + po'o +pa'jaNa+hipityh// IN but I am
drinking water (430b)
//mahu + syjeehy // IN- that one is a coward
//mahu + po'o +syjeehy// IN but' that one is a coward
e. "+\textsuperscript{P} N\textsubscript{q} / IN" where N\textsuperscript{q} includes Nf, Nq. The constitutes do not occur in 483 or 489. <-> occurs as tac-tic juncture instead of <+> if the N\textsuperscript{P} constituent is <+\textsuperscript{a} ny> //taa// Np 'we (incl.)' or <+\textsuperscript{a} tany hkw\textsuperscript{a}> //taa hkw\textsuperscript{a}// Np 'we (incl.)'.

//pa\textsuperscript{a} j\textsuperscript{a}̄a + nyy +hipity\textsuperscript{a} // IN" I am drinking water

//pa\textsuperscript{a} j\textsuperscript{a}̄a + taa +hipity\textsuperscript{a} // IN" we are drinking water

<nopih \textsuperscript{a} weeh> I in the house, at home (446g)

<qahty h tyky> Vi to be sitting/staying (472c)

<qahtyhtyky \textsuperscript{a} i> Vi (dim. subj.) to be sitting/

staying (473d)

<nopih\textsuperscript{a} weeh + qahtyhtyky\textsuperscript{a} i> Vi (dim.) to be

sitting/staying at home (474b)

<nopih\textsuperscript{a} weeh+qahtyhtyky\textsuperscript{a} i t\textsuperscript{y}i> Nf one who is

sitting/staying at home (dim.) (419b)

//nopih\textsuperscript{a} weeh + taa +qahtyhtyky\textsuperscript{a} ity\textsuperscript{a} // IN" we are staying

at home

//nopih\textsuperscript{a} weeh + nyy +qahtyhtyky\textsuperscript{a} ity\textsuperscript{a} // IN" I am staying

at home

//nopih\textsuperscript{a} weeh + mahu +qahtyhtyky\textsuperscript{a} ity\textsuperscript{a} // IN" that one is

staying at home

<syjeehty' + mahu> IN" that one is a coward

487. a. L + N\textsuperscript{\textast} / IN where N\textsuperscript{\textast} includes Nf, Nq.

Occasionally, the order of the ICs is reversed; i.e. we have
N + L / IN. The occurrence of this order seems to be related to emphasis upon what is referred to by the N constituent. (See the last example below.)

//iwooh ~ weeh// L in my head (446g)
//icohpiki// Mf my brains (431a)
//iwooh~weeh + icohpiki// IN my brains are in my head
//ahnatyhkahnuNNa+a tuheN// L under the table
//imohqo// Mf my shoe(s) (431a)
//ahnatyhkahnuNNa+a tuheN + imohqo// IN my shoe(s) is/are under the table

/nopih~nihweeN + nanootyNweeN> L in the house-trailer: "in the house-like thing—which-is-being-hauled"

/nopih~nihweeN+nanootyNweeN + ?yny?// IN a white man is in the house-trailer
<typioihhuu’Na+a unaNpaah> L on the other side of the San Joaquin River (446a)
<typioihhuu’Na+a unaNpaah + poihoi> IN Poipoi is on the other side of the San Joaquin River
<inaNpaah hsu> L on this side (and nowhere else) (448)

//ah puhku// Mf his/her dog (431a)
//typioihhuu’Na+ah unaNpaah+poihoi. ahpukU~po~o+ inaNpaahhhu.// Poipoi is on the other side of the San Joaquin River. But his dog is on this side (and nowhere else).
b. \( N_d^P + L / \text{IN}^- \) The constitutes generally occur only in 438 or 439. Cf. 434b-c, 436d-e.

\(<\text{mahu} + \text{nopih'-weeh}> \text{IN}^- \) that one is in the house

\(<\text{mahu} + \text{tai} + \text{nopih'-weeh}> \text{IN} \) that one is in the house! (433b)

\(<\text{ipahu} + \text{mahu} + \text{nopih'-weeh}> \text{IN} \) maybe that one is in the house (439a)

\(<\text{qatu'nu} + \text{mahu} + \text{nopih'-weeh}> \text{IN} \) that one is not in the house (433b)

c. \( +^+ N_d^P L / \text{IN}^- \) The constitutes do not occur in 438 or 439. If the \( N_d^P \) constituent is \(<\text{ta my}> //\text{taa} // Np 'we (incl.)' or \(<\text{tamy} \text{hkwa}'> //\text{taa} \text{hkwa}' // Np 'we (incl.)'\), \(<\text{~}> \) appears as tactic juncture instead of \(<\text{~} >\).

\(<\text{nopih'-weeh} + \text{mahu}> \text{IN}^- \) that one is in the house

\(//\text{pohpoina} + \text{ahnopih'-weeh}// L \) in Poipoi’s house

\(//\text{pohpoina} + \text{taahkwa} + \text{ahnopih'-weeh}// \text{IN}^- \) we are in Poipoi’s house

\(//\text{ahnopih'-weeh} + \text{taahkwa}'// \text{IN}^- \) we are in his house

438. In both constructions of this article and in 439a, the tactic juncture \(<\text{~} >\) is present except when the initial morpheme of the \( \text{IN} \) constituent is \(<\text{ta} > \text{Pp 'inclusive person'} (321a), in which case \(<\text{~} >\) appears instead as tactic juncture (cf. 434c, 436c, 437c). This statement is to be taken as
explaining the symbol "x" in those constructions.

a. T "x" IN / IN The analysis of the occurrence of members of T is not complete. Some occurrences have been found of T occurring in IC with VI (479a), others of T occurring in IC with IN. It is possible that there are actually two classes to be distinguished among the forms classed as T in this description.

//nyp + pahkwikahty'// IN- I am one who is accustomed to fishing (486d)
<"unohohsu> T formerly (455a)
//"unohohsu + nyp+pahkwikahty'// IN formerly I used to go fishing

b. Aq "x" IN / IN 359a.
<mahu + "yyn"> IN that one is a white man (486d)
<qatu"u + mahu+"yyn"> IN that one is not a white man
//nyp + pa"jaNa+hipity\n// IN I am (one who is) drinking water (486d)
//qatu"u + nyp+pa"jaNa+hipity\n// IN I'm not drinking water

489. a. C "x" IN / IN "x": see 488. (333b)
//"ipehu + mahu"inhqaqahpy// IN maybe that one has stolen it from me (484b)
<"ipehu + mahu+nypyhmy> IN maybe that's an Indian (436d)
b. "Ce IN" / IN Subject to certain limitations which have not been analyzed, constitutes of this construction and of 483a may occur as constituents in this construction.

//"inohqqa hpy" // IN has stolen it from me (482)
//"inohqqaahpy " tai // IN has stolen it from me!
//poihoi " tai +"inohqqaahpy" // IN Poipoi has stolen it from me! (484a)

//"yny'y"nihtu + "ahqahmahna" // IN his/her illness is strange (486b)

//"yny'y"nihtu," tii +"ahqahmahna" // IN his/her illness is strange!

//"gatu'uhuhtu + niihhnahwahkuhci' // IN our (excl.)
money (dim.) is non-existent (486b)
//gatu'uhuhtu - tija'n +niihhnahwahkuhci' // IN also, our money (dim.) is non-existent
//gatu'uhuhtu"tija'n - jaihse +niihhnahwahkuhci' // IN and also, our money (dim.) is non-existent

//"ahnatyahkahnu'nna"+"atuheh + "imoheo" // IN my shoes are under the table (487a)
//"ahnatyahkahnu'nna" - py'y +"atuheh"+"imoheo" // IN are my shoes under the table?

//"uno'oohohsu + nyy+pahwikahty" // IN formerly I used to go fishing (488a)
//"uno'oohohsu - po'o +nny+pahwikahty" // IN but formerly I used to go fishing
490. Constitutes of the constructions of this section occur in IC with <.> Z (398), the constitutes being sentences. (They share this feature of distribution with members of IN (480) and members of the classes listed in 402b.)

491. Pp* Vi* / IM where Pp* includes only <a> 'third person', and where Vi* includes unit morphemes and constitutes of 460 and 470 except the following: 471b-g, 475, 477, 478, 479b. When occurring with constitutes of 474, 479a, <a> Pp 'third person' immediately precedes the verb stem.

<mija h noo> Vi to go along (472c)

<a mijahnoo> IM go along!; goodbye! (said to person departing)

<qahty h tyk> Vi to be sitting, staying (472c)

<a qahtyhtyky> IM sit/stay!; goodbye! (said by person departing)
<nopih-weeh + ?ika> Vi to enter the/a house

(474b, 446g, 411d)

<nopih-weeh+ ?a ?ika> IM go into the house!

492. The class IM includes, besides the constitutes of 491-495, members of Vi except constitutes of 475, 477, 478, and 479b; the remaining members of Vi (except constitutes of 47lb-g, which are excluded from the possibility of occurring in 491) occur in 491 or occur alone as IM (or either) depending upon specific usages for individual cases or some general conditioning factors which have not been determined (if they exist), or both. In the constructions of this article and the following ones, IM is to be taken as including members of Vi (except those excluded explicitly or by conjecture in the foregoing remarks) as well as IM constitutes of preceding articles. The morpheme <hna?i> vIM 'emphatic imperative' (379o) appears not to be obligatory in any of its occurrences (i.e. any form with which it occurs may occur alone as a member of IM).

IM vIM / IM

<nopih-weeh+ ?a ?ika> IM go into the house! (491)

<nopih-weeh+?a?ika hna?i> IM go into the house!

(emphatic)

<"amaahtahkaahsi + nija> Vi,IM as Vi; to go

after having abandoned it; as IM; having
abandoned it, go! (479a, 455c, 476, 471e)
"amahtakahs"ni+mija hna"i> Ii having abandoned it, go! (emphatic)

493. Np* + Im* / Im* where Np* includes <"yn my>
//"yy/ 'thou', //"yyhkw"/ 'y'all', <na my> //"yy/
'oneself', //"yyhkw"/ 'oneselves', and combinations of
these forms with <hsu> F 'precisely' (438, 395).
//"yy + "shipi// IM you drink it!
//"yyhsu + "shipi// IM drink it yourself!

494. a. Am + Nf* / IM where Nf* includes only those
constitutes of 419b which contain <tyf> vNf,Im 'one who is/
was ...ing' (319a) as an IC. 359b.
//mino"o + hahkyhpohohkokityn// IM don't fool around!
(419b, 466a, 463a, 451a)

b. Am + T* / IM where T* includes only those consti-
tutes of 455c which contain <neh> vT 'while ...ing' (358b)
as an IC. 359b.
<minoh + hahkyhpo"ohohkokineh> IM don't fool around!
(cf. 494a)
<minoh + nopih"weeh"ikaneh> IM don't go into the
house! (cf. 431, 432)
495. \[ n\text{np } IM^{*} / IM \text{ where } IM^{*} \text{ does not include constitutes of } 493. \] (322).

\(<\text{nopih}'\text{weeh hkwa'} +\text{a}\text{a}'\text{ika}> IM \text{ go ye into the house!} \)

\(<\text{mino}'\text{o hkwa'} +\text{nopih}'\text{weeh+i\text{kaneh}} > IM \text{ go ye not into the house!} \)

\(<\text{mija hna}'\text{i} > IM \text{ go!} \) (492)

\(<\text{mijahna}'\text{i hkwa'} > IM \text{ go ye!} \)

496. a. \[ N \text{ op } + VI^{*} / OP \text{ where } VI^{*} \text{ includes unit morphemes and constitutes of } 460 \text{ and } 470 \text{ except } 475, 477, 478. \text{ The class op contains one member, } <\text{hsahqwa}> \] (334).

\("\text{yy hsahqwa } + \text{nopih}'\text{weeh+i\text{ika}} > OP \text{ you ought to go into the house.} \) (474b, 446g, 411d)

\("\text{pohpoh} hsahqwa + \text{ikija} > OP \text{ Poipoi ought to give it to me, would that Poipoi would give it to me} \)

b. \[ N \text{ op } + N / OP \text{ This construction occurs very rarely in the corpus which has been analyzed, although there are no apparent restrictions on the occurrence of members of } N \text{ in it. Presumably, its rarity is due to the infrequency with which situations appropriate for its use occurred during the linguistic investigation and in the texts collected.} \]

\(<\text{tawahahni}'\text{i} > VI \text{ to work} \)

\(<\text{tawahahni}'\text{i }\text{?i} > VI \text{ (dim.) to work} \) (473d)
<tawahahni'owo i waih> Vi", III as Vi: (dim.) to be going to work (in near future) (478)
<tawahahni'owoiwaih hna> ñr(p') object of future work (by dim. subj.) (419a)
//taih tawahahni'owo iwaihhna//: ñf our future work (431a)
//mahu hsahqwa + taitawahahni'owo iwaihhna//: OP that ought to be our future work, i.e. would that we were going to work at that (in near future)

497. a. ñf" (E) / ë where ñf" includes only <şy ny'> 'strange/terrible being, white man'. 392a.

b. Vi" (E) / ë where Vi" includes only <şyty'y> 'to be hot' and <şycy'y> 'to be cold'. 392a.