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Konkow Grammar

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## Konkow Grammar

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Konkow is a California Penutian language, a member of the Maidun family which also includes Maidu and Nisenan. In the aboriginal period, it was spoken in the drainage area of the tributaries of the Feather River, more precisely, within the confines of the area bounded by a line connecting the confluence of the Sacramento River and Butte Creek, the jsource of Bíg Butte Creek, the headwaters of the Middle Fork of the Feather River, and back to the Sacramento River. The area between Big Butte Creek and the Sacramento was the home of Indians who spoke a language which may have been either a widely dirergent dialect of Konkow or a fourth language. The paucity of data on this presumably extinct language dows not permit a definitive classification.

At the present time, there are an estimated fifty or so individuals living in the same genewal area who have some knowledge of the language. They are for the most part over sixty years old and the degree of fluency varies considerably from remembering a few words or phrases to the ability to use the language freely in conversation. To my knowledge, however, Konkow has not actually served as a primary means of communication for some time. Probably the most recent occasion was between Leland Scott and his wife who died in 1960 (?). About the only opportunity for
speaking the language is at the wéda, the spring festival, or at sporadic get-togethers which are fast becoming more and more infrequent.

The Konkows, at least from informant accounts, apparently had no particular designation for themselves as a social or ethnic group. The terms májdy 'person', tá•ji(mk̉jòjo) 'Western (people)', or nísena•ni 'friend, relative' (lit. our side or faction) are commonly used for purposes of group identification. Concow, Konkau, and Konkow all appear in the earlier literature but these terms were soon superseded by Northwestern Maidu up until the publication of Shipley's Maidu Grammar (UCPI vol. 4l, 1964) in which he proposed the reinstatement of the term Konkow. In order to avoid confusion with Maidu (formerly Noritheastern Maidu) and any implication that the two languages might be dialects of the same language, I have adopted Shipley's proposal. Two etyma for the name have been suggested by different informants: kठjo•mkawi 'meadowland' and ko $\cdot \mathrm{mk}$ àwi 'snowland'.

The field work which provides the basis for this description came to a total of approximately seurn months distributed over the four-year period from 1961 to 1964. I owe a debt of gratitude to the Survey of California Indian Languages, Department of Linguistics, University of California, Berkeley, and the American Council of Learned Societies for having supplied the funds and facilities
which enabled me to obtain sufficient data to complete this Grammar. Although forms were collected from seventeen informants, only three of these furnished the corpus on which this description is based: Elmer Smith of Bean Creek, Leland Scott of Cherokee, and Lena Martin of Bald Rock. To them I extend my most profound thanks for their cooperation and patience without which this Grammar could never have been written.

The question of dialectal diversity within the Konkow speech continuum is problematic. There were probably regional differences between speakers living along the North Fork of the Feather River and those located in the periphery of the Middle and South Forks but, whether there was any significant divergence between the latter two areas is uncertain. There are consistent phonological, grammatical. and lexical differences, albeit in minor ways, evident in the idiolects of the three principal informants, some of which may reflect personal differences, others undoubtedly regional differences.

Aside from a few short word lists obtained by various field workers at different times, there are no descriptions of the language in published form or, as far as is known, unpublished.

I should particularly like to thank Professor Mary R. Haas for her encouragement both as my teacher and as mentor and guide during the long period of fieldwork and analysis
of data, and for her helpful criticism. Ny gratitude is also due Professor William F. Shipley, Professor David Reed, and Dr. Sirley Silver for their valuable comments and suggestions, especially in the preparation of the final draft of this work.

Abbreviations

| AA | American Anthropologist |
| :--- | :--- |
| BAE | Bureau of American Ethnology |
| IJAL | International Journal of American |
|  | Iinguistics |
| OM | Overland Monthly |
| UCPAAE | University of California Publications in |
|  | American Archaeology and Ethnology |
| UCPL | University of California Publications in |
|  | Ingguistics |

Bright, William
1960. Animals of Acculturation in the California Indian Languages. UCPI vol. 4, pp. 215-246.
Chafe, Wallace
1962. Estimates Regarding the Present Speakers of North American Indian Languages. IJAJ vol. 28, pp. 162-171.

Curtis, E. S.
1924. The North American Indian, vol. 14, pp. 94 et sqq: Norwood, Mass.

Dixon, Roland B.
1906. The Pronominal Dual in the Languages of California. Boas Anniversary Volume, pp. 80-84. New York.
1910. The Pujunan Family. BAE Bull. 30, vol. 2, pp. 326-327.

Dixon, Roland B. and A. L. Kroeber
1903. The Native Languages of California. AA vol. 5, pp. 1-26.
1907. Numerical Systems of the Languages of California. AA n.s. vol. 9, pp. 663-690.

Fassin, A. G.
1884a. The Con-cow Indians. OM ser. 2, vol. 4, pp. 7-14.
1884b. Un-koi-to, the Savior. OM ser. 2, vol. 4, pp. 141-150.

Gifford, E. W.
1922. California Kinship Terminologies. UCPAAE vol. 18, pp. 44-46.

Halpern, A. M.
1936. Field Notes (Konkow vocabulary).

Kroeber, Alffed L.
1925. Handbook of California Indians. BAE Bull. 78, pp. 391-441.
1932. The Patwin and their Neighbors. UCPAAE vol. 29, no. 4, pp. 253-423.

Lamb, Sidney
1954 (?) Field Notes (Konkow vocabulary).
Littlejohn, Hugh W.
1928. Field Notes (Konkow vocabulary).

Loeb, E. M.
1933. The Eastern Kuksu Cult. UCPAAE vol. 33,
no. 2, pp. 139-232.
Pitkin, Harvey and W. F. Shipley
1958. A Comparative Survey of California Penutian. IJAL vol. 24, no. 3, pp. 174-188.
Powell, J. W.
1891. Indian Linguistic Families of America North of Mexico. BAE Seventh Annual Report 18851886, vol. 7.
Powers, Stephen
1874. The California Indians. OM, vol. 12, pp. 420-422.
1877. Tribes of California. Contributions to North American Ethnology, vol.3.

Riddell, Francis
nod. Field Notes (North Fork place names).
Rumery (McKay), June
1961. Field Notes (Konkow vocabulary).

Shipley, William F.
1961. Maidu and Nisenan: a binary survey. IJAL vol.27, pp. 46-51.

Ulsan, Russell
1962. A Comparison of Konkow and Central Sierra Miwok (ms.).
1964. Protomaidun Phonology. IJAL vol. 30, pp. 355-370.

The symbols listed below are used generally throughout the text. Additional class and special symbols are defined in the appropriate sections of the Grammar.
$>$ the preceding becomes, is represented by the following
< the preceding is from, derived from the following
$\underset{\sim}{f} \quad$ varies freely with
a is in allegro variation with
d varies dialectally or idiolectally with
C consonant
v vowel
\{ \} morpheme or morphemic sequence
$\rangle$ class of morphemes
|| || morphophoneme, allomorph

* hypothetical form

| Informants: | RJ | Robert Jackson |
| :--- | :--- | :--- |
|  | IM | Lena Martin |
|  | ES | Elmer Smith |
|  | IS | Leland Scott |

Chapter One
PHONOLOGY
100. Phonemics

## Chart of the Phonemes

Consonants
Restricted
Stops

| voiced imploded | $b$ | $d$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| voiceless glottalized | $\dot{p}$ | $f$ | $c$ | b |

Unrestricted
voiceless plain pt k
Spirants sh
Nasals mn
Lateral 1
Semivowels w
Restricted consonants are limited to syllable-initial position.

## Vowels

Quality

| High | $i$ | $y$ | $u$ |
| :---: | :---: | :---: | :---: |
| Mid | $e$ | $e$ | 0 |
| Low |  | $a$ |  |
| Quantity | long | e | short |
| (no mark) |  |  |  |

Suprasegmentals

| Stress | primary | e secondary | weak (no mark) |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Junctures | word | + | emphatic | ! |  |
|  | comma | , | question | $?$ |  |

In the examples cited throughout this chapter, unless otherwise noted, forms not enclosed in square brackets [ ] are to be taken as phonemic.
110. Consonants

The consonant phonemes consist of three series of stops: imploded, glottalized, and plain, of which the imploded stops occur in bilabial and apico-alveolar position, the glottalized in bilabial, apico-alveolar, palatal, velar, and glottal position, and the plain in bilabial, apico-alveolar, and velar position; two nasals: one bilabial, the other apico-alveolar; two voiceless spirants: post-alveolar slit and glottal; one voiced apico-alveolar lateral; and two semivowels: bilabial and palatal respectively.

The imploded and glottalized stops are restricted in occurrence to syllable-initial position (see Sec. 140), all other consonant phonemes are free, although /h/ appears rarely before any juncture.
111. Stops.

Imploded. /b/ and / / are voiced, imploded stops, bilabial and apico-alveolar respectively. The implosion is produced by virtually simultaneous closure at the point of oral articulation and lowering of the larynx, creating a low pressure area between point of oral articulation and larynx which, when the former is released, results in an abrupt, audible rush of ingressive air accompanying the other perceptible acoustic effects of stop articulation. Although relative tension and force of articulation vary somewhat from speaker to speaker or within one idiolect on different occasions, these stops are always imploded.
/d/ following a stressed vowel and before an unstressed
 ~ ko [ $[\dot{d}] 0$ 'country'.

Glottalized. The acoustic impression of "breaking", popping, or clicking which is characterisitic of the voiceless glottalized stops is produced by abrupt raising of the larynx simultaneous with release at the point of oral closure, resulting in a rapid expulsion of air. In deliberate speech, glottalization tends to be rather fortis but is always relatively lenis beteeen a stressed and an unstressed vowel. There are no other significant allophonic variations for $/ \bar{p} /$, /'t/, or $/ \bar{k} /$, but /'c/ is represented by the follow ing allophonic ranges for each of the two principal infor-
mants: a norm centering about a lamino-palatal [ $\dot{\chi}$ ] or [ $\left.t^{\frac{x}{y}}\right]$ occasionally but freely varying with an apico or
 'four', sáj[と̉]oko ~ sájlc̣̣]oko 'six' (ES); a norm cen-
 or $\left[\frac{f^{x}}{t}\right]$ or, somewhat more often in allegro speech, to a



Phonetically speaking, glottal stop might best be grouped with the voiceless plain stops, but since its distribution in terms of the syllable parallels that of the glottalized series, it has been assigned to the latter class. After any juncture, / $/ /$ tends to be moderately lenis except in emphatic utterance.

Plain. The voiceless plain stops parallel the glottalized stops in point of articulation with the exception of glottal and palatal. A voiceless alveopalatal affricate
 ku[ch]ála 'spoon' (from Spanish cuchara). Both forms have been reelicited many times from a number of informants. Phonetically, [と̌] clearly contrasts with $/ \dot{c} /:\left[\begin{array}{l}\dot{c} \\ \text { c }\end{array}\right] \sim\left[\begin{array}{c}\dot{c}]\end{array}\right]$ (cf. wá•['X]a 'belt') as well as /ts/:[tṣ] (cf. wá[tṣ]uwàlakk̇•n 'repeatedly knock down with a flat instrument'). In view of the peculiair distribution of these phones, they will be considered as residual along with a number of others which have been introduced into the language
from Spanish or English (see Sec. 150). It is true, of course, that the inclusion of $\% / \mathrm{c} /$ in the phonemic system would result in a more symmetrical voiceless stop series, but this would not, in the author's opinion, reflect the real status of these phones which is decidedly marginal in much the same way the loan phones are.

The voiceless plain stops exhibit a great deal of parallelism as regards the distribution of their allophones. Before vowels with primary stress, they are fortis and




After a consonant and before other vowels, they are


 'whisper'.

Before stops and nasals, they are lenis and unreleased. Before junctures, they are either unreleased or lenis with little or no aspiration: wóso[p $\left.{ }^{\urcorner}\right]$torn 'snap off',
 lust? ]pe 'genuine', lú[t<compat>ᄀ]me•n 'false', cútu[t $\left.{ }^{\top}\right]$ f cứtu[tç] 'sapsucker', kádi[k ${ }^{7}$ ]tin 'make it rain',
 'porcupine'.

Before other consonants and intervocalically following
a stressed vowel, they are lenis unaspirated: tý[p]je•n 'jump', ló[p]en 'steal', hư[t]si•n 'cut repeatedly out', ká[tu ]on 'play', गé[k]làmi 'all day long', ké[k]e 'edge'. $/ k /$ is somewhat fronted $\left[\frac{k}{n}\right]$ before $/ i /: \operatorname{hin}\left[\frac{k^{c}}{i}\right] i \cdot n$ 'float down'.
112. Nasals. The nasals are moderately fortis except before junctures where they range from lenis voiced [m] or [ $n$ ] to voiceless [M] or [N]. This variation occurs in all idiolects but, generally speaking, the older the speaker the more prone he is to devoice the nasals in this positron. In normal and allegro speech / +/ may often not be represented by a perceptible pause, in which case devoicing is less likely to occur. Examples are: [m ]op! 'Drink!', $\mathrm{pi}[\mathrm{n}] \mathrm{sa}[\mathrm{m}] . \stackrel{f}{\sim} \mathrm{pi}[\mathrm{n}] \mathrm{sa}[\mathrm{M}]$. '(He) used to hear.', [n] $\mathfrak{f}$ 'mother', wi•[n]: $\stackrel{f}{\sim}$ wí•[N]: 'No!'
$/ \mathrm{m} /$ has additional allophones in the following envoironments: before /s/ it is accompanied by an epenthetic voiceless bilabial stop release $\left[m^{p}\right]$, e.g., kef $\left[m^{p}\right] \operatorname{san}$ '(H e)laughs (habit.).'; before velar stops and /w/ it is velar [ 0 ], egg., t ri[ $n$ ]ky 'foggy', job[ $\eta$ ]kìili 'sp. shaman's song', mý[ $\eta$ ] wète 'he alone' (cf. /n/ in these environments: lóho[n]kỳ 'tuberculosis', nîktú[n]kan 'with my younger brother', mí[n]wète 'you alone').
113. Spirants. /s/ is normally a postalveolar slit spirant, moderately fortis [s] except before /i/ or /j/ when it is alveolar [s]. When syllable-final, it is lenis:
wiki[s]in 'hurt (oneself)', Ie[s]je•n 'drool', [s]ými 'deer', $\quad e ́[\underset{\substack{0}}{ }]$ to 'middle', Týko•[s.
/h/ is lenis syllable-finally, glottal except before consonants other than $/ \mathrm{h} /$ or $/ \mathrm{l} /$, where it ranges from preglottal $[\underset{\sim}{n}]$ to postvelar $[x]: \operatorname{mé}\left[\begin{array}{l}x \\ \underset{\sim}{2}]\end{array}\right] \operatorname{syn} f$ mé[h]syn 'catch with the hand', mé[h] 'take it!', [h]eli 'big', wà[h]hákan 'blaze (trees)', wó[h]e•n 'mourn'.
114. Lateral. $/ 1 /$ is voiced and apico-alveolar: wát[I]àsin 'slap repeatedly', [I]ý[I]i 'redbud', ká[l]ka[l] 'large pine cone'.
115. Semivowels. The voiced semivowels parallel one another as regards one restriction of distribution within the syllable: /j/ never occurs after /i/ nor/w/after /u/.
/w/ is bilabial with moderate friction syllable-initially [w], e.g., [w]é[w]e•n 'talk', hín[w]ono 'eldest', and following vowels a non-syllabic offglide ([ vowels, [ $\left[\begin{array}{c}\mathrm{U}\end{array}\right]$ after other vowels): hé[ $\left.\begin{array}{l}\mathrm{U} \\ \sim\end{array}\right]$ 'yes', kí[ C ] $]$ di 'behind'. Before. $/ j /$ following a stressed vowel, there is often a tendency to weakly spirantalize to [ $\boldsymbol{\beta}]$, as in

/j/ is lamino-postalveolar to palatal and, similar to /w/ as regards syllable-initial [y] and syllable-final [ $\stackrel{i}{\sim}$ ] or $\left[\frac{I}{n}\right.$ ] allophones: [y]imi 'arm', cém[y]an 'let

116. Examples of significant contrast among the consonant phonemes illustrated by minimal or near-minimal
pairs and sets:

| $\mathrm{b}-\mathrm{m}$ : | báka | 'leaf' | máka | 'taste' |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{b}-\mathrm{p}$ : | bó. | 'trail' | pó | 'night' |
| $\mathrm{b}-\mathrm{p}$ : | báka | 'leaf' | páka | 'branch' |
| b - w | báka | 'leaf' | wáka | 'flesh' |
| d-1: | dưku | 'splash' | lưku | 'creek' |
| d-n: | dý. | 'bush' | ný | 'raft' |
| d-t: | dápi | 'maple' | tápi | 'squeeze' |
| a-t: | dúmi | 'wet' | túmi | 'fog' |
| c - s: | cúku ${ }^{\text {a }}$ | 'acorn soup' | sưku | 'smoke' |
| c - ts: | wócoti ' | 'dent, notch' | wótsoti | 'stub (one's toe)' |
| c - t : | cứmi | 'urine' | túmi | 'fog' |
| $\mathrm{h}-\mathrm{k}$ : | hési | 'what' | kési | 'younger cousin' |
| h-? | hýje•n | 'pluck' | ? ${ }_{\text {ýje }} \mathrm{n}$ | 'come hither' |
| $h-\varnothing$ : | ká•nohk̇̀n | n 'with sev. old men' | ká•nokàn | 'with (an) olld man' |
| j-? | jún | 'sting' | pún | 'be somewhere' |
| $k-k$ \% | kojo. | 'meadow' | kójo. | 'enemy' |
| $\mathrm{k}-\mathrm{?}$ | kó | 'snow' | ? ${ }^{\text {c }}$ | 'rock' |
| k - ? | kún ' | 'dry up' | pún | 'be somewhere' |
| 1-n: | láka | 'goose' | náka | 'navel' |
| m - n : | mí | 'you' | ní | 'I' |
| m-w: | momi | 'water' | wómi | 'tears (n.)' |
| $\mathrm{p}-\mathrm{p}$ : | pokiko 'I | Iuminary' | póko | 'anus' |
| $t-t:$ | tú. 'bir | rchseed flour' | tú. | ' dam' |
| ?-ф: | mápa | 'people' | má. | 'hand'. |

121. Quantity. All vowels show a phonemic contrast between two degrees of length, long and short. Short vowel phonemes are written with the appropriate vowel symbol alone; long vowels are written with the vowel symbol followed by a phoneme of length $/ \%$. The phonetic duration of any vowel is determined primarily by the type of syllable in which it occurs and whether it is stressed or not. The basic unit of duration is the mora [•] which is equivalent to the length of a short stressed vowel in a closed syllable (CVC) uttered in deliberate speech. In different styles of speech such as allegro, emphatic, ironic, etc., the absolute dimensions of the various allophones of long and short vowels will diverge from the norms indicated here. In general, however, the lengths of a number of vowel allophones in a given string will tend to remain in the same relative proportion to one another as they do in deliberate speech. In the phonetic transcription which has been adopted here, a duration of less than one mora is unmarked.

Short Vowels. In unstressed open syllables (CV) before a juncture, they vary from about one-half to one mora in duration: kek[ $\varepsilon] \stackrel{f}{f} \mathrm{kek}[\varepsilon \cdot]$ 'edge'. Elsewhere in unstressed open syllables, they are very short: kek[ $\left.\varepsilon^{\wedge}\right]$ di 'on the edge'.

When they occur with primary stress／＇／before a nasal or juncture，they are half－long：$\quad$ ap［ $\varepsilon$ ：$] m$＇then＇， ？ẏ̉̉ojp［E：］＇let＇s go＇．

In other environments，they are about one mora long： wýktenaw［દे•］le＇eleven＇，b［દ匕•］le＇again＇，b［दे•］kkétin ＇flake repeatedly＇， $\mathrm{t}[\varepsilon \cdot] \mathrm{kki} \cdot n \mathrm{l}$＇（to）march＇，johnn［E•］ndi ＇in the springtime＇．

Long Vowels．In unstressed open syllables not followed by a juncture，these are half－long：jón［E：］di＇on the slope＇．

When stressed in open syllables or with primary stress before nasals in closed syllables，they are extra－long： d［e：：］＇mother＇s sister＇，mý•demt［è：：］＇bear cub＇， nikd［é：：］kan＇with my mother＇s sister＇，nikd［e：：］m ＇my mother＇s sister＇．

In the remaining environments，they are fully long： m［é：•］sce＇when I took（it）＇，síml［è：•］tna．＇from the lips＇，Pýj［E：•］s？àn＇because（he）was coming＇，séd［E：•］ ＇blood＇，séa［E：•］n＇bleed＇，mý•demt［è：•］m ．ibear．cub＇， r［处：•］k＇raccoon＇．

The distribution of short and long vowel allophones may be summarized as follows（special symbols are： less than one mora，－＝weak stress，$ヘ=$ primary or secondary stress，\＃＝any juncture，$N=$ nasal）：

122. Quality. The high and mid vowel phonemes parallel one another in front, central, and back positions, the latter rounded. In addition, there is a low central, unrounded vowel. Sequences of two or more vowels do not occur but vowels may be followed by length. Vowels never occur after juncture. /i/ is not found before /j/, nor /u/ before /w/ in the same syllable. There are no other restrictions of occurrence with regard to preceding or following consonants, accompanying stress or intonation contours. / / / is relatively infrequent vis à vis the other vowels.

The quality of a given vowel allophone cannot be regarded as fixed or absolute, but rather as a variable range (within the broader range of the set of allophones which represent the phoneme in question) which tends to center about a focus or norm. The phones cited here represent these norms. In order to facilitate certain generalizations concerning vowel allophony, four classes of allophones will be referred to: tense, close, open, and lax. The general statements which follow are applicable everywhere with the exception of restrictions noted under individual vowel phonemes below.

All vowels are tense before length：pán［a］•k＇red－ headed woodpecker＇，p［e］•la＇far＇，？ýs［i］•to＇cross over＇，b［ój•no＇write＇，lúl［u］•mi＇torso＇，ć［́v］•pi ＇（deer）tripe＇，s［k］•Ii＇rattle＇．Normally，onset vowel quality is maintained throughout the duration of a long vowel．However，there are occasional recordings of off－

 ＇head louse＇，which are clearly non－distinctive．

Vowels are close in stressed open syllables and be－ fore juncture：b［á］naka＇light（lux）＇，wélew［É］le ＇（to）wave＇，hom［iv］＇stew＇，oón［ov］＇head＇，p［uv］ni ＇knot＇，？ýkojp［主＾］＇let＇s go＇，ć［与＞］də＇curly＇．

Vowels are open in closed syllables：m［á＾］lko•n ＇fly away＇，jóhm［ $\varepsilon$ ］ndi＇in the springtime＇，Pýk［I］t ＇climb down！＇，wósopt［久］n＇cut in two＇，$k$［Ú］mdi＇in the roundhouse＇，hínp［玉］n＇dizzy＇，bád［ə＾］taə̀ti＇firm＇．

Vowels in unstressed open syllables except before
 kék［ $\Sigma>] d i$＇on the edge？，？ét［I＞］ti＇green＇，wón［ $\left.\Omega^{〔}\right]$ no ＇measure＇，kín［U＜］nà•＇from the empty shell＇，hýk［玉］my ＇settlement＇，pő［ə］p’̉̀lə＇ankle＇．

Summary of distribution of vowel ailophones in terms of front－back and high－low：

| Phoneme | Allophones |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Tense | Close | Open | Lax |
|  | - - | $\mathrm{CA}^{\wedge} \mathrm{CV}$ _ \# | C | $\mathrm{C}^{-} \mathrm{CV}$ |
| a | $a$ |  | $a^{\wedge}$ | $\dot{\varepsilon}{ }^{\text {l }}$ |
| e | e | E | $\varepsilon$ | $\varepsilon^{\prime}$ |
| i | i | $i^{2}$ | I | I |
| 0 | 0 | $0^{2}$ | $\Omega$ | $\Omega^{<}$ |
| $u$ | $u$ | $u^{2}$ | U | $\mathrm{U}^{<}$ |
| Y | $\pm{ }^{2}$ | 王^ | 王 | $\pm{ }^{2}$ |
| ө | $\wedge^{<}$ | ${ }^{2}$ | ${ }^{\wedge}$ | $\ni$ |

Between glottalized stops and juncture, short unstressed vowels may range from fully voiced to voiceless, the latter being somewhat rarer than the former: dáp[i"]


After imploded or glottalized stops, vowels (long or short) occasionally are accompanied by additional glottal stricture, the amount of stricture varying with the general



Before nasals, and after $/ \mathrm{h} /$ in the context of $/!/^{2}$, vowels often tend to appear as slightly nasalized: býhj[E]•n f býhj[E]•n 'blow (with mouth)', s[fr]mi
 f $h[\ell] \cdot!$ 'amen, all right!'
/a/ is slightly fronted when stressed following /t/:
t［á’］ama＇large salmon＇，hónt［a＜］pin＇cough＇． ／e／before／j／in the same syllable or unstressed before／／／is close rather than tense：Dy $[E] \cdot d i \quad$＇when （he）had come＇，wéw［E］•n＇talk＇，h［É］jje•n＇chase＇， wéw［E］jmè•n＇＇not talk＇；stressed before／w／，it is open and centralized：$h[\dot{\varepsilon}<] w j y \cdot ~ ' d u s k ', j[\dot{\varepsilon}<] w o \cdot n ~ ' r u n '$, $h\left[\dot{\varepsilon}^{<}\right] w$＇yes＇．
／i／before／w／in the same syllable is slightly backed： $k[I ’] w d i \quad$＇behind＇．
／o／before／w／in the same syllable is tense： $m[\delta] w j e \cdot n$＇roast；unstressed before $/ \cdot /$ ，it is close： ？ýd［ov］•n＇climb＇；before／j／，it is low：h［ś］ji＇thigh＇， hén［ $\Omega$ ］ja ̀•no＇Old Man Coyote＇．
／y／is slightly fronted after alveolar consonants： t［辛く］pje•n＇jump＇，jýl［王く］kyn＇pound（acorns）＇．
$/ \rho /$ before／w／is fronted：$\alpha[\dot{\varepsilon}]$ wow ə̀n＇shiver＇， walk $k[\dot{\varepsilon}]$ won $'$ cross one＇s legs＇．

Omitting the phonetic components of length，voice－ lessness，glottalization，and nasalization，the qualita－ tive ranges of the vowel phonemes may be charted as follows：

123. Minimal or near-minimal pairs or sets demonstrating significant vowel and length contrasts:

| i - e: | síwi | 'driftwood' | séwi | 'river' |
| :---: | :---: | :---: | :---: | :---: |
| $i=y:$ | Iýli | 'redbud' | lýly | 'star' |
| e- ${ }^{\text {- }}$ | wépesin | 'graze' | wo์? ${ }^{\text {asin }}$ | 'suspect' |
| e-a: | séwi | 'river' | sáwi | 'grass' |
| y - ${ }^{\text {a }}$ | týlyly | 'pine | tsfəəl | 'jingle' |

r-ug póni 'wound
a - a: wá?asin 'graze' wó?əsin 'suspect'
a - o: sóla 'rattlesnake' sólo 'boot'
o - a: bódo•n 'throw up' béde•n 'be happy'

-     - u: ḱómi 'seed' kúmi 'roundhouse'
ə - i: wóskətjè•n 'hobble' wiskitjè•n 'come to set a bucket down'
ə - u: wàhépin 'retaliate' - whihúpin 'beat a soft mass

| i - i•: | ${ }^{\text {c }}{ }^{\prime} \mathrm{c}{ }^{\text {i }}$ | 'rib' | cicie | 'alder' |
| :---: | :---: | :---: | :---: | :---: |
| e - ev: | pém | 'food' | pém | 'grandchild' |
| $y-y \cdot$ : | mý | 'him' | mý | 'shoot' |
| - - ${ }^{\text {er }}$ | kólkəl | 'pine cone' | ké•1ə | 'amusing' |
| a - a $\cdot$ : | ja | 'name' | já. | 'sky ' |
| u-u•: | jún | 'sting' | jú•n | 'rub' |
| - - o•: | tókio | 'awl' | to -ko | rk redbud ba |

130. Suprasegmentals

This class consists of two phonemes of stress: primary $/ \prime$ / and secondary / / (as opposed to weak which is unmarked), and six junctural phonemes: comma /,/, period /./, emphatic /:/, question / $/$ /, hesitation /.../, and word / + / (or typographical space). Each of these represents a construction composed of one or more phonetic components from the following classes:
relative amplitude and tenseness or articulation in the following syllable: ["] extra strong, ['] strong (weak amplitude is unmarked);
relative pitch level of the underlying vowel: [4] extra high, [ ${ }^{3}$ ] high, $\left[{ }^{2}\right]$ mid, $\left[{ }^{1}\right]$ low;
pitch contour of the preceding syllable: [|] last pitch level sustained, [ $\downarrow$ ] falling, [ $\uparrow$ ] rising; silence (or potential silence): [\#]
glottal release: ['] slight aspiration or brief glottal closure.
131. Stress. Stress in general carries a rather low functional load. Contrastive stress has been noted in a small number of utterances, e.g., nihaj bèle $\uparrow$ ýkojkìn.
 going to go again.', but there are no examples of minimal lexical contrast involving stress as a distinctive feature. Nevertheless, it is generally true that:
I) Spanish loan words occur with primary stress on the originally stressed syllable, i.e., usually the penult: wàke•nu 'cowboy' ( < vaquero). Hówèver, compare for example: tỳhéla ~ týhè•la 'scissors' ( < tijeras) ,
2) a few morphemes are inherently stressed: kàwácu 'madrone', pýpin vs. wỳpýp$i n ~ ' c o m e ~ l o o s e ' ~$ (contrast tápin, witapin 'squeeze'),
3) and, in the remaining cases, that is, the great majority, the first syllable of a morphological word (see Sec. 320) commonly occurs with primary
stress: sóldojcodèno. 'Did you begin to sing long agor', pínehwònomàncodè. 'He must have brought lunch, mustn't he?'

Thus, it would appear that primary stress is morphologically predictable. There is additional evidence in the form of variant stress patterns associated with loan words which would point to a tendency to assimilate to a native, initial syllable word stress (at least in recent historical times). Compare for example: kàpó•ta $\underset{\sim}{f}$ kápo•ta 'coat' (< Sp. capote), sòmlélo f sómle•lo 'hat' ( < Sp. sombrero) ${ }^{3}$. However, probably in large part due to the influence of English stress patterns, there is considerable variation from the expected norm. Consider: bómyhmỳhnotin $£$ bòmyhmýhnotin 'cause to feel sad', póləp’ələ $\underset{\sim}{f}$ p’ələṕslə 'ankle', lóskopdi $\underset{\sim}{f}$ lòskópdi 'in the mud'. Therefore, in view of the lack of absolute predictability of occurrence of stress incurred by the gradual transition to the English system, both primary and secondary stress phonemes must be posited.

Primary stress consists of strong to extra strong amplitude accompanied by a pitch level ranging from mid to high. Secondary stress consists of strong amplitude and low to mid pitch. Weak stress (unmarked) is characterized by weak amplitude and low to mid pitch.
132. Juncture. All junctural phonemes include the
component of silence. Comma juncture consists of sustained pitch immediately followed by a silence with a normal duration of from one to three morae.

Period juncture is composed of falling pitch followed by silence. When the ultima is an open syllable which is either primary stressed or which contains an imploded or a glottalized stop, the pitch contour may be terminated by a glottal release.

Emphatic juncture is a combination of extra strong amplitude and extra high pitch coterminous with the last primary stressed syllable (before silence) plus silence. Furthermore, when primary stress occurs on the ultima (before silence), that syllable carries sustained pitch; when primary stress occurs elsewhere prejuncturally, the ultima has falling pitch. The ultima may occur with glottal release under the same conditions stated for period juncture above.

Question juncture comprises rising terminal contour followed by silence. Normally / // does not cooccur with \{de\} interrogative mode (see Sec. 542). It is usually found only in elliptical sentences.

Hesitation juncture is characteristic of interrupted speech. It consists of either sustained pitch or absence of terminal pitch contour followed by a silence of indeterminate length, i.e., silence ad lib.

Word juncture is admittedly a device which has only
partial phonological validity but which enables us to establish a closer correspondence between the morphological word, which is definable and a useful entity, and what is at least its implicit phonological counterpart. Two silences enclosing any sequence of phonemes constitute word juncture. This may be coterminous with any other juncture (particularly in citation forms). In normal or allegro speech, either of both of the terminal silences may often not occur. For such cases, silence is posited as potential based upon examples of otherwise identical utterances elicited in deliberate speech. Word juncture can be further defined in part by the presence of particular prejunctural consonantal and vocalic allophones where applicable (see Sec. 110 and l20).

In the examples cited here, components of amplitude and pitch level which are written above phonemic symbols are to be interpreted as phonetic. Square brackets have been omitted to avoid undue confusion in the notation. Prejunctural nasals have also been transcribed phonetically to illustrate features of word juncture. Unmarked vowels bear the pitch of the preceding syllable:
/né•nèm? sì?yk̉ojjá! ?é•m?em múhko•n. حé•m?em máhko•nsa, mínnèm./
'(Where is) mama!' 'Go play! (She) went to gather ?émpem [an edible grass]. (She) went to gather pe•mpem, your mother (did).'

/sými...sýmimtè•m, Pépeni síヤypỳ!/
'The deer...the fawn (said), "Let's play 'yellowjacket' [i.e., 'smoking out the yellowjacket', a game]."'
140. Phonotactics

The basic syllable canon is $\operatorname{CV}\left({ }^{(1)}\right)(C)$. This formula yields twelve distinct types, all of which may occur: $\mathrm{CV}, \mathrm{CV} \cdot, \mathrm{CVC}, \mathrm{CV} \cdot \mathrm{C}, \mathrm{CV}, \mathrm{CV} \cdot, \mathrm{CV} \mathrm{C}, \mathrm{CV} \cdot \mathrm{C}, \mathrm{CV}, \mathrm{CV} \cdot, \mathrm{CVV}, \mathrm{CV} \cdot \mathrm{C}$. As indicated, any syllable must be coterminous with stress. (or weak stress). Stops of the imploded or glottalized series do not occur syllable finally. ${ }^{4}$ There are no other distributional restrictions governing syllable segments. Thus, between any two junctures, consonant clusters are limited to two constituents appearing only medially and across syllable boundaries. All remaining permitted clusters have been recorded with the exception of /jp/ and /wp/. These lacunae are undoubtedly due to the fact that morphemes beginning with /p/ are extremely rare. Vowel
clusters do not occur. A syllable must be preceded and followed by another syllable or a juncture.

## 150. Marginal Phenomena

A number of residual phones and non-canonic syllables which have unique or abnormally restrictēd privileges of occurrence will be considered as marginal to the phonemic system of Konkow, rather than assuming the more rigid position of analyzing them as phonemes equal in status to those already discussed. This group does not include unique, unassimilated interpolations of English forms appearing occasionally in texts. However, such forms which occur repeatedly are treated here.

These phones fall into three classes: borrowings, those which appear in a number of interjections and expletives, and [と] (see Sec. lll ).

The following loan phones have been recorded: a voiceless alveopalatal affricate [č] or [čh] in kù[ch]á•la 'spoon' ( < Sp. cuchara) and lén[̌]i 'lunch'; a voiceless labiodental spirant [f] in [f]rijo•li 'beans' ( < Sp. frijol, the initial consonant cluster is unique) and [f]otjulàj 'Fourth of July'; a voiced velar stop [g] in [g]ówti 'goat'; a voiced alveolar flap [ $\check{r}]$ in
 a voiceless alveopalatal grooved spirant [s] in [ $\mathbf{x}$ ] $1 \cdot p i$
'sheep', consistently distinct from /s/ which is represented by:a norm of [s]; a voiced alveolar grooved spirant [z] and a voiced alveopalatal affricate [z], both occurring in $[\check{Z}]_{i} \cdot[z]$ es 'the Creator' (Eng. Jesus).

Anomalous features which occur in certain interjections are: a voiceless imploded labioglottal or labiovelar spirant and a voiceless vowel before a consonant in $\left[h_{f} W_{f}\right] \cdot t!$ 'Whew! Gee!' (expressive of astonishment, etc.) and [x: : : : W]: sound imitative of rushing air or water; [s] in [s:ef::]: hissing of a snake; overlong vowels and
 'Watch out!', as well as non-canonic forms in the first two forms cited; nasalized vowels in $h[\&] \cdot!$ ' $A h!$ ',
 and $?[\hat{\imath}]$ ! ! sound of grunting (see sec. 122).

In terms of phonological shape, morphemes are either invariant or variant. Variant morphemes are represented by two or more different phonemic forms the occurrence of which may be wholly or partially predictable in diverse environments. The factors which are responsible for these formal alternations may be broadly classified in three ways:

1) the relative speed of utterance which, for the purposes of the present discussion, will be categorized as either deliberate, normal, or allegro (although of course there are almost infinite possibilities of selection within this spectrum). The rules of morphophonemic behavior formulated in this section will deal with phenomena encountered in normal (or deliberate-normal) speech, although some mention will be made of certain morphophonemic tendencies apparent in normal-allegro sppech.
2) dialectal, idiolectal, or stylistic differences. These will be treated under the appropriate headings in the Grammar or Dictionary.
3) the more immediate conditioning environments, which may be phonological, morphological, or a combination of both. Of these, the present rules do not apply to morphologically conditioned alternations, all of which concern only one or two morphemes and are thus discussed elsewhere.

Only those situations which are relatively widespread
or productive are dealt with here. They fall into two 2 groups: unrestricted, corresponding to phonologically conditioned, and restricted, corresponding to both phonoconditioned logically and morphologically $y_{1}$ alternations. Not all of the unrestricted alternations are necessarily covered in this section. For example, comparing the morphs hémwimu and hémwìmwi (obj. case) 'doodlebug', one might readily formulate a rule, w $>\mathrm{u}$ between a consonant and juncture, which in terms of the syllable canon could be expected to have unrestricted relevance. However, since it happens to be a unique case, the alternation is accounted for under the Dictionary listing. All of the statements made in this Chapter apply only across morpheme boundary.

The most important phonological processes are various kinds of assimilation and reduction. Assimilatory in character are vowel harmony (two types), consonant loss and assimilation to the preceding vowel, and quantitative assimilation of vowels to stressed syllable. Reduction is exemplified by loss of vowels after other vowels, loss of final consonant or length before sequences of two consonants, and loss of certain consonantal components before other consonants or juncture.
210. Transcription

The transcription which has been adopted for Konkow
is basically phonemic with the addition of a few morphophonemes,i.e., cover symbols representing systematic restricted alternations between two or more phonemes. These symbols, when cited in isolation, and all allomorphs (whether or not they happen to contain one or more morphophonemes) are enclosed in $\|\|$ brackets. This is not intended to convey any implication regarding a formal morphophonemic level, but is rather a notational convenience employed to highlight the functional unity of the set of alternating phonemes represented by a given morphophoneme. Unrestricted alternations, on the other hand, are represented by the standard phonemic symbols used for what is considered to be the basic phoneme in a given set, i.e., the one which furnishes the starting point for the optimal statement of the rule in terms of retention of pattern symmetry and general economy. Phonemic representations of forms cited throughout the Grammar are normally unmarked. Features discussed in the text are underlined in the accompanying examples.
220. Unrestricted Alternations
221. Vowel harmony. $i>$ the vowel of the preceding syllable when a velar stop (but not || K || intervenes. poko 'luminary' ( $<$ \{pok $\}+\{i\}$ 'obj. case') týtykym 'grove' ( < \{týtyk $\}+\{i m\}$ 'subj. case').
222. Vowel loss. i > $\varnothing$ after any vowel, length, or any of the consonant-final morphophonemes (see below for examples).

Ḱólos?an 'if he lacks it' ( $<\{$ ḱlo $\}+\{$ is?an $\}$ 'participle')
kolon 'lack' ( < \{ḱlo\} + \{in\} 'participle') ćés. 'Let me see.' ( $<$ \{'cé $\}+$ \{is\} 'IS.subj.' $)$ býsa•m 'cane' (< \{býsa•\} $+\quad\{i m\}$ 'subj. case'). 223. Loss in conformity with the syllable canon. Any consonant or length is lost before a sequence of two consonants. wáseh'ç̉̉o 'two blackberries' ( < wáseJ \} + /h/ 'pl.' distr.' $+\{$ 'cok $\}$ 'dual' $+\{$ i $\}$ 'obj. case') cámmihnòno 'knives' ( $<$ \{'cámmir $\}+/ h /+\{n o n o\} ' p l . ')$ súmujdi 'on the sugar pine nuts' ( $<$ \{súmu• $\}+/ j /$ 'pl. distr.' + \{di\} 'locative case').
224. Loss of glottal or implosive release. Any glottalized or imploded stop $>$ the corresponding homorganic (voiceless) stop before a consonant or juncture. Imploded stops and /'c/ do not occur in syllable-final position phonemically; however, since the reduplicative \{c\} always occurs in these environments, $b, d$, and 'c do occur morphophonemically in them. Because the palatals $/ \mathrm{c} /$ and $/ \mathrm{j} /$ have no direct counterpart in the voiceless stop series, they are represented by $/ t / .^{5}$
wípbạ̀tin 'repeatedly break branches off' (<\{wíbat\} + \{c\} : \|b\| 'iterative' + \{in\} 'ppl.') wátdàsin 'split into large pieces' ( < wádas\} + \{c\} :

$$
\begin{aligned}
& \|d\|+\{i n\}) \\
& \text { wítéc̀jin 'bent in sem. places' }(<\text { wícoj }\}+\{c\}: \\
& \|c \mid\|+\{i n\}) \\
& \text { wípmolin 'skin sem. animals' }(<\text { wímol }\}+\{c\}:\|m\| \\
& +\{\text { in }\} \\
& \text { tétjakan 'mash underfoot' ( }<\{\text { téjak }\}+\{c\}:\|j\| \\
& + \text { \{in\} ) } \\
& \text { wiháplèle•n 'slide easily out of' ( < hap \} ~ ) ~ } \\
& \text { jakatsi•n 'push out of' (<\{kat \} ) } \\
& \text { býlekwò dojdi 'hilltop' ( < \{ lek \} ) } \\
& \text { wènənéknon 'ridge' ( < \{wónok̉ }) \\
& \text { čákut?òmisin 'wash oneself' ( < ccúkut\}) . }
\end{aligned}
$$

230. Restricted Alternations
231. Vowel harmony. $\|0\|>$ the vowel of the following syllable. This occurs with the harmonizing prefixes (sec: 444) and two modal suffixes (see Class 13a, Sec. 542).
bátajton 'miss hitting with a rock'
békesin 'graze with a rock'
bíkihnon 'plug a hole by driving a mass in'
bótokdiknon 'paste a blob on'
búcu'tin 'break, crack (an egg)'
býtykdo in 'flip (a coin)'
bə̀hóptin ' make a clumsy object fit'
All of the above are from $\{b \dot{b}\}$ 'with a rock $\mathrm{f}^{\prime}$ ike object'.

From \{de\}: ||do || 'interrogative' are the foliowing:
'cédejem. 'Did you ( pl. ) see it?'
'céda_ja•m. 'Did you two see it?'
232. Consonant loss and assimilation to the preceding vowel. There are two distributional classes which share two features: they represent an alternation between a syllable-final consonant and length, and they become length before $i$; in other environments, the distributions of the alternants differ.
a) $\|\mathrm{H}\|>$ length as above, before consonant followed by juncture, and before the following morphemes and classes of morphemes:
verb suffixes: $\left\{t i, t i_{2}, m e H, w e ? e s, m a, ~ p e\right\}, ~ c l a s s e s$ 13, 15, 18, 19, and the participles; noun suffixes: $\{p e, d i k y\}$, case markers, $\{$ hoj $\} ;$ and the postposition \{wete\}.
\{nê\} 'intensifier' exceptionally shows loss of $H$ before i. Compare mihano néhwèwe•n! 'You talk too much!' vs. némsa kò•n. 'It's snowing hard.' (here before \{im\}). bája•p! 'Crack acorns!' bája•tīn 'crack acorns for' bája•mè•n 'not crack acorns' bája•de. 'Did he crack acorns?' bája•mìnce 'if you crack acorns' bája-ce 'if he cracks acorns' bája•penì. 'Would you crack acorns?' bája•wète 'having cracked acorns' jémpo - 'young man' (before \{i\}) jémpo•k̇ki sólo 'the young man's shoe'.
||H || > h elsewhere.
bájahdò•n 'begin to crack acorns' bájahki•n 'will crack acorns' bájah 'ono. 'They say you cracked acorns.' bájahْùn. '(He) was there cracking acorns.' jémpohtè•: 'Poor young man!' jémpohpikno 'that young man'.
b) This class includes the remaining six morphophonemes which all share the same distribution, i.e. ||C || > • before i , remains \|C \|elsewhere.
$\|J\|:\{k \delta \cdot d o J\}$ 'country, place, et al.' appears before $i$ as $\|k \delta \cdot d o\|$. Cf. kódom (before \{my\} ) ~ but ko•dojnak 'to the spot'. Other examples are: ?énwytùn $n$ 'turn back' wỳtájiton 'return'.
 as in ||mạ́jdy ||(before \{i\}) but májdyknạ̀. 'from the man'. Other examples of $\|K\|$ are: kádi.m 'rain' kádikde. 'Did it rain'
 '(He) was afraid.' (but cf. \{piN\}: \|pi\| ~ ||piN || , Sec. 465).
$\|P\|:$ mási•n 'finish a job' másipkìn $n$ 'will finish a job'.
$\|T\|$ : ḱájkies. 'I'm going to have supper.' kájkitpỳ. 'Let's have supper.'
$\|W\|$ :has an additional development. After any cansonat but $h$ or $\|H\|$, it assimilates totally to that
consonant. This alternation differs from the others in this Section with respect to its fixity of occurrence. In normal speech it occurs somewhat sporadically and with greater frequency for some informants than for others (see also \{we\}, Sec. 560). k'ýgda•n 'hang (intr.)' k'ýdawtin 'hang (tr.)' 'ýmpinnè?esin '(he) kept coming all the while' lúmittè?esin '(he) kept on fishing' ?fkojjè?esin '(he) kept going' ?ýsippè?esin '(they) kept coming out' cí•me•wè?esin '(he) still wasn't dressed' wówe?esin '(she) wax crying all the time'.
233. Quantitative assimilation to syllable stress: $\left\|^{-}\right\|$represents an alternation between short, unstressed vowel in non word-initial position.and a long, stressed vowel in word-initial position. This applies to a small class of poot morphemes.
'cýcikyn 'crease, wrinkle' vs. bácyćỳ̀kki•n 'frown, grimace' $\left(<\left\{{ }^{\prime} \dot{c} \bar{y} k\right\}\right)$
tétin vs. pétitin 'green' ( $<$ \{tít $\})$.

> 240. Additional Symbols

Purely as a transcriptional convention, several special symbols are used to represent ablaut vowels (see Sec. 420) and reduplicatives (see Sec. 430). For details of reprem sentation as well as examples, see the appropriate sections.

For ablauting vowels, the replacive $\|A\|$ is used; for reduplicatives, $\| C, C V, C V C, C V C V C$, and $r \|$ are used.
250. General Morphophonemic Tendencies

In addition to the systematic alternations described above, there is considerable, if sporadic, evidence for certain morphophonemic tendencies, some of which are related to regular situations, but none of which are predictable with any degree of accuracy. Yet, since these do recur with some measure of frequency and are clearly indicative of phonological areas particularly susceptible to change, at least mention of the facts is in order. The alternations discussed below appear in normal and normalallegro speech. In very rapid speech, a great many other changes take place, many of which confirm the general trends described here. A detailed and useful treatment of such phenomena, however, is beyond the scope of this Grammar.

These tendencies are roughly grouped into types of phonological processes.
251. Under the general heading of quantitative differences are the following:
a) emphatic gemination of consonants most often observed intervocalically following the stressed vowel of an initial syllable or medially preceding a stressed vowel. On occasion, word-final nasals after stressed
vowels are also geminated. All of the examples occur within the context of $\{!\}$. héssì: 'What?!' hèllólopèm já•mpin! 'Big ones came down (the trail).' hájosam jámani tàmýmu 'They carried it straight up the hill.'
b) reduction of a sequence of identical vowels with intervening semivowel, $h$, or $?$ to a corresponding long vowel tends to occur when the first vowel or, in the case of a reduplication, the reduplicative base (i.e., second vowel) is stressed. jòhó.jdi 'while kneeling' ( < johohójdi ) oòpén ' miss (someone)' (< oòpéjen ) 'cá•ni dò•n 'biting' ( < ' 'áwajni dò•n ) háwaky (IS) d há ${ }^{\text {ofy }}$ (ES) 'seem' má•ti 'like that' (< márati) wéres (LS) $\underset{\sim}{d}$ we•s (ES) 'usitative'.
c) epenthetic $i$ between two consonants bounded by vowels, i.e., $\mathrm{VC}_{1} \mathrm{C}_{2} \mathrm{~V} \geqslant \mathrm{VC}_{1} \mathrm{iC}_{2} \mathrm{~V}$. Note that the original sequence is phonotactically permissible. mỷkilipa•m 'his (fore)fathers' jáníto (LS) d jánto 'tell' pýtíce 'because she was cold'.
252. Vowel harmony.
a) Two morphs with related or at times identical referents have the shapes $C_{1} V_{1} C_{2} V_{1}$ and $C_{1} V_{1} C_{2}$ respectively. $C_{2}$ is always a continuant. kyly f kyl 'roll'
kolo 'lack, not be, hollow (?)' vs. fol 'large hole, hollow'
pé•ne ~ pé•n 'two'
co lo 'creased' vs. col 'mash'.
b) $u \quad>y$ in the vicinity of fronted phoneines.
bứni ~ bŷni 'pubic hair' cựpe ~ ḉppe
'(cedar) bark' cứkcukpè ~ 'cýk'cykpè 'sour'
wŷtújton ~ wỳtẏ́jton 'return'.
253. Weakening of syllable-final consonants. Syllablefinal $k$ is quite lenis and tends to become $h$, usually before stops and nasals. This secondary $h$ may, in turn, develop into length and eventually be lost in allegro speech. This general development, it will be noted, is in essence the same which is responsible for the more systematic syllablerfinal alternations described above and, in all probability, pairs such as: ||siP || ~ ||siM || 'out', ||do\|
 ~ \|májdy || 'person', ||wássah || ~ ||wássa || 'bad', et al. Other examples are:
májdyhkù• 'that man' bák'cinki•n 'will cover with a sheet' ofdizhnon 'reach' Pámanah mỳjem... 'thither they...' núoti 'wee, a little bit' (cf. núkti 'a little').
254. Alternations between glottalized and plain stops. A number of such pairs have been recorded with either no semantic contrast or at best doubtful meaningful distinelions.
pûni ~ penni 'counting string knot'
po ~ pto 'ball' wíkisin ~ wíkisin 'hurt' páka•ti $\sim$ páka•<compat>̇<compat>ᅳi 'frog' Toke ~ Toke 'rabbit' Pí•tykyn ~ Pi•ṫykyn 'cold'.
255. $j$ and $h$ alternate with ? . The two develop m ments are, however, inverse to one another. ? tends to become $h$ word-initially before stressed vowels, whereas $j$ tends to become $?$ intervocallically after stressed vowels. Thus, ? > h: híbe di 'everywhere' hýnopè! 'Let's go!' hóno 'head'.
 'rabbitskin blanket' píqokòn 'hot, warm'.
260. Stress

As has already been noted in Sec. 131, stress as a contrastive feature plays a very minor role indeed. Words tend to retain the same relative stress pattern which they exhibit as citation forms in most environments. Nevertheless, there are many examples in which the pattern deviates from the expected norm in at present unpredictable fashion. Pending more exhaustive analysis, I cannot formulate rules to account for the divergent cases. In all of the examples cited throughout this Grammar, stress is phonemically indicated.

## Chapter Two

MORPHOIOGY

## 300. Introduction

Konkow is largely agglutinative with some slight tendency toward fusion. The formal techniques insed to represent grammatical categories are, in descending order of productivity: suffixation, compounding, reduplication, prefixation, vocalic ablaut, and word order. Suffixation is employed in stem, theme and word derivation (e.g., postfixes), and inflection; compounding, reduplication, prefixation, and ablaut in stem derivation; and word order in the expression of stem constituent relationships.

310. Word Classes

Konkow morphology comprises the description of morphemic word classes, their memberships and internal structures. These classes are defined in terms of the obligatory cooccurrence of certain clasmes of suffixes which will be referred to as inflectional, or by the absence of such suffixes.
320. Basic Terms

At this point, it is appropriate to broadly define a
few terms for basic units which it will be necessary to refer to repeatedly throughout the description.

A morpheme is interpreted in a general Bloomfieldian sense as a meaningful phonological unit (i.e., a phoneme or a morphophoneme) or a given sequence of phonological units which cannot be further segmented without incurring change or destruction of the semantic association. Monomorphemic units are of three types:
I) A process is either ablaut (see Sec. 420) or reduplication (see Sec. 430).
2) An affix, which is always bound, is a prefix (see Sec. 440) or a suffix. Suffixes are either stem formants (see Sec. 450), thematic (see Secs. 530 and 632), inflectional (see Secs. 540, 633, and 700), postfixes (see Secs. 550 and 640), or postpositions (see Sec. 900).
3) A root, which may be bound or free (for some classes), is a morpheme which is neither a process nor an affix.

Morphological constructions are also of three types:

1) A stem is a morpheme or sequence of morphemes which may occur in constituency with a thematic suffix.
2) A theme is a morpheme or sequence of morphemes which may occur in constituency with an inflectional suffix.
3) A word is either a member of a minor word class (see Sec. 800) or a construction which includes one or more inflectional suffixes.
4) A clitic is a word which only occurs postfixed to
another word, i.e., without intervening juncture.
There are three major word classes: substantives, verbs and adverbs, and a class of minor words.
330. Minor Words

These consist of a relatively short list of uninflected forms which occur freely as words, vary in random phonological structure and are, for the most part, not subject to internal analysis. This class includes sentence connectives, adverbials, and interjections, a number of which are onomatopoetic expressions.

340. Adverbs

Adverbs are identified by a unique suffix as welll as by word order syntactically. Any semantically appropriate stem may appear as an adverb.
350. Substantives

Substantives are inflected for some eight cases and a vocative. The two classes of substantives are pronouns, inflected for dual and plural number, and nouns, optionally inflected for number.

Nouns fall into three classes: demonstratives, which do not occur with the possessive suffix and do occur with
a pronominal dual allomorph; inalienably possessed, which normally occur with a pronominal prepound denoting possessor; and alienably possessed. The last named is further subdivided into five classes each of which occurs before a different plural allomorph.

Noun themes are formed by the addition of one or two thematic suffixes to a stem. These suffixes derive nouns from ambivalent, verb, noun, or, in one instance, pronominal stems.

Noun stems are simple roots or compounds. Compounds consist of root, stem, or theme plus root with or without the intervening attributive suffix.

Substantives may be followed by a number of postfixes and/or postpositions.
360. Verbs

Verbs are either finite or non-finite. Non-finite verbs consist of themes followed by a participh suffix, the resultant construction subordinate to a major tactic unit, phrase, clause, or sentence.

Finite verbs are inflected for first and second person subject (third unmarked), dual and plural, and a number of modal categories. With the exception of the neutral recent (unmarked), at least one modal suffix is obligatory. The
imperatives differ sharply from other finite verbs; nevertheless, since they are marked for number, they are included with them.

Finite verbs are further subclassed into: dependent verbs, occurring before clause subordinators; auxiliary verbs, occurring in constituency with other verbs; and copulas, occurring in constituency with two non-coordinate subject nouns.

Auxiliaries are of two general types: the modals, occurring with main verb participles, and the aspectuals, usually occurring in participial form in constituency with other verbs. These aspectuals constitute a mixed class covering aspectual, modal, and directional categories.

A verb*theme consists of a stem or theme to which may be added one or more thematic suffixes chosen from terron classes and having various functions: distribution of phenomena, directionals, object designation, aspect, tense, and mode.

A verb stem is often ambivalent. Formally it may be a simple root or composed of various combinations of prem fix(es) plus root with or without intervening stem formant; or a reduplicated root, stem, or theme; or an ablauted root; or a root, stem, theme, or word plus root (see Sec. 400).

Verbs may be followed by postfixes and/or postpositions.
400. Stem Formation
410. General

The stem is the basic building block of the word. It may be identified externally by occurrence with various thematic affixes and internally by manner of derivation, i.e., suffixation, compounding, vocalic ablaut or reduplication, or any combination of these for a given stem. While potentially multivalent with respect to word class, certain stems occur only or largely with substantival or verbal affixes. In some instances the apparent distributional restriction is undoubtedly fortuitous, reflecting the limitations imposed by a very finite corpus; in other cases the restricting factor is clearly semantic. Nevertheless it will be convenient from time to time to refer to verb stems and noun stems with the understanding that these terms do not necessarily represent structurally definable units.

With the exception of the two processes, which will be treated first, the internal composition of the stem will be presented by position classes in the normal sequence found in a maximally expanded stem.
420. Vowel Ablaut

If the only evidence for diminutive-augmentative ab-
laut were manifested in a few sets like the demonstratives héde 'this (proximal)' vs. hodo 'that (distal)', the prefixes ka (gross motion) vs. ke (fine motion) 'with the hand', or a handful of others, the feature might simply be attributed to sporadic sound symbolism of the sort which is probably found in all languages to some extent. There is, however, at least one sizeable class of roots, largely finals (see Sec. 464), the members of which are productively subject to internal vocalic change representing a semantic gradient of diminutive-augmentativeness. Starting ait the diminutive end of the scale, the relative order is from $\{i\}$ to $\{u\}$ to $\{y\}$ to $\{e\}$ to $\{\theta\}$ to $\{a\}$ to $\{0\}$. Because the degree of size intended by the speaker is relative to a given context, the particular vowel selected cannot be assigned an absolute value. Since neither infixation (discounting reduplication) nor morpheme discontinuity are germane to Konkow, the vowels of ablauting roots are analyzed as being morphophonemically neutral and subject to obligatory replacement by the diminutive-augmentative (vowel-)morpheme which is deemed appropriate to the context. The cover symbol $\|A\|$ is used to represent this neutral or basal character of such vowels. While there are no examples of a single root occurring with all seven vowels, there area few involving six, e.g., \{ćat\} 'split': wícitin 'split a very small object with the hand' bu'cu'tin 'break, crack (an egg)'
wícytin 'split a small object with the hand' wécétin 'crack open a small object with an instrument' wácétin 'split a larger object with an instrument' wócotin 'chop a notch (with an ax)'.

In addition to the semantic component of size, the back rounded vowels (particularly \{u\}) are occasionally associated with a component of shape, specifically cylindrical or tubular. Compare $\left\{h A^{\prime} p\right\}$ 'slide' in juhúpda•n 'slide a rodlike object into a cylinder' and johópin 'stuff (coals) into (hollow twigs)' vs. jahápin 'slide a timber into place (in making a lean-to)'. In some instances this might be explained by the context, but in others such an interpretation is not justifiable. On the other hand there are numerous examples which do not reflect any particular connotation of shape.
430. Reduplication

Reduplication is a process employed primarily in stem formation but also occasionally in immediate constituency with a theme. There aide four major patterns represented by the morphemes $\{C\}$, $\{C V\},\{C V C\}$, and $\{r\}$, all of which are very productive, and two minor patterns, one of which will be considered as a structural process (\{CVCVC\}), albeit relatively few supporting examples exist, the other not. The reduplicatives represent categories which deal
with the distribution of phenomena in space and time, thus in some measure paralleling and overlapping the functions of similar categories expressed by thematic suffixes in the verb (see particularly classes 1, 4, and 5, Sec. 530).
431. One general rule accounts for the formation of $\{c\}$, \{CV\}, and \{CVC\} in most constructions. \{r\} is regularly derived from either of the latter two. Apparent deviations from and the very few exceptions to this rule will be dism cussed separately. This rule may be stated as follows: The first C, CV, or CVC of the second syllable of the stem (or, more rarely, theme) is reduplicated and preposed to that syllable. Length is not reduplicated. Two natural corollaries of this rule are:

1) \{c\} may never occur in constituency with a monosyllabic stem due to the basic syllable canon (see Sec.140),
2) When the stem is monosyllabic, \{CV\} or \{CVC\} is preposed to it, i.e., the first syllable of the stem.

In the case of a compound stem, the reduplicative may occur with either the first or the second constituent. Although the data show no examples of reduplication of both constituent stems, theoretically this is a possibility.
432. \{C\} 'periodically or rhythmically distributed phenomena of brief duration, often with a connotation of abruptness'is represented by the stop (see Sec. 224) which is homorganic with the consonant to be reduplicated except when that consonant is $h$, in which case $h$ is the redup-
licative. There are no examples of reduplicated $?$, $n$, or w. \{c\} rarely occurs in constructions containing locative directionals which almost always imply. continuity, often linear. Examples are:
wípbatin 'break off (branches) by hand'
hútdasin 'cut open repeatedly'
wỳtéýpin 'make small incisions in sev. places'
jottsólin 'pound meat coarsely with a pestle'
wípmalin 'peel strips off'
býtlẏ̉kyn 'beat (of heart), pulsate'
bátjakan 'mash with a rock-like instrument'.
With stems having active meaning, \{C\} functions as a repetitive (cf. the examples above); with stems having static meaning, it functions as a distributive denoting plurality, e.g., békkèlin 'have many small holes, be full of holes'.
\{c\} may cooccur with \{CV\} or \{CVC\}, although this is rare: wàttátákan '(they) clapped their hands'
${ }^{2}$ tilutlútin $\quad$ nod affirmatively'.
433. \{CV\} 'uninterrupted, continuous, but implicitly incomplete distribution of phenomena' deviates from the expected order of preposition within the stem in a very few instances:

1) Habitual themes based on disyllabic stems show reduplication of the suffix which constitutes the third syllable of the simplex, as in pédawsasàpe 'one who always comes to eat (intensive)'.
2) The third syllable is uniquely reduplicated in wéwejmemè'n 'he was silent all the while' -- this may be due to the fact that the stem \{wéweJ\} 'talk' is in itself a reduplication (frozen), and héste•mcècete 'somewhere' where the entire form indicates analogical change -héste•m, a noun functioning syntactically as a locative (subject absolute, cf. \{im\}, Sec. 633.2), followed by the verbal postfix \{cete\} which is then reinterpreted as an attribute noun (Subject case and attributive compound suffixes are homophonous) succeeded by a new stem functioning as the second constituent in a compound and subject to normal reduplication.
3) There are six constructions where what must be taken as a disyllabic second constituent of a compound unaccountably appears with reduplication of the first syllable, e.g., jèwohtetésko•n 'she ran on the surface of the water'.

With stems having active meaning and almost always including one of the locative directionals, \{CV\} denotes continuous, incompleted action:
wílolopsì•n 'pull a long object steadily out of a cylinder' sẏty týjko•n 'clip along a given line'
hưkykýxtdà•n. 'slice a long object all the way down at
one stroke'.
There are a number of forms which refer to repetitive but connected or uninterrupted action:
kýnynỳkyn 'muffled rumbling'
bàstatátje•n '(to) skip along'.
A \{CV \} stem in constituency with \{kiT\} 'downward' results in a construction having the meaning 'approaching an end, a term':
sámmo•msa $\quad$ i•tytykki•n. 'The stove is cooling off.' má•tmemènki•n 'autumn is almost over'
jàmamankitdi '(at) the bottom of the hill'.
In stems associated with static meaning, \{CV \} indicates distribution of phenomena within a continuum,thus often includes the notion of collectivity in nominal compounds:
’’ýpy-skòlehp̀y
'little boys'
hélolomkò - 'big snowflakes'.

With intransitive verbs, it may denote a plural subject: sàwwalimsa pákpaktòdi kówtátànon. 'The squirurels are
lying on the branches.'
obsisippinๆùn 'several (are) looking out'.
With intransitives having qualitative or descriptive referents, \{CV\} implies a continuous distribution of phenomena over a given surface:
wènenáknòn 'entire length, continuity of a ridge' Déwawàwnon '(it's) turning white, (is) white all over'. 434. \{evc\} completed eyales or integral phenomena imtermittently distributed in an implicitly larger whole' in constituency with stems having active meaning functions as an intermittent iterative; with stems denoting sensory per-
ception, it is usually translatable as 'prone to..., easily..., -able':
wísetsétin 'be apprehensive, scare easily'
wé•pespèsin 'tender, easily bitten off'.
When it occurs with locative directionals, a component of linear continuity within each iterated cycle is added: hinputpùtki•n 'alternately sink and rise to the surface' wíloplopsi•n 'pull sev. long objects steadily out of a cylinder'

The iteration may only be apparent as a plural object, as in wénehnèhtin 'be good to several'.

There is a mildly productive \{CVC\} construction translatable as 'somewhat...' or 'beginning to...' which is perhaps to be equated with the intermittent iterative function: kánohjèhje•n 'beginning to grow old, getting on in years:
Dékylkỳlin 'somewhat blue, bluish'.
With stems of static reference, \{CVC\} functions as a distributor of integral phenomena within a whole and, as such, accounts for a number of collectives more or less of the mass noun type in English. It is to be noted that this differs from the kind of collectivity obtained with \{CV\} derived stems. In the latter case, the items in question are viewed as existing within an unbounded continuum; in the former, within an implicitly defined whole: wíswusin 'hair (is) mussed up'
kowkowemmỳde 'brown bear' (i.e., the 'brownness' [actually from \{kow\} 'snow'] is distributed over the whole bear).
435. \{r\} 'intensive' occurs only with \{CV \} or \{CVC\}. It is formally represented by "rereduplication" of an already reduplicated stem in accordance with the general rule of reduplication (see. Sec. 431). Most of the stems affected by this pattern have imitative referents:
'àwa• dídidiktin 'gnash one's teeth'
týtýtỳin 'crackle (of fire)'
sýnynynyn 'tremble, quake (of ground)'
p3tpotpatin 'bubble, seethe'
tystíystýston 'make clicking sound'.
436. \{CVCVC\} 'imitative-repetitive' creates new stems by total reduplication of disyllabic stems. Stems which occur with this morpheme denote imitative sounds or inherently repetitive motions:
?óho?8̀hon 'cough'
ḱslok̉lə 'rattle'

437. \{CV \} and \{CVC \} appear in a number of stems which refer to body parts, animals, and plants. Some of these constructions are clearly analyzable as descriptive, e.g.,
c'úmkok̀̀lo 'bladder' ( < \{'úm \} 'urine' + \{CV-kólo\}
'continuously distributed hole, cavity', or
tùjisbukbúku 'eyebrow' (<\{tújis\} 'sleep' + \{CVC-bử\}
'tails collectively distributed';
others such as bábaika 'live oak' or háha. 'tan oak' may be so (cf. \{bák\} 'Ieaf' and \{há•j\} 'acorn meaty; still others are no longer analyzable (or fortuitous ?) as is the case with kùkú•si 'goat' and múnmun(imsàwi) 'wormwood (grass)'; and some are undoubtedly onomatopoetic, as for example hỳhý•mi 'owl' and mákmàka 'yellowhammer'. All but those which are analyzable with certitude will be considered as monomorphemic stems. However, where a segmentation seems reasonably possible, the Dictionary item will be appropriately cross-referenced.

Often enough, apparently reduplicated forms have been recorded without the corresponding simplex. When it is felt that the form bears sufficient formal and semantic analogy to classes of stems which are normally prone to reduplication, the item will be listed in the Dictionary under the hypothetical simplex along with a note (in the form of a conventional symbol) indicating the fact. Compare for example j́slépale 'ball and socket joint, ankle' which would be analyzed as \{CVCVC $\}+\left\{\right.$ *p'plo $^{\prime}$ \} on the analogy of $\{p A ́ l A\}$ 'ball' (cf. pólo 'buckeye ball, roll into a bail' and pýly 'pebble, testicle, (small) ball'), or tútuk 'fuzzy, brushlike', analyzed as $\{\mathrm{CV}\}+\{$ *'túk $\}$ by comparison with $\{\dot{t} A k\}$ 'sharp-pointed' (cf. tóko 'needle, awl' and tótoko ithorny').
438. There remains a residue of a few stems which ex-
hibit a CV•(C) pattern of reduplication. Almost all of these are names of animals or plants. They may well be frozen descriptive terms but the evidence is insufficient to prove such a hypothesis. Examples are: ćý• cyky 'sour dock'
ká•skas 'bluejay'
lú•tlùti 'small white cricket'.
Apart from the distributional restrictions noted throughout this section, any of the first three major reduplicatives may appear in constituency with potentially any stem.

## 440. Prefixes

Morphemes which may occur before free roots or medials (see Secs. 461 and 463) but not before initials are prefixes ( $p$ ). These fall into two order classes constituting those which must always occur word-initially ( $p_{1}$ ) and those ( $p_{2}$ ) which may occur with or without a preceding prefix of class $p_{1}$. This distinction is made to accomodate the relatively few instances of constructions containing two prefixes, although these might just as well be explained as examples of recursion where the original $p_{2}+$ root has been reinterpreted as a prefixable root to which a $p_{I}$ is appended. Actually the formal canons and semantic range associated with prefixes of both classes are very similar. The morph canons which appear in this corpus are listed
here with examples of each. CV is the commonest; CV•, at least in some cases, may be segmentable into $\mathrm{CV}+$ • . In addition, there is one example of CVCVC, namely jésik 'stand', which is probably historically segmentable. ${ }^{6}$

| Canon | Class | Morph |
| :--- | :--- | :--- |
| CV | $p_{2}$ | té 'with the foot' |
| CV. | $p_{1}$ | bá 'probe, stroke' |
| CVC | $p_{1}$ | pén 'backward' |

Most of the members of these two classes function as classifiers of the phenomena referred to by the root or stem.structure of the construction. The general categories of classification are on the basis of body part (usually as the instrument of an action) or shape of object. Metaphorically related to some of the body part classifiers are a few directionals. ${ }^{7}$ Compare for example hín 'eye'f front, forward motion', ?én 'tongue; backward motion', ?ठ 'head; top, end', hój 'thigh; rear', حés 'with the mouth; mid'. The shape classifiers may refer to the logical subject, object, instrument, location of action, or even to an action which inherently involves phenomena of a general shape category, dependent in part upon the root or stem meaning, or conversely in the case of a root having "neutral" (in regard to shape) reference, upon the category required by the context (for examples, see Sec. ). The same substantive referent may, in different contexts, be construed in the light of two or more shape categories.

Furthermore, both shape and some of the body part classifiers may function as empty morphemes, i.e., having no apparent referential meaning but serving as dummy slotfillers, usually before finals or locative directionals. The commonest of these, $\{P \dot{y}\}$, occurs only as an empty morm pheme. The semantic content of the shape classifiers is extremely generalized and is much more dependent upon context for precision than lexical items are. Thus, $\{b 0$ \} $\}$ 'rock-like mass' may be translated as '(rock) lie' in To•msa káwdi bóki•n. 'Thenrock is lying on the ground.', as 'throw, put, or lay (rock)' in $9 \delta \cdot h a j$ káwdi bóki•n. 'I threw (put, lay) the rock to the ground.', as 'hit (with a rocky' in Pó•nihaj bó•n. 'I hit him with a rock.', as $\emptyset$ (*rock- or node-like configuration ?) in mòmbówajtòn 'fork of a river' and pákbowàjton 'branch out (of a tree)', or as $\varnothing$ (auxiliary) in dohbòdo'n 'begin to ache'.
441. $p_{2}$ prefixes fall into two subclasses: harmonizing, which largfey coincide with the semantic category of shape, and non-harmonizing. Since the harmonizing prefixes play a particularly important role in the morphology and because of the problems involved in stating the allomorphy of these morphemes, they are discussed here in detail. All other prefixes will be described in the Dictionary. It will be noted that at several points the data offers contradictory evidence to some of the statements made here, i.e., some ailomorphs are apparently in free variation with
one another. Such examples are for the most part rare and they seem to reflect an unstable situation which can most probably be accounted for in terms of the historical situation. The evidence points to an earlier, more elaborate system of vowel harmony (there are relics scattered throughout the language which would support such a view) which is in process of disappearing. I have therefore considered it best to formulate rules which have wide general application (thus most economically accounting for a relatively large number of forms), even though there may be occasional unexplained exceptions. The exceptions will be noted.
442. The respective allomorphs of $\{b 00\}$ 'rock-like instrument', \{jÓ\} 'pointed instrument', and \{wÓ\} '(flat) sticklike instrument' share certain distributional properties.
I) The $\|0\|$ allomorph never occurs before locative directionals (Sec. 465), appears most often before finals, occasionally before free or medial roots.
bádaswàjton 'smash apart with a rock, hammer, etc.'
jékelsi•ton 'poke through (something)'
wícitin 'split a very small object with an instrument' bofjolmi•n 'bash (something) in with a rock, etc.' jùhúpdà•n 'push a rod-like object into a cylinder' wýcyttòn 'split (something) with a handled instrument' býkyttòn 'break (something) with a small blunt instr.'.
2) The $\|0\|$ allomorph occurs largely before locative directionals, occasionally before finals, and rarely before
free and medial roots.
bodo•n 'throw (a ball, rock, etc.) up'
jósi•tòn 'thread (a needle)'
wóki•n 'put down a stick-like object'.
3) The $\|y\|$ allomorph is generally rare, occurring principally before locative directionals, but with a few examples before medials and free roots.
býtje•n 'drip slowly'
?éni jýsiptin 'stick one's tongue out'
wýkoj’ùn 'be laid out in a line'.
In addition to the above, there are sporadic instances of non-harmonic \|a, e, and $u \|$ allomorphs, e.g., játilin 'plug a large hole', bòhwéci•n 'ambush (someone) along the trail!, ju'colin 'mash with pointed instr., thumb, etc.'. Both jótilin 'plug a large hole with a pointed instrument' (contrast jítilin 'plug a iemail hole etc.') and wátilin 'plug a hole by applying a flat object flush with the surface! point to interference with the diminutiveaugmentative ablaut system (see Sec. 420), but other examples do not so readily lend themselves to explanation.

Other harmonizing prefixes are:
$\{b o ́\}$ 'run', a homonym of $\{b \underset{o}{\text { O }}\}$ 'rock-like instr.', exhibiting allomorphy similar to that of the latter, is represented by $\|$ bọ́, bo , and býll. \{bọ́s\} '(with) leg' and \{wó•\} 'several (go)' occur only with || oll allomorphy.

## 450. Stem Formants

Statements regarding the members of this class are tentative due to problems of segmentation which are as yet not fully resolved. In addition to those described in this section, there are several morphs whose status is dubious in varying degree. For example, there are a number of stems which occur with orrwithout a suffixed /is/ and other stems which appear similarly with or without /im/. There is no clear indication of any semantic contrast and the alternating stem forms are almost complementarily distributed. Therefore these and other comparable sequences have not been segmented but are accounted for in terms of parallel stem allomorphy. However, particularly in the case of /is/ and /im/, the doubt is reinforced by the existence of two similar stem formants, \{si\} a nominalizer and $\left\{\mathrm{im}_{2}\right\}$ the compounding suffix. Some of the stem formants also have privilege of occurrence as thematic suffixes in the verb (see class I, Sec. 530).

The members of this class are listed as three morphs which probably represent more than three morphemes, although the identifications are in part questionable.
/h/ 'plural distributive' occurs optionally after both noun and verb stems, noun themes in $\{b e H\}$, and verb themes in $\left\{\right.$ to \}, as well as after $\left.<p_{2}\right\rangle$. It often appears in plural or iterative constructions with the apparent func-
tion of a plural stem formant, although at times it would seem redundantly so. Compare kónojbehk̀̀n 'along with two girls' contrasted with kónojbe•kàn (< \{kónoJ-beH-ḱan\})
 'two old men', and wolimmènim jóhsi•n. 'Many years passed.'

A few contrastive sets containing this morph associated with the meaning 'proximal, closer to the speaker' have been elicited: móhnon 'go a short way to dring' vs. mójon 'go to fetch water', jàmani ংénnahnà. 'just a little behind the mountain' vs. jàmani oénna•na• ( < \{Pén-naH-na•\}) 'behind (distance unspecified) the mountain', and méh! ( < \{méH-h-p\}) 'Take it (from my hand)!' vs. mé•p: ( < $\{$ méH-p\} $)$ 'Catch it!'
$/ \cdot /$ 'plural subject' occurs in a few, but frequently recorded, constructions always after the prefixes $\{w 0$ \} $\}$, $\{b 00\}$, or $\{$ hé \} ' with the hand; $\varnothing$ ' as in:
sêwi wísi•tòn. 'Several crossed the river.'
bó:cokon 'accompany'
hégjalwàjton 'fall apart, into pieces'.
This morph also appears with no connotation of subject number, as a stem formant, e.g., hýdohkì•n '(he) will get up slowly', \{w'k\} 'one' vs. \{wfók\} 'other, another'; however, most of the examples are questionable.
$\|H\|$ occurs as a stem formant after three prefixes $\left(p_{2}\right)$ :

wón 'hit with a stick', wohki•n 'will hit with a stick'.

Although $\|\mathrm{H}\|$ represents an alternation between $/ \mathrm{h} /$ and $/ \cdot /$, the plural morphs $/ \mathrm{h} /$ and $/ \cdot /$ cannot be taken as allomorphs of one morpheme since they occur in contrastive environments. Free variation has been ruled out in this instance since the two morphs have been consistently recorded as distinct from one another.
/j/ functions as a stem formant after at least one prefix, \{hý\} 'with the foot', after a few noun stems as a verb-deriving suffix, and after a few roots. Compare hýjmi•n 'put one's foot into (something)', hý•pajtòn 'salmon arcs over in jumping upstream' (cf. \{hý•pa\} 'male salmon or fish').

In a very few examples, this morph appears as a pluralizing suffix with noun stems, e.g., súmu•di 'on the pine nut' vs. súmujdi 'on the pine nuts'. Furthermore, as the final consonant in a small number of CVC-finals, /j/ alternates variously with several other consonants or zero with no apparent semantic contrast, nor does this alternation accord with any regular morphophonemic situation.

460. Roots

Roots may be divided into five classes determined by their distribution relative to one another or the prefixes within the stem. Those which may occur stem-initially are:
461. Free roots may occur as free stems, that is, after
juncture and before an inflectional suffix, or as stem constituents. The semantic range covered by members of this class is very nearly total in terms of Konkow culture, including largely physical, conceptual, and perceptual referents but also some which functionally closely parallel a number of affixes which represent grammatical categories. Free and medial root morphs appear in a large number of unrestricted and random shapes. A few widely ranging examples:

| Canon | Morph | Meaning |
| :---: | :---: | :---: |
| CV | pé | eat, food |
| CVCV | béle | again |
| cveveve | búlalàj | black bear |
|  | kóhunèje | abominable snow man |
| CV-cvecve | kíliklik | falcon |
| cVCV - CCVCV - | ?òle•1w6do - | rainbow. |

462. Initials must occur stem-initially followed by a final or a locative directional. Most of the members of this class denote rather generalized types of action or state. Morph canons which have been recorded, along with examples, are:

| Canon | Morph | Meaning | Example |  |
| :--- | :--- | :--- | :--- | :---: |
| CV | hú | cut | húpelin | cut onan |
| CV. | pó• | wade | pó•si•ton | wade across |
| CVC | Kót | facing | kótki•n | Iie on one's belly |
| CVCV | hóme | drag | hómetoton | drag about. |

A further subclassification could be made, dividing the members of this class into three groups one of which never occurs before locative directionals (ID), a second which occurs only before $I D$, and a third which may or may not occur before $L D$. However, it seems much more likely that this distributional pattern does not represent any significant structural distinction, but is rather due to insufficient data.
463. Medials must occur either before aan LD,after a prefix, or in both environments simultaneously. The semantic range of the medials is general, as for the free roots, although there are far fewer examples of the former.

Roots which may not occur stem-initially are:
464. Finals may occur after any of the preceding root classes, stem roots (see Sec.470) or stems, and before LD's. In constituency with \{CV \} or \{CVC\}, they may occur as free stems. Most of the morphemes in this class refer to highly generalized kinds of motion, wave-motion , or. frequency of motion. Representative morph types follow:

| Canon | Morph | Meaning | Example |  |
| :--- | :--- | :--- | :--- | :--- |
| CV | ty | sudden motion | wítytyn | tremble |
| CVC | das | burst open | bádaswàjton | smash apart |
| CVCV | kece | tear away at | wé•k̉ecèn | gnaw on |
| CVCVC | kedew | notch | hưkedèwin | cut a notch. |

465. Locative diredtionals (D) have dual privileges of occurrence as roots which may occur after finals and as

Class 3 thematic suffixes with verb stems (see Sec. 530). As roots they may also occur after any of the prefix, stem root, or root classes. In a minimal simple stem containing the prefix $\{\partial \dot{y}\}$, the root must be an $L D$. Certain members of this class are distinguished (from all other morpheme classes) by parallel allomorphy. As the class name indicates, they represent categgries of location and direction (often with linear implications). The following morph types appear in the corpus:

| Canon | Morph | Meaning | Example |
| :--- | :--- | :--- | :--- |
| CV | ta | on top of | mýtan roast over a fire |
| CVC | miT | in, into | bómittin drive (a |
|  |  |  | nail) into |
| CVCV | toto | about | jétoton glide about |
| CV•CV | si•to | across, | húkelsI•ton cut a |
|  |  | through |  |
| CVCCV | wajto | apart | hómewàjton pull apart |
| VC | in | downward | búsújinnon knock down |
| VCCVCV | immoto | together | dótímoton tie together. |

Since they form an important diagnostic class as well as a class of suffixes, the LD's are listed and described fully here.
\{cik\} 'block, plug, cover an opening' has two allomorphs which occur in normal allegro speech: \|'cip \| before /p/as in bàk'íppỳ. 'Let's cover it (window).', and ||'cih \|before $/ k /$ as in hícihkympelkidi 'on the day (she) forgot'.

Examples of regular alternants are: húcikikbỳny. 'Don't forget.' and támci•n 'cover with dirt'.
$\{c o\}$ 'over, over the edge of ' occurs most frequently before \{no\} '(go) along' (see below), rarely without another LD.
hýjcon 'foot covering'
? y copi•n $\quad$ 'come over (a hill)'.
\{daw\} 'off of or away from and toward a goal, come toward' has an additional allomorph $\|$ daH $\|$ (cf. \{dáH\} 'wipe off') of relatively infrequent occurrence, apparently in free variation for LS, but restricted in meaning to '(take) away from' for ES.
méhdahkìn 'will steal from' and méhda•n 'steal from'(ES),
mýhdahton '(they) shot at him (LS)
bápasdàwtin 'brush something off for someone'
bá?asdà•n 'brush something off'.
\{dik\} 'against, facing, opposing' is unique among the members of this class in having a further privilege of occurrence as an initial before an ID. As an ID, it appears most commonly followed by \{no\}.
wỳný•diktin ' lean (an ax) up against (something)' díkpajton 'be face to face'.
\{immoto\} 'move together, around; circle about' has one rarely occurring allomorph ||moto || in apparent free variation with \|immoto \|. Historically, it would seem that /to/ equates with the thematic suffix \{to\} 'reciprocal dis-
tributive' (i.e., in the sense of reciprocating motion); however, synchronically it is not segmentable (cf. also \{kammoto\} 'continuative', Class 8, Sec. 530). nénimmòton $\underset{\sim}{f}$ nénmotòn 'several groups or bands come together'
?ýmmoton 'circle, go around'.
\{in\} 'downward, downslope, downstream, southward (the ultimate direction of flow for most streams in the area, hence equivalent to downstream)' is represented by \|im || in one commonly occurring frozen construction before \{piN\} 'out of and toward', and possibly by $\|t\|$ before $\{m i T\}$ 'in, into' in a hapax, wàhátmi•n 'get a linear object caught by pulling or pushing down' (ES). With very few exceptions, this morpheme occurs before another $L D$, usually \{no \}.
hónna. 'below, beneath'
jápasinnòn 'slide downhill'
néninnòn 'migrate, go south'
sỳmpiniùn '(fruit is) hanging down'
lápimpín! 'Crawl down!'
\{miT\} '(move) inside, into, down into' before \{we?es\} 'repetitive' has been recorded several times as /mi/ when part of a progressive series in texts (LS). This may be a stylistic feature or perhaps simply an allegro variation.
 going in all the while, going in, etc.... He got in!'

Additional examples are:
Káhmit?ùn 'be hiding inside of'
bohmi•n 'go inside to hit (someone)'
?ýhejmì•n '(he) followed him down into (the valley)'.
\{piN\} 'more out of and toward' has an allomorph ||pi || which occurs only in imperative constructions before $\{p\}$ 'imperative sing.' or \{leJ\} 'rapidly' + \{p\}. Although ES claims that sthis usage is characteristic of North Fork speakers, he may inadvertently produce a ||pi || before \{p\} and always before \{leJ\}.
ofpin?ùn 'be with the head facing (something)'
pýkpi•n 'crawl out on all fours'
Pỳpiléj! ' Come here quickly!'
Pympi: 'Come on down!'
\{túJ\} 'reverse the original motion, turn back (intr.)' as in diktújton 'turn around (intr.)' pinehwutù•n 'bring back the rest of one's lunch'. \{ta\} 'above, atop; move onto' as in mýtan 'roast over a fire', máltade. 'Did (the bird) fly onto (a perch) $\boldsymbol{z}^{\prime}$ \{wajto\} '(move) apart, asunder' like \{immoto\} above seems to contain \{to\} but, for the same reasons, is not segmentable.
hưcytwàjtoki•n 'will cut apart, open'
mòmimsa jowajton. 'The water is spreading out.' 465.1 The remaining members of this class have been grouped together because they all appear in constructions involving
metaphorical extensions of their basic meanings in terms of aspect or object designation categories (see Classes 1 , 4, 5, 6, Sec. 530).
\{doJ\} 'up, upward' has a freely varying allomorph \|doH \| which occurs somewhat less frequently than \|doJ\|. After \{bó\} 'auxiliary (rock-like)' (see Sec. 442) and as an aspectual suffix (for details, see Class 6, Sec. 530), \{doJ\} functions as an inceptive, referring to an action which has just begun or is in process of beginning.

come up.', tédoj! $\underset{\sim}{f}$ tédo:p! 'Stand up!'
\{jeH\} 'continuous motion in an unspecified direction, come (hither) without implication as to goal' is an extremely productive $I D$. As an aspectual, it conveys the related notion of action in process or transition, e.g., 'becoming...'. In constituency with the empty prefix \{oy \}, with the resultant construction as second constituent of a verb compound or following a participial in \{we\} (see Sec. 560), \{jeH\} reflects continuous action over a period of time. This morpheme also appears in a common construction before \{to\} 'recip. distrib.'. In a number of instances, there seems to be an added connotation of plurality of subject which may well be traceable to its distributive function.
lópjehdòwin 'come to a feast with someone' síheen 'float with the current'
bóhsyjè.tin 'sev. come to spear salmon for (us)' ká•nohjè̀n 'grow old'
lájdahjè•n. 'It's getting to be day.'
niki ónom nik dóhbojè•n. 'My head (still) hurts me.' hédato Pyjè̀n. 'They kept on trying in vain.'
mójehton 'keep coming back to drink'.
\{kiT\} 'down, downward (generally in a vertical sense)' also occurs as an aspectual in two different constructions: in constituency with \{CV \} with the connotation of approaching a natural term or goal, which has already been discussed, and with the auxiliary $\{b \dot{b}\}$ in an inceptive sense, translated as 'just about to' or 'beginning to'. In connection with the latter usage, one should consider the thamatic future \{kiT\} (see Class 8, Sec. 530) which is morphophonem mically identical with the present morpheme.
'ýkitmè•nsa. 'He didn't climb down (from the tree).' Kýkitboki•n 'start to sit down' nýnki•n 'fall or lie down'.
\{koJ\} '(move) away from in an unspecified direction' in constituency with $\{b 0$ \} as an auxiliary means 'unable, incapable of, fail to'. Thus,
? ýkoj: 'Go (away):'
mýhsyk̛ojpỳ. 'Let's go hunting.'
hónjehbôko:n 'have difficulty in breathing'
wéwejbòko•n 'stammer, stutter'.
\{no\} basically refors to generalized linear motion or
state, most commonly 'move along in an unspecified direction' but also 'move uphill, upstream' (as opposed to \{in-no\} 'downhill, downstream'), and perhaps in a few examples denotes an incomplete or progressive condition (cf. the analogous function of $\{j e H\}$ above). As a thematiw suffix, \{no\} is always translated as 'go(and...)'. Often \{no\} serves no apparent function, presumably representing a stylistic preference. In such instances it may frequently vary with zero. It is by far the most productive of the $L D^{\prime}$.〇ýnon 'go, goalong, go upstream'
bòhsýnotòn 'sev. go to spear salmon' hénon 'sev. are (in the act of) dying' bótan $f$ bótanon '(rock) is lying on top of it'. \{paJ\} 'toward or against a surface' also functions as an object designator in the sense of performing an action on, to, or for someone or something.
híkpàjton 'throw liquid on (someone)'
kàhlýkpà•n 'sneak up on'
'cà• 'ínpajoùn 'lean one's butt against a tree' pítispa•n 'be mean to someone'
nik bìspajkíton! 'Wait for me (later)!'
\{siP\} '(move) out, outward, out; ofiand upward, uphill' is also represented in two occurrences by the morph/sih/ $f$ ||sip \|. In a small number of constructions, \{siP\} apm pears to have the aspectual meaning 'completive or terminative'.
wípulsì:n 'pull out (and up) by the roots'
Pýsipnon $\underset{\sim}{f}$ ?ýsihnon 'go to relieve oneself' (the accepted euphemism for defecating or urinating -lit. 'go outside')

ఇàmamjámandi wí•sippè. 'Let's go up that mountain.' másipde. 'Did he finish that chore?'
\{si•to\} '(move) across, through' is a frozen construction composed of \{siP\} above plus \{to\}. Normally, this would result in */sipto/ or */sihto/ neither of which ever occurs. This morpheme is occasionally used in the metaphorical sense of (completely, thoroughly'.
pósi•ton 'wade across'
mòmisa túkedi jòsí•totìn. 'He poured the water through the hole.'
hý•nosi•tomè•n 'be immature' (lit. 'not be thöroughly grown up').
\{toto\} '(go) about, around' is actually one of the functions of the reciprocal distributive, a Class 4 thematic suffix. For a detailed exposition of this morpheme, see Sec. 530.
465.2 The LD's are treated here as constituting a single class. In a rigid sense, this is not altogether defensible. Two, three, or possibly even four LD's may occur in sequence within a given construction. With the exception of a few commonly occurring sequences, there is no fixed order of occurrence. The relative order in such cases
is presumably determined by the context and is not predictable in terms of grammatical environment. A few examples of the most frequently occurring combinations follow. \{co-no\} 'over, over the edge of', e.g., týpćconon 'jump over'.
\{como-jeH\} 'circle, move about aimlessly' sà jóconojèhki•n. 'He will circle about the fire.' hínconojè:n 'float with the current'. \{dik-no\} 'move against or toward a goal, reach' wósaiknon 'put one's leg against (something)' Pýdiknon 'arrive'. \{in-no\} 'downward, downslope, downstream' (see \{in\} above). \{in-piN\} 'downward and toward' (see \{in\}). \{no-jeH\} 'go about aimlessly', e.g., týtykdihàj ?ýnojè•n. 'I was walking about in the forest.'
\{siP-kiT\} '(put) up vertically, upand down', e.g., my’ki má•sa ćá•di býsipki•n. 'They stood.his hand up on a pole.' \{siP-piN\} 'up out of and toward', e.g., húmpujna•hàni ?osippin?ùn. 'Were you looking out the door?' \{si•to-jeH\} '(move) about, back and forth (aimlessly \%)' Pỳsí-tojè $\cdot n \quad$ 'wander about'.

It is worth noting that $\{j e H\}$ following another $I D$ adds the notion of aimless, continuous motion which seems to accord well with its basic meaning.

470. Stem Roots

Certain dimorphemic constructions, notably those including a stem formant or an ablaut vowel in constituency with particular root or prefix classes, are the equivalents of the corresponding prefix or root, i.e., the resultant constructions do not function as stems. These will be referred to as stem roots (SR). They are of two general types:
I) A Class 2 prefix plus a stem formant (the sole exception to this is the subclass of harmonizing prefixes which form stems in this manner), e.g.,
wísi•n 'sev. go out' $\left(<\{w i\}\right.$ empty morpheme $\left[p_{2}\right]$
$+/ /$ 'plural subject', the whole functioning as a $p_{2}$ ).
2) A Class 2 prefix, a medial, or a final plus an ablaut vowel (ID's do not occur in constituency with ablaut vowels. Free roots do but the ultimate constructions are stems.), $/$ hé/ 'carry with the hand' $\left(p_{2}\right)(<\{h A ̣\}$ 'by carrying'
$\left[p_{2}\right]+\{e\}$ 'fairly small' [vs. /há/ carry on the back'])
/law/ 'lift a large (flat) object' (medial) (< \{lAw\}
'lift an object' [med.] $+\{a\}$ 'large (flat)' [vs. /lew/ 'lift a smaller objectl])
/kot/ 'break, strike a large object' (final) ( < \{kA't\} 'break, strike' [final] $+\{0\}$ 'large' [vs. /kit/ 'pinch, abradel]).
480. Stems

Stems are composed of two or more of the elements
described above, forming constructions which may occur in constituency with thematic or inflectional suffix(es).

In the latter case, a stem is equivalent to a minimal theme and may thus properly be referred to as a noun or verb stem. Since minor words are neither thematic nor inflectional, they are also stems.
481. A simple stem is a construction consisting of one or two prefixes or a stem root followed by a root, or a free root alone or with an ablaut vowel, or a stem formant. The following types have been recorded (abbreviations for root types: $F=$ free, $i=$ initial, $m=$ medial, $f=$ final; hyphen indicates morpheme boundary, double hyphen separates ultimate constituents in complex stems):

1) A Class 1 prefix plus any root but an initial.
/’̀̀n-káj/ (F) 'fall backwards'
/bá--lap/ (m) impaled'
/Pyh-lekf (f) 'sneak along'
/hú•-koj/ (LD) 'wander off in a daze'.
2) A Class 2 prefix plus any root but an initial. /hè-pýp/ (F) 'undo, loosen' /hè-púl/ (m) 'dip (water) up'
/té-jak/ (f) 'mash underfoot'
/si-daw/ (LD) 'brush (crumbs) off'.
3) A Class 1 prefix plus stem (2) above. Most of the examples include an ID as root constituent. /hènwí-lek/ (f) 'wave one's hand'
/?èn=té-daw/ (LD) 'back away from'.
4) A stem root plus any root but an initial.
/hý-j=sòlok/ (F) 'buckskin moccasin'
/hé- =hùl/ (m) 'crumble'
$/ \mathrm{we}-\cdot=\mathrm{k} e \mathrm{~h} /(\mathrm{f})$ 'sev. run rapidly'
/bó-h=paj/ (LD) 'throw a rock at'.
5) A free root alone, with an ablaut vowel, or followed by a stem formant (for the latter, see also $\left\{\mathrm{im}_{2}\right\}$ Sec. 650).
/péne/ 'two' /péne-h/ (sf) 'twice, two twos'
 482. A compound stem is a construction consịsting of a root, stem, theme, or word plus a root or stem. An exhaustive analysis of compound types has not been made but examples of the most commonly occurring types are given here.
I) An initial plus a final, an $L D$, or a stem.
/piz-kót/ (f) 'break by burning'
/héj-čono/ (LD) 'chase (someone) over (something)'.
6) A medial plus a free, final, ID, or stem.
/lám-mùl/ (F) 'deep spot in the water'
/kóp-col/ (f) 'very dirty'
/hék-mit/ (LD) 'jump into'
/nỳn=máh-คù/ (S) 'support oneself on one's hands, face down'.
7) A free root plus any root but an initial or plus a stem. The free root plus free root subtype also includes the important inalienably possessed noun construction (see Sec. 670).
/Pék-nỳn/ (m) 'noon' /bís-?àl/ (f) 'survive' /lúmit-k̇̀̀j/ (ID) 'go fishing' /ník-nè/ (F) 'my mother' /'pý•s-luk / (F) 'little creek' /jim=hú-doj/ (s) 'raise one's arm (to shoot)'.
8) A stem, theme, or word plus a stem. Many of the word + stem compounds are descriptive terms which were historically object + verb constructions but which now consist of two bound constituents.
/jìm-húdoj=bàwah/ (s) 'try (in vain) to raise one's arm' /?ýdiknomehkit-cekit/ (T) (first constituent from stem /甲ý-dikno/ + thematic suffixes /meh/ and /kit/) 'it seems (they) wont arrive'
/rú•t-i=lut/ (W) 'black oak acorn' (lit. 'real acorn') /lưk-u=bò-si•to/ (W). 'coyote (kenning term)' (lit. 'he who runs across the creek').
500. The Verb
501. General

Morphologically the most complex of the word classes, a verb alone may constitute amajor sentence or a clause. The verb is defined as a verb or noun theme in obligatory constituency with an inflectional suffix complex consisting of one (minimally) or more modals and number and person categories, or with a participle, and optionally followed by one or more postfixes and/or postpositions. The inflectional complex-participial dichotomy determines two major classes: finite and non-finite.

Finite verbs fall into four classes: modal auxiliaries, which never occur in participial constructions; copulas, syntactically determined; dependent verbs, which occur only in constituency with clause subordinators; and all other verbs.

Non-finite verbs include a mixed class of aspectual auxiliaries, which do not occur with participles, and all other verbs (i.e., the majority) which do occur in participial constructions.

The inflectional suffixes can be described in terms of fixed position classes. Thematic suffixes are also characterized as occurring in position classes but the ordering of these optional classes is not always subject to rigid definition. That is, on a superficial level, there
would inevitably appear to be a sizeable number of exceptions to such a system of rules. The underlying factor in such instances is always traceable to some form of recursion. Thus, theoretically, a new theme may be created by adding any appropriate thematic suffix to an already existing theme, virtually regardless of the normal position class from which the suffix is selected. Carried to its ultimate ramifications, this could lead to a situation where it would be impossible (and pointless) to posit any order classes; however, practically, there does appear to be at least a preference in the relative ordering of these suffixes. Thus, the thematic classes are analyzed on the basis of frequency of occurrence in a relative position rather than exceptionless occurrence, and are further grouped by function. Particular suffixes or classes which then, in reference to the established position classes, appear in recursive constructions will be so noted in the discussion which follows.
520. Chart of the Position Classes

| Description |  |  |  | Number of Items | Class Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 0.0 \\ & \mathbb{X} \\ & \ddot{4} \\ & \stackrel{y}{6} \end{aligned}$ | O 管 \% En | Distributives <br> Purposive-habitual <br> Locative directionals <br> Object designators <br> Iterative <br> Aspects <br> Negative <br> Tense; aspect <br> Aspects; modal <br> Tense |  | $\begin{array}{r} 2 \\ 1 \\ 19 \\ 5 \\ 1 \\ 3 \\ 1 \\ 3 \\ 3 \\ 1 \end{array}$ | $\begin{gathered} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 7 \\ 8 \\ 9 \\ 10 \end{gathered}$ |
|  |  |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 6 \end{aligned}$ | $\begin{aligned} & 11 \\ & 12 \\ & 13 \end{aligned}$ |
|  |  | ¢ ¢ ¢ R | Number <br> Person | $\begin{aligned} & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 14 \\ & 15 \end{aligned}$ |
|  |  | 告 | Tense <br> Tense <br> Imperatives | $\begin{aligned} & 1 \\ & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 16 \\ & 17 \\ & 18 \end{aligned}$ |
|  |  | Empha sub <br> Anap | tics; concessives; ordinators <br> oric resultant | $\begin{aligned} & 7 \\ & 1 \end{aligned}$ | $\begin{aligned} & 19 \\ & 20 \end{aligned}$ |

530. Verb Theme

The verb theme consists of a stem, another verb theme, or a noun theme occurring in constituency with a thematic suffix. With the exception of the reduplicatives (see Sec. 430), the final suffix of the theme is always one of the immediate constituents of the construction. This also permits recursiveness in a theme (see above).

The thematic classes will now be described in detail.
Class 1 contains two of the morphs described in Sec. 450. /h/ 'plural distributive':
ćájćajnohkì•n 'will do several things'
bò -sa ? 'ynonòhton. 'He walked up and down the road.'
/j/ 'stem formant' in this position results in verb themes from nouns or verbs:
té•màjin 'feed an animal or a child' (cf.\{tér\} 'young animal, child' and \{mé\} 'offer, bequeathe')
pèphedéj: ' $\quad$ ome and eat!' (cf.\{héde\} 'proximal demonstrative, here').
Class 2 has one member \{sy \} which is variously associated with habitual or continuous action, usually goaloriented or purposive in character:
ćésyn 'look at (continuously), stare' (< \{cé\} 'see') mýhsyn 'hunt' ( < \{mýH\} 'shoot')
bo'nosyn 'in the habit of writing' ( < \{bo•no\} 'write'). Class 3 coincides with the LD's (see Sec. 465 for a de-
tailed description). Members of this class may occur with the preceding suffix classes,
?á•jajàhnon '(he) went screaming'
mýhsyk̇̉̇-n 'go hunting',
or recursively (as recorded) after Classes 4, 5, and 6. hini cétiḱk.n 'go to see (a doctor) about one's eyes' bóhsyjònon 'sev. go to spear salmon' sólbòsnoméhwonomàncodéno. 'You didn't go to finish that song long ago.'

Class 4 consists of five object designating suffixes, each of which expresses a relationship between the object or implicit object and the subject or the verb. Since all of these may occur in recursive constructions, it is possible to have two or more (rare) of these in the same string. They may occur after any of the preceding suffixes.
\{ti\} 'causative' by the very nature of the category often has a transitivizing effect on (inherently) intransitive verb stems or themes. It and \{to\} are the two most productive theme formants. This suffix is homophonous with $\left\{\mathrm{ti}_{2}\right\}$ 'benefactive' (cf. also $\left\{\mathrm{ti}_{3}\right\}$ 'adverbial suffix'), shares the same general distribution, and both constitute determining environments for $\|H\|$ (see Sec. 232). It is possible that any contrast in meaning is only apparent, due to the vagaries of translation, but, since both suffixes are of frequent occurrence and do reflect a consistent distinction on the part of the informants, this hypothesis
cannot be effectively substantiated. Pending the discovery of more decisive evidence, they must be analyzed as two different morphemes. \{ti\} also seems to occur in a few frozen constructions such as /núkti/ 'few, little' (cf. \{nưk\} 'worthless' and [nús\}.'short')."
'ó•tin 'burn (tr.)' (vs. $\{$ 'cóH $\}$ 'burn [intr.])
tíktitibostin 'finish making them all stop for (someone)' which includes two causatives in the same construction ( $<$ \{tík\} 'suffice' $+\{$ ti\} $=$ 'stop')
wénnetitòtotin 'make two (persons) get ałong with one another' ( < \{wénne\} 'good' $+\{$ ti\} $=$ 'be good to')
píjehtotijjòn 'give sev. a bath'
\{ti\} occurs recursively after Classes 5, 6, and 7. wéwejbòstin 'make (someone) finish talking'
ćétime•tīn 'make invisible' ( < \{'̣̂é\}'see' $+\{$ ti $\}=$ 'cause to see, be seen, visible').
$\left\{t i_{2}\right\}$ 'benefactive, for the sake of'. See \{ti\} above for remarks on identification of this morpheme and for additional examples.
bája•titoton 'crack acorns for one another' sà húpajtip nik: 'Build a fire for me!'
Recursively this also occurs after Classes 5, 6, and 7: wóhjotin 'repeatedly hit (someone) for (someone)' mỳnésa sóldojtìn. 'He began to sing for his mother.' minaj jóje•me•tinn: 'I didn't shoot it for you.' \{Pomis\} 'reflexive' indicates that the subject performs
an action upon himself. There are no examples of this morpheme in recursive constructions outside of the object designator class itself. \{romis\} often (but not always) occurs in constituency with reciprocal themes in \{to\} involving no apparent semantic contrast. The resultant construction is merely redundant. Furthermore, with a few verbs with inherently reflexive referents, this redundancy may be compounded by suffixing a second \{to\} to the theme in \{romis\}.
 cuikuttondmigtowa: 'Wash yourselves!', but nìhaj píjehtonòmiston. 'I'm bathing myself.' \{to\} 'reciprocal distributive', one of the commonest of thematic suffixes, covers a wide range of rather generalized meaning to which the arbitrary label assigned here can hardly do justice. In general terms, this suffix expresses interaction or interrelationship between any two phenomena. It may represent virtually any manifestation of the concept of duality. \{to\} and \{toto\} 'reciprocal' form a distributional subclass since they never cooccur. \{to\} appears in recursive constructions after Classes 5, 6, and 7. The examples are arranged by subfunction to illustrate as wellaas possible the usage of the suffix.

1) reciprocity between:
a) subject and identical object, i.e., reflexiveness mihano cíhton. 'You got dressed.'
b) subject and object
mỳsemsa círtitōn. 'They are dressing one another.'
c) two verbal objects
kàjihaj sýkkyttòn. 'I sawed the log in two.' péton 'eat (something) along with (something else)' wónonòhton ' compare two objects' nîki k̛̛mbali ćàtná•ntonà•sa bísin. 'He lives in the house opposite mine.'
d) two persons, things, places, etc. in derived nouns padito ' 'woman who has had a child' ( < \{máj\} (child $)$
kónojŁò 'married couple' ( < \{kónoJ\} 'woman') \{kyto\} 'natural group (animate)' (see Sec. 632).
e) two actions, motions
? ýmpintòn 'come in and out sporadically'
méjton 'buy' ( < \{méj\} 'give').
2) plural subject (a logical consequence of intaraction between two subjects and/or between two actions)
hýhton 'they seịne (repeatedly)'
'àmadi tó•pajtòn. 'Several went there.'
3) 'practice, pretend, play at' (from the notion of iterated interaction -- here presumably between the subject and the action)
píkytòn 'practice, train to swim'
ká•tton 'play cards'
rù•ti bájahtōn. 'crack acorns for the fun of it'.
\{toto\} 'reciprocal is clearly a frozen construction $(\{C V\}+\{$ to $\})$ which shares much of the distribution and semantic range of \{to\} above. It expresses primarily reciprocity between subject and object or between two actions. The latter function explains why it has dual privilege of occurrence as an ID in the sense of 'go around, about (doing something)'.
4) as a reciprocal:
bólopajjtoton 'help one another'
wí•toton 'get divorced from one another'
wéwejtotòn 'discuss' ( $<$ \{wéweJ\} 'talk').
5) as an ID:
'Ytoton 'walk about' jétoton 'glide around'.
Class 5 is represented by a single morpheme, $\{j o\}$ 'iterative', which as it were overlaps in function the two adjacent classes of object designators and aspectuals. \{jo\} designates plural, intermittent action which, in accordance with the context, may also imply a plural, individually distributed subject and/or object.
wóhjon 'hit repeatedly at short intervals'
kóleh'ymsa píjehtojozn. 'The boys are bathing by turns.'
méhjòdojjòn 'sev. jump up and grab it'
wótijòn 'one שatches fish, sev. catch fish'.
A small class of stems in $\{d o J\}$ 'up', all denoting 'carry, handle', form iterative themea by replacement of the $I D$ (second constituent of these stems) with $\{j 0\}$.
hájon 'carry (make sev. trips)'on one's back' (vs. hádo•n 'carry [once]')
sóhjon 'carry (iter.) in one's arms' (vs. sóhdoon 'carry etc. [once]').
\{jo\} also occurs after Class 6.
wóhbosjòn 'finish hitting each one (so many blows)'. Class 6 consists of three aspectuals, the first of which also occurs as an LD. The members of this class may be added to any theme already discussed above.
\{doJ\} 'inceptive' (see Sec. 465 for allomorphy and additional details) denotes incipient action or condition. 8 pédojpỳ. 'Let's begin to eat.' bòhsytijódojbòsin 'begin to finish salmon-fishing for' wómbòdojtin '(she) burst into tears'. \{bos\} 'completive' refers to terminal action, most often translated as 'finish (doing something)'. There is one ididlectal (or dialectal ?) allomorph || os || (LS). wóhboski•n 'will finish chopping wood' Típekànimsa wónobòsin. 'They all died off.' mỳmsa kú•subòsin. 'He became completely blind.' mónòsinaj. (LS) 'I drank it up.'

Recursively after Class 8:
mỳmsa bóhkammotobòsin. 'He finished hitting them.' \{dow\} 'verbal comitative' represents accompanying or concomitant action.
pédowin 'share one's food with (someone)'
nìksa kàtobosdówdawmè•n. 'He didn't come to finish playing with me.'
mìnaj píkydơwin. 'I'm going swimming with you.'
Class 7 has but one member, $\{\mathrm{meH}\}$ 'negative', which has one additional allomorph ||mi• || occurring as a nominal thematic suffix (see Class I, Sec. 632). In normal allegro speech $\|$ meH \| $\underset{\sim}{f}\|m e\|$, particularly before stops and nasals and almost always after \{hưmpuno\} 'care about' which, with $\{\mathrm{meH}\}$, constitutes a common cliché. In constituency with the singular and plural imperatives (Class 18), \{meH\} themes are used as an alternate device for expressing prohibition. This may be a calque based on the English pattern. The normally favored method is by means of the cavetive optative (see Class 13b).
pánpemèhki•nàj. 'I'm not going to smoke.' ?ýkojme pỳ. 'We had better not go.' dó•me•p! a do $\frac{\text { mèp! }}{\sim}$ 'Don't bite!' hùmpúnomenweteha hákjehton. 'Without worrying (thinking about it) he jumped off (the cliff).' \{meH\} occurs recursively after Classes 8 and 9. bờhsykámmotomè•n 'not still spearing salmon' bóhsysamè•n 'hadn!t made a habit of spearing salmon'. The next group comprises several tense-aspectuals which fall into three distributionally based classes. Class 8 contains two tense markers and one aspectual. \{kiT\} 'future' is homophonous with the $L D$ meaning 'down-
ward' (see Sec.465). As has been noted, the latter is also used aspectually with a terminative sense. Since both morphemes also share the same allomorphy, there is at least reason to suspect that future action is another aspectual metaphor of downward, terminal motion. However, any such semantic shift must remain speculative due to inconclusive evidence and the two will be treated as separate morphemes. \{kiT\} occurs recursively after Class 9.
lájda•haj ?ýkojmehki•n. 'I will not leave tomorrow.' Pýdiknòssesa táwalkitkàmmoton. 'He will still be working when I get there.'
bískitjà•m. 'Will you two stay?'
bóhsysaki•n '(he) will get the hang of spearing salmon'.
\{kammoto\} 'continuative' expresses action in process with no implication as to termination. It would appear to be analyzable into an empty morpheme \{ka\} + the $I D$ \{immoto\} ' (go) around, together' usealaspectualiy (3), but in any event the sequence is no longer synchronically segmentabłe as a suffix.
pékàmmoton '(he) is still eating'
mỳmsa wóhkammotowè •sin. 'He used tọ be hitting him.' héjakdyk ćíhkammotossetehàma ?ýda•n. 'I had just started dressing (was in the act of) when he came in.'
\{wono\} 'remote past' refers to situations which occurred at some time in a past which is felt to be remote by the speaker. This may have been in an absclute sense such as.
for an event which transpired before the speaker was born, or in a relative sense associated with an occurrence which is beyond the speaker's range of memory.
míhano bíswomonà•m. 'You could have been there.' sòldojmehwónomancodèno. 'They say you didn't start singing long ago.'
wò•lem rîki bískymmi• ?ýdawwònon, 'White men came before I was born.'
nihàndes tújwònon. 'I must have fallen asleep.'
Class 9 includes two aspectuals and a modal.
\{We?es\} 'usitative' denotes usual or habitual action over an explicit or (more often) implicit period of time, or action repeated within the same period of time. \{We?es\} is subject to reduction in the following manner: \|We•s \| in normal speech $\sim \|$ Wes $\|$ in allegro speech (ES), $\|$ Weres $\|~ a\|$ we•s \| ( $I S$ and RJ).
nìhaj sými mỳhsyweresin. 'I usually hunt deer.' kúlu•diha ?ýmpinnèresin ( Z ? m mpinnè-sin). 'He generally comes in in the evening.' tépajjè’esim ýsi•ton. 'Stepping (from stone to stone) he got across.'
solle-sinàjes. (ES) 'We used to sing.'
máko• hájowe•sim Pýda•n. 'All the while carrying fish, he came home.'
\{sa\} 'habitual' occurs frequently in the narration of myths with norppssible reference to habitual action but
always with a theme in the past tense. The most reasonable explanation seems to lie in the assumption that originally the speakers had past custom in mind when referring to a mythological context but that this practice soon became a stylized convention which could be (and is) indiscriminately applied to any situation occurring in the past. There are other devices, both morphological and syntactic, for expressing habitual action where necessary. This view is supported by the common quotative formula used extensively throughout the myths, Pàsám?an 'he, she, they said.', literally '(he) used to say that, (they) say.'
bíssani. 'Were you in the habit of staying there?'
'Did you live there?'
mỳmsa nem Pítusàn. 'He's susceptible to illness.'
nihatema sólsam. 'I used to sing (and still do).'
?àmamwýtymtymimkà•nom bỳsa• mé•nkani, ?ýsipsàm?àn. 'Old Man Thunder took his cane and went out, they say.'
\{na•\} 'subjunctive' expresses potential result of an explicit or (often) implicit prior condition. It is usually translated as 'would (if....), could (if...)'. It occurs most frequently in past tense constructions.
nỉki lư•lim wénnecée ?àpćó nì ?ýsiptonà•m. If my leg were all right, I could go out.'
sólsanà•m. 'He would get to like singing.' (i.e., if he gave himself the chance)
nì Pama pémehnà•m. 'I wouldn't eat that (if I were you).'
mì sólna•'codèno. 'You would have sung long ago (if you could have).'

Class 10 consists of \{ma\} 'past tense' (?) which is set apart from the two preceding classes in this group for two reasons: it poses a problem of segmentation, and, no matter how it is segmented, at least one and possibly both of the morphs involved may occur after Class 9 above. As analyzed here, these morphs represent one morpheme with the following aliomorphy: ||im || occurs after a vowel (long or short) and before any CV sequence or juncture with one exception, namely after the auxiliary verb \{ha\} in the same environments; ||ma || occurs in the latter environments and elsewhere. Although this appears to be a fairly productive suffix, its identification remains tinged with doubt. In most examples, past tense seems to fit the situations but there are apparent exceptions, some of which are certainly due to deficiencies in translation, others perhaps not so. Furthermore, on the basis of the present analysis: 1) there are a few constructions which must represent tautolow gies, i.e., \{ma\} occurs twice or with \{wono\} 'remote past' in the same string, 2) \{ma\} must be accorded triple privilege of occurrence as a thematic suffix, a participle, and as an inflectional suffix. However, when it occurs in a finite verb other than an auxiliary, its class assignment is ambiguous.

The principal alternatives would be to analyze both
morphs as representative of two homophonous and seemingly synonymous morphemes occurring in different major internal distribution classes, or to analyze each morph as a separate but synonymous morpheme, or to segment the /a/ of /ma/ leaving us with the former as an unidentifiable residue. Since none of these solutions would solve the questions raised by tautological constructions and multiple privileges of occurrence, and all of them would only further complicate matters, they have been rejected in favor of the above proposed, albeit tentative, solution.

As a participle:
mìhani bíssàm. 'Were you in the habit of staying there?' mỳmade ?ýkojna•․‥ 'Would he have gone?'
As a thematic suffix:
Pámadihas biswónoman. 'He must have stayed there quite a while back.' (contrast ...bíswonon 'he stayed there some time ago' [not quite as̀ remote as biswónoman]) As an inflectional suffix: mỳmampa sými c'èn. 'He wondered if he saw the deer.' Pàdihamdes mípatin. 'I did that then.' kólehkydihàma wó•non. 'She died in childbirth.' Kájpihatèma sỳmi mý•n. 'I shot the deer yesterday.' mýmamànčo wó $\operatorname{rnotin.~'I~hear~he~must~have~killed~him.'~}$ ambiguously:
sólwonomdèno. 'You were always singing (in the old days).' bísmancodènos. 'You must have been alive then.'
wóhwe•smède. 'Was he in the habit of hitting him?' tautologically:
nìhatema sólsam. 'I used to sing.'
mihamdeno mýhsywonosàm. 'You used to hunt long ago.' ఇàma pémambè. 'Had he eaten it?' (contrast ...pémabe. 'Did he eat it?'

The same two morphs also occur together in an auxiliary verb construction which has been elicited from two different informants (ES and LS) on several occasions, and which is consistently glossed as 'wish...had, ought to have...'. mîhámmanos mỳkan $P$ ýko $\cdot n$. 'You ought to have gone, would have wanted to go with him.'

Pàdihammas 9 ýnon. 'I wish I had gone.' (contrast
 The auxiliary in these constructions is always in constituency with \{s\} 'emphatic affirmative'.
540. Inflection

The inflectional categories of mode, number, and person define finite as opposed to non-finite verbs. Finite verbs in general may be divided into two classes dependent upon the choice of modal suffix: those which may occur in auxiliary verb (see Sec. 580) constructions and those which may not. Those which do are subdivided into those which occur only in auxiliary constructions and those which may
occur either with or without an auxiliary. Finite verbs which never occur with an auxiliary correspond almost entirely to what one might term "non-indicative" categories which involve contingency or dependency of some sort: the optatives, imperatives, conditional, and dependent verbs.

Viewed paradigmatically, the various allomorphs of the members of the person, and, with less complexity, those of the number classes, form sets, the occurrence of which is determined by the preceding modal. Thus, in a slight departure from the order of presentation heretofore adhered to, these classes will be treated first so that the frequent references to them which are necessary in any discussion of the modals can be more conveniently and intelligibly made.
541. Person and Number. Most finite verbs are overtly inflected for two subject persons, firsteand second (third is unmarked), and two subject numbers, dual and plural (singular is unmarked). The class of person markers closes a finite verb construction. This, however, does not prem clude the possibility of appending one or two postfixes (see Sec. 550) to such a construction.

Person (Class 15).
\{is\} 'first person subject' has the following allomorphs: $\|j\|$ after an auxiliary verb (there are no examples with \{ma\}), zero after \{ma\} 'past' and '\{py\} 'hortatory opt.' non-
singular, and ||is || elsewhere. ES occasionally shows $\|$ is $\| \sim \quad \varnothing$ after $\{d e\}$ 'interrogative' and $\left\{d e_{2}\right\}$. nìhaj hémnon. 'I'm reading.'
nìhatema hémnon. 'I was reading.'
nìsa•maja•s hémnon. 'We two are reading.'
sólis. 'Let me sing.'
ćá•ca min jánakas. 'Let me straighten your back for you.'
ヤùjna. १ýsipjèssesa ćén. 'He saw (us) as we came out of the house.'
\{no\} 'second person subject' is represented by these allomorphs:

Singular: ||min || before clause subordinators when not preceded by \{be\} 'permissive opt.' (cf. also \{min\} 'second person pronoun'); \|ny \| after \{by\} 'cavetive opt.'; \|nil| affer \{de\} 'interrogative'; \|no \| ~ $\quad$ ( after \{be\}; and ||no \| elsewhere.
After dual and plural: $\left\|_{\text {mo }}\right\| \sim\left\|_{\text {m }}\right\| \sim \varnothing$ after $\{b e\} ;$ ||m || after \{de\}, \{by\}, and before clause subordinators; and $\|$ mo $\|$ elsewhere.

Singular:
nìhaj kémince hánukun. 'I got scared when you laughed.' nìk 'éskatabỳny. 'Don't look at me!! hýbo•di bisni. 'Did you stay at home?' sólbeno. ~ sólbe. 'You may sing.' mihano ${ }^{\text {épbybỳ•n, 'You are afraid.' }}$ háwihamdèno mý•n. 'You shot the fox.'
mìmánčono wó $\operatorname{notin.~'They~say~you~killed~him.'~}$
Non-singular:
cíhtobàja•自o. ~ ćíhtobàja•ㅡㅡ ~ cíhtobè. 'You two may get dressed.'
céjem. 'Did you (pl.) see him?'
pélanak pỉkokójbyjà•m. 'You two had better not swim out (too) far.'
mímem màko • wó • tijem'ehàj mýtatin. 'If you (pl.)
catch the fish, I'Il roast it for (you).'
mòm'cá•haja•mo kájtin. 'We two felled that tree.'
nìsemamdéjemo cúku pèn. 'We (pl.) ate the acorn soup.' Number (Class 14).
$\{j a \cdot\}$ 'dual subject' is zero after $\{p y\} .,\|j a \cdot\| \sim \varnothing$ after $\{b e\}$, and $||j a \cdot|| ~ e l s e w h e r e . ~$
\{je\} 'plural subject' shows parallel allomorphy: zero after \{py\}, \|je \| ~ $\varnothing$ after \{be\}, and $\|j e\|$ elsewhere. For examples, see Class 15 above and \{py\} 'hortatory opt.'. Thus, summarizing the distribution of the Number and Person allomorphy ( $A=$ only with auxiliary, $B=$ with auxiliary or other finite verb, $C=$ only with finite verb other than auxiliary; I = after auxiliary [with no intervening modal], II $=\operatorname{after}\left\{m a . . . \mathrm{de}_{2}\right\}$ when $\{n\}$ does not intervene, III $\dot{E}$ in all environments except those listed for the other sets here, IV $=$ after $\{b e\}, V=\operatorname{after}\{d e\}$ 'interrogative', $\mathrm{VI}=$ after the clause subordinators, VII $=$ after $\{b y\}$, VIII = after $\{p y\}$ ):

Subject Reference

542. The Modals. Modals may be broken down into three distributional classes:

1) those which may occur before \{de\} 'interrogative', including two evidentials and the conditional, and which may be further subdivided into two additional distribution classes,
2) those which occur only before number and person classes, including modal categories only,
3) those which do not occur after other modals nor before the number and person classes, including the imperatives. Exceptions to these statements concern the distribution of \{be\} which is discussed in detail below.

Semantically, modals refer to the attitude of the
speaker toward the topic and/or comment.
Class 11 consists of one morpheme, $\{n\}$, which it is difficult to identify in any precise fashion. It is clearly associated with uncertain evidence, supposition, or conjecture on the part of the speaker, yet it does not express such an evaluation as strongly as \{pa\} 'dubitative' does. $\{n\}$ occurs after Class 10 and before Class l3a.
nihàndes tújin. 'I must have fallen asleep.'
Tàmadihànno bísin. 'They say you stayed there.'

mimáncono wó•notin. 'They say you killed him.'
Class 12 contains two members.
\{'co\} 'quotative or hearsay' before second person nonsingular endings shows $\|$ 'co $\|\stackrel{f}{ \pm}\|$ 'co $\|$ (cf: \{be\}, \{de\}, and $\left\{\mathrm{de}_{2}\right\}$ ). It may occur after the preceding modals and before Class $13 a$.
mỳmamco wáda•n. 'I hear he ran away.'
mỳm wádahcódè. 'Did he run away? I hear he did.' hòjamkúlu•di kádikçodè. 'He said it rained last night.' mỳmácópa wo •le jániton. 'They say he might have told. the white man.'
wó•notiçàja•mo. "f wó•notiçòja•mo. 'They say you two
killed him.'
sólćèjemo. f sólćòjemo. 'I hear you (pl.) sang.' \{pe\} 'conditional' expresses the projected result of á prior condition. As far as is ascertainable, this appears
to be nearly synonymous with \{na•\} 'subjunctive' (Class 9) in most contexts. IS has produced a few tautological utterances where both occur in the same string but ES denies the viability of such constructions. It may occur after \{ma\} and before $\left\{\mathrm{de}_{2}\right\}$.
nì hýhćes?an, kéminpès. 'If I knew how, I would dance.' míPapejèm. 'Would you (pl.) say that?' wó•nopedèjemo. 'You (pl.) would die.' sólwonompèno. 'You would have liked to sing.' mì 'ýnona•peni Pámanak. (LS) 'Could you go there?' Class 13 falls into two subclasses, those which may occur after other modals (13a) and those which do not (13b). Class l3a includes the following: \{de\} 'interrogative mode' exhibits these allomorphs: ||do || before dual and plural, but ||do || ${ }^{f} \varnothing$ when second person; zero before second person (singular); \|de || elsewhere. Undoubtedly due to the fact that the interrogative is redundantly marked for the second person in all three numbers by the allomorphs of the second person, dual and plural morphemes, informants tend to prefer the zero alternant. \{de\} occurs with group $V$ endings.
ćékojdàja•m. f cékojjà•m. 'Did you two go to see it?' cékojąàja•s. 'Did wẹ two see it?' hẽ̛dedihadèjes péki•n. 'Are we (pl.) going to eat here?' suikudèjem. $\mathcal{L}$ súkujèm. 'Were you (pl.) unlucky?' súkudè. 'Was he (were they) unlucky?'
$\left\{\mathrm{de}_{2}\right\}$ remains persistently unidentifiable. It is almost completely homophonous with the interrogative, differing from the latter in the shape of one of its allomorphs, and largely shares the same distribution, yet $\left\{\mathrm{de}_{2}\right\}$ frequently occurs in constructions which could not possibly be interpreted as interrogative. It appears most often after \{ma\} and $\{n\}$ and always with number-person set III, i.e., non-interrogative. It may be omitted in a few constructions but in many others the informant refuses to accept any such tampering. Its allomorphy is identical with that of the interrogative with the exception of \|te \|, which occurs only in the first person singular with \{ma\} (without the intervention of $\{n\}$ or $\{p e\}$ ) and metathesized in that environment, and the distribution of $\|d e\|$, which is restricted to occurrence with the first and second persons. $\left\{\mathrm{de}_{2}\right\}$ occurs with groups II and III endings.
mìma•mamdája•mo Pýko•n. 'You two went.' kówo•hamcodèjemo pén. 'I hear you (pl.) ate eel.' nihatema májdy pínin. 'I heard the man.' tújinatèméo. 'They say I slept.' nìhandes sí•mpykbò•n. 'I must have gotten dew over myself.' \{pa\} 'dubitative' has unique privileges of occurrence as a modal suffix, an auxiliary verb, and a copula. It reflects relatively strong doubt cast on the statement or question by the speaker. \{pa\} may occur after the above described modals with the exception of \{pe\} for which there
are no recorded examples. \{pa\} occurs with group III endings.
mỳmampa bó•non. 'He wonders whether he wrote.' sóldojpàno. 'You might hạve started to sing.' nìháncopas ংàmamkóle. ćén. 'I wonder if I might have seen that boy.'
lópenapà. 'Maybe he stole it.'
Class 13b comprises the optatives which express relatively mild injunction as contrasted with the imperatives (see below). With the exception of \{be\}, the members of this group do not occur after other modals. All may occur in dependent constructions.
\{be\} 'permissive optative' functions primarily in two related ways. It expresses permission granted to perform an action, or the result (or projected result) of a prerequisite action. It deviates slightly in some respects from the others of this group inasmuch as it appears somewhat rarely in interrogative (although curiously only with the $\varnothing$-allomorph of $\{d e\}, i . e .$, identifiable only by accompanying person and number allomorphy) and future imperative constructions before \{su\} and \{kuton\} (see Sec. 543). There are also a few examples in which it occurs after \{ma\}. The interrogative examples may be spurious since they were perm haps elicited with undue pressure on my part, never spontaneously. \{be\} occurs with group IV endings. Allomorphs are as follows: \|bo\| $f$ \|be\|before second dual and plu-
ral (q.v.), i.e., if person and number are overt in the verb, ||bo || is the alternant; if not, ||be || ; ||bo || before first dual and plural; and ||be || elsewhere. ?'f́mitbàja•ssesa mỳm dý•'cikpùlin. 'He opened the door so that we might come in.' mìnaj líjani méjin ?ýkojbe?àn. 'I gave you the money so that you could go.'
lúmitk̉ojbèjes. 'May we go fishing?'
?àmahambe kádi•n. 'Oh, that it might rain!: I hope it rains.'

Pàmadi tújbe, mímem. 'You (pl.) may sleep there.' \{by\} 'cavetive optative' is commonly used to express prohibition, warning, or, in dependent constructions, negative result. It occurs with group VII endings.

Tàma pébyny. 'Don't eat that (i.e., I wouldn't if I were you)!'
sólam mìn dó•by. '(Watch out!) A snake might bite you!' nỉki líjani méhtu•n, ?ýkojbỳsse. 'He took back my money so that I couldn't go.'
nisem mi?atibỳjes. 'We'd better not do that.'
\{py\} 'hortatory optative' denotes encouragement and, in dependent constructions, positive option or result. Before \{is\} 'first person' (sing.), \{py\} often has the connotation of intention. This morpheme is restricted in occurrence to fist and third person constructions, thereby constituting a defective paradigm. It occurs with group VIII endings.

Before \{je\} 'plural', it is represented by $\|$ pe $\|$; before \{ja•\} 'dual', by \|py || alternating rarely with \|py?y || (LS); before \{is\}, by zero; andalsewhere, that is with the third person, by \|bo \|.
pù•ti bája•pè. 'Let's (pl.) crack acorns.'
Ḱáminpỳ. ~ Káminpỳ?y. (IS) 'Let's (du.) dance.'
wéwejbòsis. 'Let me finish talking.'
?ýnos. 'I'll go, let me go.'
pỳly méh?ubò. 'Let him hold the ball.'
mỳhaj méjin, cébơò̀n. 'I gave it to him so that he could see it.'
543. Classes 16,17 , and 18 constitute the imperatives. As has been noted above, these do not normally occur after other modals. There is, however, one exception to this statement. What is apparently \{be\} has been recorded on a few occasions before the future imperatives, the resultant construction having the force of obligation, roughly translatable as 'must, have to, etc.'.

Class 16 is represented by \{su\} 'future (imperative)' which must occur after \{be\} and before Class 18, may occur before \{kuton\}. Idiolectally, \|su || (ES) alternates with \|sy || (LS).
pěbesùp: 'Be sure and eat (when you come by)!' màkpajbésykùton! 'You must try it (sometime)!' nìk bòlopajbésywà! 'You (pl.) will have to help me!' Class 17 also has but one member, \{kuton\} 'future (im-
perative)'. This seems to be synonymous with \{su\}, but note the redundant cooccurrence of the two (a hapax from LS ) above. \{kuton\} must occur before a member of Class 18. It may be in part historically segmentable. Compare \{ḱńn\} 'first, prior' and \{to\} 'reciprocal distributive'.

Dújdi nik bìspajḱkiton: '(Go) to the house (and) wait for me!'
?ỳhjo?e-k̉́tonnà: 'Be careful (pl., i.e., when you get there)!'

Pỳmpinkúton: 'Come in (after a while):'
Class 18 consists of the imperatives proper. Imperative constructions normally occur in constituency with \{!\} emphatic intonation. They do not occur before personal endings.
\{p\} 'imperative singular' refers to a command addressed to one person. It has a morphophonemic variant, zero, after any consonant but $h$ or $\|H\|$ (which is in conformity with the syllable canon, see Sec. 140). However, after \{méH\} 'take, grab', the expected $|\mid p \|$ occasionally varies with zero. Since $\{\mathrm{mé}$ \} esthibits irregularity in the forms represented by its final segment in other environments as well, this is not particularly surprizing (see Dictionary for fuller treatment). There are also two or three allegro recordings from texts (LS) which show a tendency for $p$ to become $h$ in word-final position after emphatically stressed vowels (cf. céh! \{cé-p\}; móh! \{móp\}).
mèhヤúp! 'Hold it!' màhwó•p! 'Clap hands!'

nìk bólopàj! 'Help me!' pédaw! 'Come and eat!'
hú-cik! 'Forget it!'
\{Wa\} 'imperative plural' expresses a command addressed to two or more persons. mìmemcúúttowà: 'Wash yourselves:' májkim, ’ỳjé•wa: 'Children, come here!!
 hìnnahwokítta! '(Go) forward!' sóllà: 'Sing!'

## 550. The Postfixes

The verbal postfixes may be added to finite verbs. They fall into two order classes, the first of which may be further broken down into three distributionally based subclasses. There is no generally applicable class meaning, rather each subclass has a function which is quite distinct from that of any other subcass.

Claasl9 comprises a class of emphasis markers which occursafter auxiliary verbs; a concessive and an intensive which occur after optatives and imperatives; and a class of clause subordinators which occur after finite verbs other than auxiliaries.

The emphasis markers are:
\{s\} which denotes relatively mild emphasis applied to
the clause as a whole. It is often employed more as a preferred stylistic rather than emphatic device.
po•dymas jánitohèl.u•n! 'Mosquito almost told him!'
mímwetehandènos pén. 'You ate it all by yourself:'
míma•mandàja•mos míratin. 'You two must have done that!' pùdipemjá•mhamàndes ?ámamàn. 'That's a pretty cloud, isn't it?'
\{kas\} which conveys relatively strong emphasis, is undoubtedly a frozen construction composed of an empty morph $/ \mathrm{ka} /$ which occurs in a few emphatic forms $+\{\mathrm{s}\}$ above. Recorded instances of \{kas\} are fairly rare as opposed to those of \{s\} which is extremely productive.
hómohanikàs ?ýko•n! 'Where are you going!?' hèdenak Pýpincehàjkas wó•notikì•n! 'If he comes here, I'Il kill him!'
hési ?ánanikàs! 'What did you say!?'
\{ta\} 'concessive' (8) has another privilege of occurrence as an auxiliary (see Sec. 581). As a postfix, it has been recorded after the optatives \{be\} and \{py\}, and the imperative singular $\{p\}$. There is some slight doubt as to the identification of this morpheme but it is usually associated with a concessive attitude on the part of the speaker.
bája•pỳta. 'Let's crack acorns anyway (since there's nothing better to do).'
wíleklèkesta. 'Just the same, I'd better hurry.'
sólbaja•stà. 'Let's try to sing anyhow.'
mákpajtà! 'Try it anyway!'
\{hájdyk\} 'intensive' occurs only after cavetive verbs. It was probably originally a construction formed from a morph /haj/ 'privative' ( ( ) + a common root with intensive meaning $\{d y k\}$.
bèlem míPatibỳnyhájdyk! 'Don't ever do that again!' mùlnak pikok'ójbyja•mhájdyk! 'Don't you two dare swim out to the deep spot!'

Tàma pébyhájdyk: 'He'd better not dare eat that!'
The clause subordinators relate the clauses to which they are postfixed to the main clauses as prior condition or action (usually in a causal sense) to result of effect. Clause subordinators identify the preceding verb form as a dependent verb (see Sec. 570). The initial \|'c \|of both members of this group is represented as $/ \mathrm{s} /$ in normal speech and zero in allegro speech following $s$, and /'c/ elsewhere. In deliberate speech ||c ||usually remains /'c/ after s.
\{'ce\} occurs when the subjects of the dependent and main clauses are different (for identical subjects, cf. the participle \{is?an\}). It has the following general functions:

1) object designating when the main verb refers to saying, thinking, doing (i.e., demonstrative verbs);
2) conditional when the main verb is a conditional or future (implicit of explicit);
3) causative when the meanings of the dependent and main verbs are such that they would normally be interpreted by the listener as expressive of a cause and effect relations ship. A formally defined subcategory of this function is purposive when the dependent verb is cavetive.
4) temporal elsewhere (i.e., 'when, as soon as, while, etc.') mènemmípàde, nì witasse: 'Who says that I lied!?'
 right, would you go out?'
mì màko• wó•timincehàj, ni mýtakì•n. 'If you catch the fish, I'll roast it.'
pèkym ḱoloćesa wém bìsin, 'Because there was no food, he was without.'
sỳ•m nik dóhwonoćehä̉j lá?əjsan. 'I limp because the dog must have bitten me (long ago).'
nỉki líjani méhtu•n, フýkojbỳsse. 'He took back my money so that I couldn't go.'
mìmem sóljemćesa mỳm kén. 'When you (pl.) sang, he laughed.'
céhejjje ssehàs ḱfion! 'When I looked around, he was gone:' \{ce \} followed by the generaì postposition \{te\} 'but, although' constitutes a very productive construction with essentially the same semantic range as the latter, i.e., relating the dependent to the main clause as a proposition contrary to the latter ('although, nevertheless, in spite of, etc.').
wò•lem wáda•cetehàj ném wàtamin. 'Although the white man ran away, I ran after him.'
mì 'amadi bísminçètehaj césakmè•n. 'In spite of the fact that you were there, I didn't recognize you.' nìhaj héw ?assetesa wí•n Pàn. ' I said, "Yes."", but she said, "No."'
The remaining subordinator, $\{$ cewi• $n\}$, appears to contain \{'ce\}, but the residue is unanalyzable (although one might conceivably consider \{wíH\}, a stem expressive of general negation, rejection). This morpheme is fairly rare of occurrence and, in the extant examples is translated as causative.
mi?atícewì•nsa káditon. 'He fought back because he was doing that.'
nìhaj kémirćewì•nı, hánukun. 'I got scared because you laughed.'

Class 20 consists of the anaphoric resultant \{ran\} which occurs also as a connective (see Sec. 800). After optatives, it has purposive effect on the preceding clause; after $\{$ ce \}, occurrences are rare and appear to add nothing to the meaning expressed by \{ce\}. This morpheme is a frozen construction composed of \{?a\} 'anaphoric demonstrative' + \{in\} 'main clause participle' which, historically, no doubt constituted a clause in itself. In two instances, a morph $/ \mathrm{Pa} /$ reflecting the same sense of purpose occurs suffixed between the optative \{be\} and the person marker \{is\}, and
once before the participle \{is?an\}. These occurrences probably do not represent the normal distribution (and allomorphy) of \{ran\} but they do show that it may still be segmentable intuitively by the speaker. Semantically, the connection with \{?á-in\} is clear enough in the sense *'that of the aforesaid being so, then...'.
bís bisbó?àn! 'Let him live!' (lit. 'Let him so that he may live.')
nỳki pèm pítupby? ${ }^{\text {ann }}$, hómpa•n. 'He fought so that his food woulan't burn up.'
mìnaj líjani méjin, `ýkojbe?àn. 'I gave you the money so that you could go.'
 because) he turned around, that hollow tree closed on him.'
560. The Participles

A participle is a morpheme which is in constituency with and closes a verb theme (or an uninflected verb) rem sulting in a construction which is tactically either a (nonfinite) verb, when it is in constituency with an auxiliary, or an adverb, when in constituency with a main clause. This basic constructional dichotomy is the basis for setting up two classes of participles.

The non-finite main verb class contains two members.

Normally participial constructions of this type are in constituency with a finite auxiliary verb. However, where the information (inflectional) carried by the auxiliary is explicit enough from the broader context to avoid any serious ambiguity or misinterpretation, it may be omitted. The resultant elliptical clauses occur fairly frequently in the narration of texts.
\{in\} is essentially neutral semantically. Its primary function is to identify a non-finite verb, yet where it is necessary to make explicit a distinction in tense (bepast and non-past) between two parallel or otherwise identical constructions, \{in\} serves as a contrastive non-past (or recent) to \{ma\}. Aside from such situations, \{in\} can and does occur with themes in any tense: past, remote past, future, and unmarked or recent.
píjehtontehàja•mo pè•lanak píkojmè•n. 'You two (may) swim, but don't swim (too) far out.'
mìhano wássatiwè•sin. 'You keep on doing it wrong.' mòmbákamsa 刀éculàkan. 'That leaf is brownish red.' nìhaj sỳmi jýlykyn. 'I pounded the deermeat.!
mỳmsa lópesan. 'He steals (habitually).' (contradt mỳmsa lópesam. 'He used to steal.').

For additional examples, see Sec. 530.
\{ma\} 'past tense' (?) as a participle is represented only by the allomorph $|\mid i m \|$. For complete details and examples, see Class 10, Sec. 530.

The main clause class includes two morphemes which parallel in function the clause subordinators (see Class 19). Iike them, they are in constituency with non-main clauses.
\{is?an\} is used when the subjects of both the participial and the main clause are identical. Its functions are otherwise equivalent to those of $\{c e\}, q . \nabla$.
hỳbo-di ?ýdiknos?àn, bìspajkúton nik! 'When you get to my place, wait for me!'
niki sólky tó•je•s?àn, Pàpóo ni sóltina•m." 'If I had brought my instrument, I would have played it.'
pébosis?anàjes, ?ýsipki•n. 'As soon as we finish eating, we'll go out.'
nèm ?okos?ồnaj pén. 'I ate because $I$ was very hungry.'
When this participle occurs before the auxiliary. \{hamo\} 'you (are)' in allegro speech, there is a strong tendency towards haplology of the sequence. Thus,

२àce, kúmis?ano (*kúmis?ànano) bý•tbý•t ?ảkúton! 'Sọ, when you are suffocating, say (cry out), "býtbý•t!"'
wássamces?àno (*wássamces?ànano) wássamcen, wèm. iIf you don't like it, you just don't like it.'
\{we\} refers to continuous action accompanying and usually simultaneous with that designated by the main verb. It alone among the participials may occur in nominal themes (see \{pe\}, Class I, Sec. 632 and \{ni\}, Sec. 633.2), and also before the postposition \{kana\} (see sec. 900).

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nỉki sólky tó•je•ṣàn, ?àp’óo ni sóltina•m. 'If I had brought my instrument, I would have played it.' pébosis?anàjes, ?ýsipki•n. 'As soon as we finish eating, we'll go out.'
nèm ?ơkos?ẵnaj pén. 'I ate because $I$ was very hungry.' When this participle occurs before the auxiliary. \{hamo\} 'you (are)' in allegro speech, there is a strong tendency towards haplology of the sequence. Thus,
?àce, kúmis?ano (*kúmis?ànano) bý•tbý•t ?àkứton! 'So, when you are suffocating, say (cry out), "bý•tbý•t!"' wássamces?àno (*wássamcees?ànano) wássamceen, wèm. 'If you don't like it, you just don't like it.'
\{we\} refers to continuous action accompanying and usually simultaneous with that designated by the main verb. It alone among the participials may occur in nominal themes (see \{pe\}, Class 1, Sec. 632 and \{ni\}, Sec. 633.2), and also before the postposition \{kana\} (see Sec. 900).

Occasionally in allegro speech or sporadically in normal speech, an allomorph \|We \| may occur.
nìhaj sólwe ( ~ sólle) Əýnon. 'I walked along singing.' býsa• tó•je•we, wènehné•ti ’ýtotok̀àje•n. 'Carrying his cane, he walked slowly about.'
mýhsywe 9 ýko•n. 'He hunted as he went.'
bó•wekànasa tétatòn. 'He alternately hit him and kicked him.' (lit. 'While hitting intermittently, he kicked him.') màji hádo•wekàna, Py̆mpi•n. 'Each one carrying salmon, came in.'
Paralleling \{'ce\}, $\{w e\}+\{$ te $\}$ 'but' form a most productive construction. As a postposition, \{wete\} occurs as a frozen construction (see Sec. 900).
'cí•wete, hởmma•ti ?ýnomè•n. 'Although he was dressed, he couldn't go.'

Pépenim púkwete ( ~ púkkete), Púhsaman. 'Having turned into a yellowjacket, he was there (like that).' nìhaj 刀ýkojkitwète, wín. 'I was going to go but I didn't.'

570. Dependent Verbs

An important class of finite verbs are those which occur before Class 19 clause subordinators. These are dependent verbs . With the exception of an occasional elliptical sentence, these, along with any other cooccurring clausal elements, are in constituency with a main
clause. The second person (singular) subject is represented by a unique allomorph in deperdent verbs (see Sec. 541). For a description of the various types and illustrations of dependent verbs see the clause subordinators, Sec. 550.
580. Auxiliary Verbs

An auxiliary is a verb which normally occurs in constituency with another verb. The latter does not include dependent verbs nor main clause participials. 'Normally' is used advisedly since there are a very few exceptions to the general definition given above. These will be discussed in the appropriate sections. Auxiliaries may be divided into two principal classes, one of which may be further subclassified on both distributional and semantic grounds.
581. The modal auxiliaries are always fully inflected, the resultant constructions occurring only in immediate constituency with noñfinitemain verb participials (see Sec. 560). Formally speaking, the modals also constitute a class of clitics since they are words (i.e., inflected themes) which never occur after juncture. A modal must be appended to a preceding word (see Sec. 1024 ), although it itself may be followed by certain postpositions.
\{ha\} 'neutral' is by far the commonest of the modals. It also occurs as a copuøa translatable as 'be, do, happen'
(see Sec. 590). In the Middle and South Fork dialects, when it occurs immediately before juncture (i.e., third person recent neutral, not postfixed), the allomorph ||sa || appears; elsewhere, it has the following forms: after consonants, in normal speech the /h/ assimilates totally to the preceding consonant; in allegro speech /h/ is lost; and retained in deliberate speech and in postvocalic environments. \{ha\} may occur before all modal suffixes except the imperatives, optatives (except \{be\}, q.v.), and the conditional. For examples, see the inflectional suffixes.
\{ma\} is in restricted but apparently free variation with \{ha\} in a few examples. Since there is no discernible semantic contrast between the two, they might be analyzed as free variants of the same morpheme. Due, however, to the formal identity with \{má\} 'anaphoric demonstrative' which is functionally parallel to \{há\} 'be, etc.' in many respects, the perhaps more conservative alternative of, at least tentatively, maintaining a morphemic distinction between the two auxiliaries has been adopted. In all of the examples which follow, \{ha\} may be substituted for \{ma\} with no apparent difference in meaning, although the former seems to be stylistically (?) preferable. mìmandeno bíswonon. 'You must have lived there,' mimano mamáko• wótin. 'You caught that fish.' pàdimammas sólin. 'I wish I had sung then.'
nìmándes mí?atiwònon. 'I must have done that.' mímamdeno ’àmadi kýki•n. 'You sat down there.' \{pa\} 'dubitative' has already been described as a modal suffix (see Class 13a). There are relatively few examples of it as an auxiliary, all of which occur with no other modal or with the interrogative. This restriction is probably due to paucity of data rather than any structural limitation.
máqatipàj cén. 'That is what I might have seen.' nìk kána•nk̉̉̇•dojdiwetepàni, máko• héjjehton. 'Were you perhaps chasing after fish for me way down on the bottom (of the river) ? ' pólomca•mpa hàn. 'It might be a buckeye (then again, it might not).' mípano nìk pínin. 'Maybe you heard me.'

A morph/ta/, occurring in auxiliary environments, appears in several allegro recordings in texts obtained from LS. This could be interpreted as another auxiliary or as the allegro morphophonemic equivalent of normal \{te-ha\} 'but' + auxiliary. Since the evidence is so sparse, the latter course has been chosen.

P'mpinki•ntajàn. 'I'll come in pretty soon.' ( $<$

* ’ýmpinki•ntehàj hán.' 'I'll come in, but I will!') wòsí•ntà ja•mo píje•tomènki•n, ?ámadi. 'You mà fish with a pole but you will not swim there.' ( $<$ * wósi•ntehàja•mo....).

582. The aspectuals constitute the other major class of auxiliaries (the term "aspectual" is not intended to typify all of the categories herein included, although it is applicable to most). A few of the members of this class do not fully meet the distributional criterion for auxiliaries; i.e., they may occur (although rarely) as independent finite verbs. In the case of many of the items listed below, there would be more structural validity in considering these as second constituents of compounds (see Sec. 482). However, since all fulfill some gramatical function which is usually reflected in the verb theme and most commonly do occur in constituency with an independent verb, they are treated here. Some of these are monomorphemic, others are dimorphemic, either frozen constructions or common clichés, idioms. They are subgrouped according to their functional ranges. Those having more or less aspectual significance are fas follows:

A group of three related constructions based on $\{b 0\}$ (see Sec. 442) $+L D$ which occur after themes:
\{bó-doJ\} 'inceptive' ( < \{doJ \} 'inceptive') as in
Iittumas dóhbodojtin. 'The pain is beginning to subside.'
Pàdiky; wómbodojtin. 'Then, he began to cry.'
\{bó-kiT\} 'inceptive' (cf. \{kiT\} 1. 'downward, terminative', 2. future tense) in
'̇ádikbokìn ' just start to rain'
mỳmsa Pýkitbokittin. 'He made him begin to climb down.'
\{bótkoJ\} 'unable, have difficulty in...' ( < \{koJ \} 'away fromi') as in
nìhaj hónjehbokojjsam. 'I used to have difficulty in breathing.'
wéwe jbokò •n 'stammer, stutter'.
\{pú-to\} 'almost' ( < \{pú\} 'almost' + \{to\} 'recip. distrib.') which has been recorded once as an independent verb.
hábòsinani. pútonàj. 'Are you finished? Almost.' (lit. 'I am almost.')
kùmpútocete rýsiptin. 'But when he had almost suffocated, they let him out.'
niksa héjdawpùton. 'They almost chased me here.'
\{táwal\} 'iterative, habitual' has dual' privilege of occurrence as a free root meaning 'work' (cf. Span, trabajar).
nìhatema mýhsytàwalin. 'I used to hunt.'
hìniswikihtàwalin 'blink one's eyes'. $\{P \dot{y}-j e \mathrm{H}\}$ 'continuative' ( $<\{\underset{y}{\prime}\}$ empty prefix $+\{j e H\}$ 'continuous motion') also occurs as a common verb meaning 'come hither'.
hédahtorỳje•n '(they) kept on trying'
wènneti jékesdaw?yjé•s?à̀nano wénnekì•in. 'If you just continue barely missing her slowly, you will be all zfight.'

A second group consists of modal-like auxiliaries:
\{bis\} 'stay, exist, live' + the imperative singular in constituency with a third person hortatory or cavetive optative clause functions as a reinforced optative.
bís mákbo! 'Let him taste it!'
bísbò?an, bís! 'Stay so that he can stay!'
bís nika wó•notibỳ! 'Don't let it kill me!' \{'ekiT\} 'seem' (cf. \{'é\} 'see' and \{kiT\} 'down, terminative; future') may also occur as an independent verb, but it usually occurs before the participle \{in\} in constituency with a preceding theme or clause.

2ù•timsa káwinceki•n. 'It seems the acorns are ripe.' mihano diknomehkitcekì•n. 'I don't think you will get there.'
'cájtisćèkitki•nsa. 'It's going to seem strange.' \{háwaky\} 'seem (like), maybe' occurs only in constituency with \{in\} but the latter may be segmented from háwakyn on the basis of rare occurrences like nìk háwakyn. '(He) looks like me.' where háwakyn can only be a participial. The latter is frequently found in immediate constituency with wém 'just, only', the resultant construction being translated as 'perhaps, might...'. (wèm) háwakyn then is normally in constituency with a preceding (preferred) or following clause. In allegro speech, LS (North Fork dialect) shows the allomorph háky; in the remaining dialects, the latter is the only acceptable form, \{háwaky\} does on occasion appear as an independent verb.
wèm há•kynaj ヤ’́noki•n. (LM) 'I might go.' wèm háwakyn, mòmima jójehlelèhkyman. (LS) 'It seems the water flows more quickly (here).' kó•m ćùn, háwakyn. 'Berhaps the snow was melting.' \{japa•n\} 'happened to..., it seems...' is synchronically no longer segmentable although it probably represents a frozen construction consisting of \{jápaJ\} 'tell (someone) about (something)' + \{in\}, perhaps in the sense of a quotative such as *'they tell me...'. \{jápaJ\} in turn is undoubtedly further analyzable (see Dictionary). \{japa•n\}, like /héwakyn/ above,occurs in constituency with a clause, and frequently in immediate constituency with an elliptical construction, pán 'that being (so)'.
pètiky pén japà•nsa ( $£$ pánjapà•nsa) wó•non. 'He
died because he happened to eat poison.'
mỳma hálitwoki•n, japà•n. 'She happened to duck down.'
 to knock, he woke me up.'

A third group contains two lucative directional auxiliaries.
\{kájeH\} 'go around (doing something)' is probably segmentable but the evidence for an empty morpheme *\{ka\} is insufficient. However, the identification of /jeH/ with the $I D$ \{jeH\} 'continuous undirected motion' seems fairly certain. \{kájeH\} usually occurs before \{in\}, resulting in a construction which is then in constituency with a prece-
ding verb theme; however, it also figures in independent constructions.
tékitkàje•n 'step about from place to place'
líjanisa Pépipink̀àje•n. 'He's going around asking for money.'
káwajudihàjes bótak̉àjehsam. 'We used to ride around on horseback.'
\{?ú\} 'locative' is a most productive morpheme. Its basic meaning is 'be in a place, somewhere, there' but it is often used in constituency with a preceding verb theme with the force of a stativizer, i.e., converting an active to a stative theme. It may also occur in independent constructions and in constituency with a somewhat productive absolute construction which is closed by \{ni\} 'instrumental case' (see Sec. 633.2) where it refers to the prolongation of the term of the verbal action. Before \{sa\} 'habitual' and in one idiomatic construction before \{worno\} 'die', the allomorph ||rúh || occurs.
mỳjemká•nom ?atté•nak ? ?úhwò•non! 'That old man pretty near fainted!'
nèm p’fikilpem?ò•m จưhsám, pàmadi. 'A very hot rock was there.'
méhoùn. 'hold' (cf. \{mét \} 'take, grab')
jìmi húdojoùp! 'Hold your arm up!' (cf. jìmi húdoj! 'Put your arm up!')
bohrùnsa. 'He's holding a rock ready to hit (someone).'
(vs. bó•nsa. 'He hit him with a rock.').
590. The Copulas

A small class of verb stems is distinguished from other classes by occurrence with two subjects in the same clause. This environment does not include subjects which are composed of two or more subject nouns in coordinate constructionssor a subject noun in apposition with another subject noun. The latter constructions are made formally distinct from the former by and intervening $\{$,$\} or \{$ ?akym $\}$ 'and' in coordinate constructions, and by setting off the second noun (optionally followed by the connective \{rapco\} 'i.e.') by comma junctures in the case of apposition. Copulas may occur in periphrasis just as other independent verbs do.
\{há\} 'be' also serves as a modal auxiliary (q.v.) and as an independent verb in other constructions (e.g., transitive with the generalized meaning 'do...'; see Dicticnary for this and other usage).

Tàmamkáwajam májdym hasám. 'That horse was a man.! nỉki jépima háki•n, ?àmam. 'He will be my husband.' pé:nem ?àkym pé•nemsa ćý•jeman. 'Two and two is four.' ménemmàni hàn. 'Who are you?'
wénnemmàjdymhás?an, ?àp'co mí?amehpèno. 'If you were a good man, you wouldn't say that. 19
\{kolo\} 'not be, have; lack' is probably related to a
final stem root $\{k A l-o\}$ or /kohl/ 'large hole or hollow'. ?ù•timaj kolo. ~ nìhaj pú tim kolo. 'I have no acorns.'
jèpim kólomincehaj ni bómymỳhnon. 'I feel sorry for you because you have no husband.'
cí•m killos?anaj màko• 'cí•me•n. 'I dídn't net any fish because I didn't have a net.'
\{púk\} 'become, turn into'.
mỳmsa jómim pưk̉un: 'He became a doctor.'
Pàmama kútim púkkete ?ýda•n. 'Having turned into an animal, he came home.'
kóhunejemmàjdyma 9 of $\cdot \mathrm{m}$ pùkaam. 'The mythical snow man changed into a rock.'
600. The Substantive 610. General

A substantive is a theme which is obligatorily marked for case, optionally marked for number, and which may be followed by one or two postfixes. Substantives fall into two classes, a closed class of pronouns and an open class of nouns, distinguished from one another by differences in their privileges of occurrence with various allomorphs of the number and subject case suffixes, with the compounding suffix, and by restrictions of occurrence in certain compounds.

Nouns fall into three major classes and a number of subclasses on the basis of number suffix allomorphy, differences in compounding, and, syntactically, shape concord with the verbal prefix.

620. The Pronoun:

A pronoun is any member of a class of three roots which is in obligatory constituency with number and case suffixes, and which may occur as prior constituent to K -nouns (Sec. 670) in compounds. The first and second person roots show parallel allomorphy before the number and subject case suffixes, and may not occur before the compounding suffix (see Sec. 650); the first and third person roots occur before
the same allomorphs of the number suffixes; and the third person root may occur before the demonstrative suffix (see Sec. 660).
\{ník\} 'first person' has the allomorph ||nị || before number, subject, and possessive case suffixes.
nísa. 'us two' níse 'us (pl.)'
níki sỳ • 'my dog' níkpà 'my father's father'
níkk̀̀n 'with me' ní 'I'.
\{mín\} 'second person' is represented by $\|_{\text {mí }}| |$ before number and subject case suffixes.
mí 'you (sg. subj.)' míma. 'you two'
míme $\quad$ you (pl.)' mínki sỳ • 'your dog'
mínnè 'your mother' minkàn 'with you'.
\{mý\} 'third person' before \{tútu\} 'son' is represented by $\|$ mý $\| \stackrel{f}{\sim} \varnothing$. When it occurs in compound before the anaphoric demonstrative \{pá\}, it is translated as a general demonstrative. This usage appears to be limited to the North Fork dialect. In the other dialects, \{mi\} or \{má\} (IS), emphatic demonstrative prefixes, are employed in the same environment.

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mým. '(It is)he.' mýsa. 'them (du.)'
mýse 'them (pi.)' mýkuli 'his father'
mýki'sỳv. 'hịs dog' mýkàn 'with him'
nihaj my`atin. 'I did that.'
mihano mý?àn. 'You said that.'
mú•tu (preferred) ~ mýtùtu 'his son'.
```

Pronominal allomorphy may be summarized as follows:

| Person | Morpheme | Allomorph | occurs Morpheme | fore Allomorph |
| :---: | :---: | :---: | :---: | :---: |
| 1 | ník | ní | cok | sa. |
|  |  |  | nono | se |
|  |  |  | * im | $\varnothing$ |
|  |  |  | ki |  |
|  |  | ník | *lsewhere |  |
| 2 | mín |  | cok | ma. |
|  |  | mi | nono | me |
|  |  |  | im | $\varnothing$ |
|  |  | mín | elsewhere |  |
| 3 | mý | $\varnothing$ | tútu | mú•tu |
|  |  | mý | elsewhere |  |

* q.v. for sole exception.

The pronouns can now be presented paradigmatically with their appropriate number suffixes.

| $S$ |  | $D$ | $P$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | ní | ník | nísa• | níse |
| 2 | mí | mín | míma• | míme |
| 3 | mý | mýsa• | mýse |  |

Before inalienably possessed nouns, pronominal pos-
session is indicated as for nouns, by suffixation of the possessive to the pronoun, but before K-nouns the pronominal root is preposed directly to the noun, the respultant compound being the equivalent of a possessed noun. See above for examples. This is one of three devices for showtng possession (for the other two, see \{ki\}, Sec. 633.2, and $\left\{i m_{2}\right\}$, Sec. 650). With the exception of $\{m$ ý $\}$, pronouns do not occur in any other kinds of compounds.
630. The Noun
631. A noun is any theme which obligatorily occurs in constituency with a case suffix, optionally with a number suffix, can only be marked as a possessor by means of $\left\{k_{i}\right\}$ or $\left\{\mathrm{im}_{2}\right\}$, and may occur before $\left\{\mathrm{im}_{2}\right\}$. Although number cooccurrence is technically optional, in practice nouns with human referents almost always occur with the number suffix. Nouns which occur with the $\|$ sa. $\|$ allomorph of $\{$ cok $\}$, never occur before $\{k i\}$, and appear before $\left\{\mathrm{im}_{2}\right\}$ only immediately after juncture are demonstratives; those which occur only as the second constituents of pronominal compounds are inalienably possessed; all others are alienably possessed. The latter class is further subdivided into two productive and three minor subclasses dependent upon which of five plural allomorphs the noun theme occurs with. 632. The Noun Theme. A noun theme is composed of a stem
optionally followed by one or more thematic suffixes which may occur in constituency with a number and a case suffix. The stem may be either a noun or a verb stem, or, in a few cases, a frozen (but segmentable) noun word. The thematic suffixes, with two exceptions, may be accounted for in terms of two position classes. The exceptions are almost certainIy attributable to either recursion or frozen constructions
 stem formant).

Class 1 includes a number of elements with various functions: diminutive, derivational, agentive, attributive, locational, privative.
\{beH\} 'diminutive' is no longer productive and occurs in only one clear-cut case, although it does appear in a few names certainly of descriptive origin.
kónojbè•m 'girl (subj.)'
kónojbèhku• 'just the girl' ( < \{kónoJ\} 'woman') Compare also ?íbee 'all' and píwbe 'sp. place name near Clipper Gap' (cf. \{pfw\} 'root, vine').
\{diky\} 'rather close to' appears to contain the common locative suffix $\{d i\}$ but $/ k y /$ is unidentifiable.
tá•jjàmanimk̉ò•dojdikýnaka jà•héjko •n. 'She looked toward the vicinity of the Coast Range.'
pújdikỳ̀sa káton. 'They were playing rather close to the house.'
\{je\} 'demonstrative suffix' frequently occurs as ||j \|
in allegro speech before a consonant. Restricted to occurrence with the deictic demonstrative $\{\mathrm{m} \delta\}$ and the third person pronoun \{mý\}, it forms demonstrative themes. Compare also the nominalizing function of the stem formant / $j /$ (see Sec. 450).
mòje péwa! 'Eat them (those berries there):' mýjesa•m ( ${ }^{\text {a }}$ mýjsa•m) mónonòhton. 'Those two growled at one another.'
\{ky\} 'agentive' is one of the two most productive thematic suffixes. Deriving nouns from verb stems or themes, the agentive may represent the logical subject, object, or instrument of the underlying verb stem. The intended meaning is normally clear from the context. Thus sólky from \{sól\} 'sing' may be translated in a given context as 'singer', 'song', or 'vocal apparatus'. Compare also:
lópekỳ 'thief, loot' ( < \{lópe\} 'steal')
lúmitkỳ 'fisherman, fishing animal, fishing gear'
( < \{lúmiT\} 'fish with a line').
As instrument by means of which the action is performed: wílowkỳ 'gathering hook' (< \{wílow\} 'gather [acorns]') sí?ykỳ 'toy' ( < \{sí?y\} 'play').
Furthermore, agentive nouns are comnonly used in syntactic constructions of the type: substantive + agentive + copula as an additional device for indicating habitual action: nihaj $\quad$ ýkojtòkymàn. 'I used to go back and forth.' (lit.
'I am one who goes away and back being.')
mìhani ćókotkỳman. 'Do you chew?' (lit. 'you are ? one who chews being')
\{kymmi•\} 'before, prior to, without...' is a frozen construction formed from \{ký\} 'have, be' $+\|m m i \cdot\|$, an allomorph of \{meH\} 'negative' (see Sec. 530), meaning literally *'not having, not being...'. It usually derives nouns from verb stems; however, there are one or two examples of derivation from a noun stem.
nìhaj pékỳmmi•m ?ýko•n. 'I left without eating.' kápkỳmmi•mwàka 'raw meat' (lit. 'not yet ripe or cooked')
\{Ia\} is a non-productive noun formant with indeterminate meaning.

Tóla 'scalp' ( $<$ \{?o\} 'head')
wísla 'chipmink' ( $\langle$ wís\} 'with a tail or handle' [?]) býskala $\underset{\sim}{f}$ býska. 'cane'.
\{m\} is no longer productive but clearly functions as some sort of nominalizer (see also \|mmi•\| below).
mómi 'water' (< \{mó\} 'drink')
wómi 'tears' (< \{wó\} 'cry')
cứmi 'urine' (< \{cú\} 'urinate').
\{ma\}, less productive than $\{k y\}$ above but synonymous or near-synonymous with the latter, is aiso used to derive nouns from verb stems.
?áma 'that (one)'
hé•pemasa méjin. 'He gave him what he asked for.'
hư•hèjje•mamsa wássan. 'Whatever he's thinking is wrong.'
$\|\mathrm{mi} \cdot\| \quad \sim \quad\|\mathrm{mmi} \cdot\|$ are two allomorphs of the negative suffix \{meH\} which form noun themes. In the few existing examples, \|mi•\| occurs after noun stems and $\|$ mmi•\| after verb stems. It would thus seem likely that the latter can be segmented into $\{\mathrm{m}\}$ 'nominalizer' $+\|\operatorname{lni} \cdot\|$. Compare also \{kymmi•\} above.
kýty•mìmsa hàn. 'It's not a burden basket.'
kàpó•tamì•pemsa 9 ýsi•n. 'He went out without a coat.'
lájda•mì• 'pre-dawn, early morning' ( < \{lájdaH\}
'grow light')
wó•nommi. 'the Creator (myth.)' (lit. 'the immortal one').
$\{\mathrm{n}\}$ is an unidentifiable suffix of limited distribution which occurs most frequently with noun themes in \{naH\} (see below) and perhaps after a few verb (?) stems.
hínna•ni 'front (end, part)' (cf. hínnahwönon 'go forward')

Pújimpènna•ni 'rear of the house' (cf. Pénna. 'rear, rearwards')
and possibly búni 'pubic hair' (cf. \{bú-tuJ\} 'hair', perhaps segmentable as indicated) or jánin 'make use of appropriate' ( < \{já\} 'make', presumably a denominal verb).
\{naH\} 'side (of), general area (of)' is also commonly used after the first and third person plural pronouns in the sense of 'relatives, friends', i.e., *'those of my area (group), etc.'.
jímdyknà• 'right hand side'
hínnahwònon 'go forward, take the lead'
nísena•ni 'relative, friend'
kíwna•di 'behind, on the other side of'
\{no\} occurs in a few forms as a noun formant.
Tóno 'head' Pínno 'butt'
cáj’́àjno 'other kinds, things'.
\{pe\} 'attributive' , an extremely productive suffix, often has a habitual connotation. It may be suffixed to any verb stem, resulting in a noun theme which is either qualitative:
sí?ypè 'playful' hýhcepè 'wise, knowledgeable' passive:
bótipè 'wrapped up' wó•tipè 'beaten' active:
lópepè 'thief' ?ýnopè 'one who goes along' or locational before locative suffixes:
bíspedi sádi nýntàn. 'Where they were waiting, he fell into the fire.'
jámanpenàkaj ?ýnon. 'I'm going to a mountainous spot.'
In addition, the attribute is a favored device for expressing passive notions:

Pú•timmà•'timsa Pú•timbàtni kówepèmàn. 'Acorn bread is made with acorn flour.'
mómmàjaykki bó•nopèm 'written by that man' (lit. 'that man's written (one)!.
\{si\} occurs rarely as a nominalizing suffix. It may be related to the morph /is/ which has been referred to before as a possible stem formant (see Sec. 450).
láklaksi 'magnesite' ( < \{lák\} 'red')
wá•ksi 'crane' (cf. dialectal báwakno 'crane')
héssi 'relative' (cf. hésky with the same gloss).
Class 2 consists of three elements having distributive functions.

The morphs $/ \mathrm{h} /$ and / $\mathrm{j} /$ have already been discussed under the stem formants (Sec. 450). Additional examples of these are presented here.
/h/ 'plural'.
 ménehtehpà•m 'persons unknown' (< méne\} 'who')
?ékihtè•m 'every day'
ká•nohnono 'several old men'.
/j/ 'plural'.
Pínnojdi méhdykdykky. 'He held onto (their) butts tightly.' jákaj̣ni wýjyp’ìn 'knock acorns off (a tree) with sticks' (vs. singular jáka•ni...).
/j/ 'noun formant'.
Púji 'house' ( < \{rú\} 'locative'), and compare kó•do ~ kó•doj 'country, place', héno 'coyote' ~hénoj 'Coyote (myth.)', and perhaps \{hoj\} 'rear; thigh' (cf. */hó/ 'distal demonstrative').
\{kyto\} 'collective' refers to a natural group of animate
beings, most often human. It seems to be analyzable but the precise nature of the first element is not certain. Compare $\{k y ́\}$ 'have, be', $\{k y\}$ 'agentive', and $\{$ to $\}$ 'recip. distrib.'. A K-noun followed by \{kyto\} becomes an alienably possessed noun.
kónojkỳto 'married couple' (< \{kónoJ\} 'woman')
hýna•nkỳtopa• 'related community' ( $<$ \{hý\} 'home')
jépkyto 'man and wife; male and female adult couple, e.g., stallion and mare' ( < \{jép\} 'male')
'cáhlrytopà. 'grove, orchard of same kind of trees' nỉki káhkỳto 'my (two) younger sisters' (cf. nikkà• 'my younger sister').

## 633. Inflection

Inflectional suffixes fall into two fixed position classes, number and case. The latter class closes a noun word which may optionally be followed by a number of postfixes. The number suffixes show formal contrast between dual and plural. Singular forms are unmarked. There are eight case suffixes and a vocative-nominative which is unmarked. The members of this class constitute syntactic designators which relate their constituent nouns to tactic units in the larger context of the phrase, clause, or sentence.
633.1 Number (Class 3).
\{cok\} 'dual' has the following allomorphs: ||ma. || after \{min\} 'second person', \|sa•\| after other pronouns and the demonstratives, and $\|$ ćok $\|$ after all other nouns. It will be noted that two of the above share the sequence $/ \mathrm{a} \cdot /$ which also figures in the principal dual subject allomorph \|ja•\| (see Sec. 541). Further segmentation, however, would leave the unidentifiable residues $/ \mathrm{m} / \mathrm{l} / \mathrm{s} /$, and $/ \mathrm{j} /$. The dual is also occasionally used to refer to natural pairs.
míma. 'you two' nísa. 'us two'
mósa. 'those two' mýjesa. 'those, them two'
cíla•k'òko 'twins, two babies'
kýlecokkàn 'with two women'.
The form májsa $\sim$ májsa. ( < \{máj\} 'child') has been variously glossed as 'two children' (LS and LM) and 'child' (ES). Although the evidence is not absolutely conclusive (ef. májsa'còko 'two children' [ES]), it seems reasonably certain that/sa/ ~ /sa•/ may be identified with ||sa•\|. ${ }^{10}$

The corpus contains three examples of denominative verbs formed from nouns in $\{$ cok $\}$ :

Pácoktin 'compare' ( < \{Pá-cok\} 'both')
bó•cokòn 1. 'spear two salmon with one thrust' ( $<\{\mathrm{b} \sigma \mathrm{H}\}$
'throw'), 2. 'accompany; companion' (< \{bóH\} 'road').
\{nono\} 'plural (i.e., three or more)' exhibits rather complex allomorphy: ${ }^{l l} \|$ me $\|$ after $\{\min \}$, $\|$ se $\|$ after the other two pronouns, ||tyty || d \|pypy || (RJ, a hapax)
after $\{$ téf $\}$ 'young animal', $\|\mathfrak{k i}\|$ after $\{$ máj\} 'child' and \{jémpoH\} 'young man', \|py \| after \{koleH\} 'boy' and $£$ $\|p a \cdot\|$ after $\{k o ́ n o j b e H\}$ 'girl' and \{ká•no\} 'old man', ||nono || after \{ćíla•k̉\} 'baby', \{kýla•te\} 'young girl' and all nouns with non-human referents, and ||pa•\| d ||paJ \|| (LS) after noun themes in \{kyto\} and all other human nouns. In a few recorded instances, \|py \| occurs pefore the plural formants /h/ or /j/ (see fn. no. ll), and ||nono \| occurs recursively after plurals in \|py || and || paJ || denoting plural collectivity. ||nono || also tends to be subject to haplology after the sequence /no/ as in hénonòm ( < *hénonònom) 'several coyotes'. míme 'you (pl.)' mýse 'them' té•tyty 'litter of young' jémpohkikàn 'along with the young men' ?à̀mamkólehpyhkù•! 'those boys!' ká•nohp̣y ~ ká•nopa. 'several old men' cíla•knòno 'babies' nikkáhnono 'my younger sisters' Pújnono 'houses' Pámanono 'those (non-human)' cícihnòno 'alders' Pámapa. 'those (human)' hýna•nkỳtopa• 'related community' niki kàhkýytopa•ǩàn 'with my younger sisters' ?éssujpàjnono (LS) 'several different groups of old women'
kólehpyjkàn 'with the boys'
ká•nohp’ỳnono 'groups of old men'.

Number Suffix Allomorphy

| Number | Morpheme | Allomorph | occurs after |  |
| :---: | :---: | :---: | :---: | :---: |
| dual | cok | ma. | \{min $\}$ |  |
|  |  | sa. | \{ník, mý\}, D |  |
|  |  | cok | elsewhere |  |
| plural | nono | me | \{min \} |  |
|  |  | se | \{ník, mý\} |  |
|  |  | tyty ${ }^{\text {d }}$ pypy | \{têH\} |  |
|  |  | ki | \{máj, jémpoH\} |  |
|  |  | * ${ }^{\text {j }}$ y | \{kóleH, kơnojbeH, ká•no \} |  |
|  |  | *nono | \{ćíla•k, kýla ${ }^{\text {a }}$, te\}, non-human | N |
|  |  | pa. ${ }^{\text {d }} \mathrm{paJ}$ | $\{\mathrm{ky} \pm 0\}$, other human N |  |

*see above remarks. $\mathbb{N}$ = noun, $\mathrm{P}=$ pronoun.
633.2 Case (Class 4).
\{im \} 'subject' has these allomorphs: zero after the pronouns \{nír\} and \{mín\} except when they occur before the postfixes \{pikno\}, \{ku•\}, \{wete\}, and \{kan\}; and .|im || elsewhere. It functions in the following manners:

1) Primarily, it identifies the subject of the predicate. nìhaj cửk pén. 'I am eating acorn soup.' mýsa•msa séwnak १ýkojsàm. 'They two used to go to the river.'
?ámamkỳlemsa hédem?èki ?újdi táwalin. 'That woman worked in the house today.'
2) It marks both equivalent nouns in equational sentences: ?ámamàde mínki Pújimàn. 'Is that your house?'
mìhano wénnemmàjdymàn. 'You are a good man.'
3) It is used as a naming case or nominative.
bákam. 'It's a leaf.'
wý•kym, my̌ki kýle bèle, mèhá•si•tòn. 'Another one, also one of his wives, he pulled across.'
4) It identifies a noun or noun phrase in apposition to the subject which is often marked only by the verbal ending in such constructions.
bìspáj, kédem! 'Wait, brother-in-law!'
hómma•ticehàni pýtoton, májdym. 'Why are you walking about, man?'
5) It is commonly used as an adverbial absolute with a small number of forms which express temporal or locative condition and with one intensive. These words are absolute in the sense that they are in immediate constituency with the clause as a whole. The object case is used in the same way with some forms (q.v.).
nìhaj bélem ’ýkojkì•n. 'I'm going to go again.' kựtihàj ném wó•notikì•n! 'I will really kill the animal!' héjakam, wýktemmàjdym oàmamcá•mkàna•ndi láhe•mbìsin. 'After a little while, there was a man standing under that tree.'
\{i\} 'object' has the allomorphs zero after \{ník\} and \{mín\}, and $\left\|_{i}\right\|$ elsewhere. Its functions are:
I) It identifies the direct object of verbal action or condition.

Pámamàjdymsa sýmí mýhsyk̇ $\cdot \mathrm{n}$. 'That man was hunting deer.' Kájpihamdèno nik cén. 'You saw me yesterday.'
2) It is commonly used to indicate the indirect object of verbal action, although it varies freely in this respect with the allative (see below) as regards dative and benefactive usage.
mínaj méjin. 'I gave it to you.'
mómisa nik ?épipi•n. 'He asked me for water.'
3) It is occasionally used as a vocative.
júbu•nsa, kóle•. 'It's getting late, bcys.'
týni: 'Younger brother!'
4) It serves as an adverbial absolute with a few forms (see also \{im\} above).
bélehaj ヤýkojki•n. 'I'll go again.' mýsa•ki bíspemwèna. Píkakàn. 'It was dry alongside (the spot) where they were.'
$\{k i\}$ 'possessive' has these functions:

1) Basically, it indicates that its constituent substantive designates the possessor of the referent of the succeeding noun or noun phrase. The possessor is usually, but not necessarily, animate. nỉki kýla•te 'my daughter'

2) It is also characteristically employed with attributive nouns or compounds where it is often translated as passive agent.
mómmàjdykki mýpemsỳmi 'the deer shot by that man'
(lit. 'that man's shot deer')
ఇámamkòle•msa kóhunèjeḱi pépemàn. 'That boy was eaten by the mythical snow man.'
bèlemwete hýhcemehki•n, nikiz mónkypè. 'They will never know that I have money.' (lit. '...of my having money').
3) When a possessive phrase (see Sec. 1021) occurs in constituency with a locative suffix, often \{di\}, an action or condition is possessed.
mìmek̉i ?ýdiknomehmàkapedihàj ヤýdiknon. 'Although you (pl.) are not likely to reach (that spot), I (will) get there.'
(lit. 'your not ought reaching when...').
pokki hínkitdi 'sundown' (lit. 'sun's at sinking').
\{di\} 'locative' has these functions:
4) Primarily, the locative indicates the static location of the object in space. némmùldihàj máji cén. ' I see a salmon in deep water.' móm?èssu•msa húmpujdi kóhkit?ùn. 'That old woman is sitting outside.'
kýlemsa či•dí kothkitoùn. 'The woman is sitting on the blanket.'
mómmàjdykdisa bísin. 'He's staying at that man's place.'
5) It is often used to designate motion towarda goal in lieu of the allative.
?áce, séwdi pú•Ikami•nkàni. 'So, she splashed into the river.'

6) By extension, it is commonly used to express temporal stasis in absolute constructions.
kólehkydì, ?ámamkỳlemsa wó•non. 'That woman died in (the act of) childbirth.'
nì hédedi káhkitrùdihàno, ’ýda•n. 'While I was sittin̂g here, you arrived.'
bókithòjammàjdykdi 'in mythical times'.
7) It is occasionally used to describe the instrument of a verbal action, thus substituting for the instrumental. pétidìsa wó•non. 'He died of poison' kíjdihàno wíhyhỳhdo•n. 'You hoisted him up by the neck.' \{kan\} 'comitative' denotes a constituent substantive referent which is in accompaniment with the referent(s) of another substantive.
niktútukianàj bísin. 'I live with my son.'
mómkòle•msa hédenak ?ámamàjdykk̉̀̀n ?ýda•n. 'That boy came here along with that man.'
\{ni\} 'instrumental' has two functions:
I) It denotes the instrument by which an action is performed and is usually translated as 'by means of, with'. 'cá•nisa wóhton. 'He beat him with a stick.'
cá•sa ?ó•ni júmmototin. 'He's putting rocks around the tree.' (lit. 'tree he is with rocks causing to be piled around')
pé•nemmè•niwóhky 'two-handed maul' (lit. 'with two hands hit with a stick agent').
8) It denotes the manner in which the main verb referent is performed. When the latter is stative such as \{bís\} 'be, remain' or more frequently \{pú\} 'locative', the whole construction designates duration of manner; when the main verb is directional suchas $\{? \dot{y}-j e H\}$ 'come' or $\{? \dot{y}-k \neq J\}$ 'go', it refers to continuous action in the specified manner. ’ỳjé•weni jéwo•n. 'He kept on running hither.' (lit. 'with coming he hither ran')
wí•niwetesa méjin. 'Reluctantly, he gave it to her.'
(lit. 'with refusing...')
hýmbởko ?ýdo•wète, wóswoskymà wéwejni ?ùn. 'After climbing to the smokehole, wóswosky (sp. bird) was still talking there.' (lit. '..."with talking was there') cúhtoni pùn. '(He) is still washing.' \{nak\} 'allative' has these functions:
9) It characteristically denotes motion toward a goal. nìhaj nísenak pédawwòhki•n. 'I'm going to invite him to our place to eat.'
pákannakàj ?ýkojki•n. 'I'm going to go to the lake.' 2) It is often used to indicate the indirect object. mínimsa mínnak wénnen. 'Milk is good for you.'
mỳmsa níknak míPàn. 'He told me that.'
10) It is also used temporally.

Pàtté•nak 'for a little while' ( < \{?àttéH\} 'near') núktinàk 'for a little while' ( < \{núkti\} 'little').
4) The constructions which express the teens are formed by the sequences \{méhcok\} 'ten' + \{nak $\}+i n t e g e r$ (ll 14) and \{híwal\} 'fifteen' + \{nak $+\operatorname{integer~(16-19).~}$ máhcoknak sá•py 'thirteen' híwalnak pé•ne 'seventeen'. \{na•\} 'ablative' has these functions: 1) Its principal function is to express motion away from. nàmana• 'ýsippì•n. '(They) came out of there.' mýsemsa jàmanmántonà• wí•tàmmoton. 'They came together from all the mountains around.'
2) It also denotes source or origin. nìhaj wátammàna• hàn. 'I'm from Indian Creek.' pétina•sa wó•non. 'He died of poison.'
633.3 Vocatives are normally expressed by the unmarked theme optionally preceded by the vocative (or some other) particle (see Sec. 800) and occurring in constituency with emphatic intonation. Most vocative themes are K-nouns, which are by definition inalienably possessed. The vocative environment provides a sole exception to this rule. Such nouns may occur without the personal prepound as vocatives. Occasionally, subject or object case forms serve the same purpose (i.e., vocative). Similarly, nominatives (i.e.,
nouns cited in isolation in response to either a verbal or sensory stimulus) often appear without an affix. These are most often names of animals, plants, etc. See also the subject and object case descriptions for alterndte nominative expression.

Vocatives:
nikkés: 'My younger cousin!' kúl! 'Father!' hó•, kám! ఇàdi kám! 'O.K., nephew! Now, nephew!' १áj, péj! 'Hey, grandchild!'

Nominatives:
(hésimade hàn.) kílem. '(What is it?) Foot drum.' ká•skas. 'Bluejay.' (hétydihàja•s péki•n.) héjak. '(When will we eat?) In a little while.'
640. The Postfixes (Class 5)

There are several peripheral elements which occur in connection with substantival constructions for which there is no fixed distributional pattern. Generally, however, they share the same environmental range and may thus be treated as members of one class. Most frequently they occur either between the number and case markers or following the case marker (i.e., appended to a noun word); nevertheless, there remain a few instances where they appear in the normal position for thematic suffixes preceding the number
class. There seems to be nothing in the formal environment nor any difference in semantic contrast which might account for the variation in position; nor do any of these morphemes ever occur as free forms. The range of meaning represented by members of this class is largely emphatic or intensive, but there is also a locational (perhaps deictic I) and an indefinite.
\{hoj\} 'near, close to' has one idiolectal variant $\|$ huj $\|$ (LM). It occurs most commonly between number and case, rarely affer case.
?àmam?óhnonohàj kólehpy̌hòjnak bóje•n. 'I threw those rocks close to the boys.'
mỳmsa nìkkúlhòjnak kóhkitrùn. 'He's sitting there next to my father.'

\{ku•\} is an emphatic, placing particular emphasis on the constituent noun, and usually translatable as 'just, only...'. LS employs \|ky\| f \|ku•\|. Other informants recognize only the latter. $\{k u \cdot\}$ usually occurs between number and case, more rarely after case, and after the postposition \{wete\}.

ংàmamtéhcokkù•'̛an 'With just those two pups' mómংùjnonokù•dihaj \cline { 1 - 1 } ými•n. I just went into those two houses over there.'
hèdediky tètáp! 'Step on it, right here:' nú•tidikỳ ijust a little'.
mỳma ?ýnon, bó•mwetekù•. 'He was going along, only on
the trail.'
míku•m ?ýnop! 'You go:'
\{pikno\} appears to be syhonymous with $\{k u \cdot\}$ but considerably rarer in occurrence. Its distribution is essentially that of $\{\mathrm{ku} \cdot\}$.

Tàmam?óhnonohàj kolehcokpiknonak bóje•n. 'I threw those rocks at those two boys.'
?ámadipìkno bísin. 'He lived right there.'
mípiknom aýnop: 'You go:'
The morph /teH/ has been recorded with four distinct translations. Although the first three at least seem to be related, the frequency of occurrence and consistency of semantic contrast (sometimes in otherwise identical environments) evidenced by the informants' translations favor, I feel, the more conservative interpretation of four morphemes rather than two.
\{teH\} 1. denotes particularized emphasis as with $\{\mathrm{ku} \cdot\}$ and \{pikno\}.
mýsa•tehkù•msa $\urcorner y ́ k o \cdot n$. 'Just those two alone went.' póknak jý•man, pòknakte.. 'He was approaching the moon, the moon!'
2. refers to emphatic repetition or habit. nihaj póhte.m tùjin. 'I always sleep at night.' Pámampàndakte•haj jójehtòn. 'I always shoot with that bow.'
séwdite. píjehtòn. 'They always swan in the river.'
3) is acommiserative.
mýsa•mte•ha tèdidísdo•n. 'Those two poor fellows slipped and fell.'
níkte:! 'Alas! Woe is me!'
nikpéjte•msa ?íttun. 'My poor grandchild is sick!' 4. has indefinite reference.
mìm čáknakte. wítysin. 'They are fighting at some other place.'
ménehteh'cokomsa ?ýbje•n. 'Two unknown persons are coming this way.'
hèste•dihaj ká•tin. 'I'm choking on something.'
650. Compounds

There are basically three kinds of nominal compounds: (inalienably) possessed nouns; stem, theme, or word plus stem; and attributive. The first two have already been discussed (see Secs. 482 and 620); the third and most prom ductive type will be treated here.

An attributive compound consists of any theme in constituency with the compounding suffix $\left\{\mathrm{im}_{2}\right\}$, which construc-. tion is then in constituency with the stem which follows. $\left\{\mathrm{im}_{2}\right\}$ always occurs before a stem (or theme). Such compounds are subject to further expansion by the same device; thus, a potentially indefinite string of such sequences is
possible although, in practice, a maximal string rarely includes more than three or four attributive constructions. In this type of compound, the attribute is always the first theme plus $\left\{\mathrm{im}_{2}\right\}$, and the head is the remainder. This constituent order is normal for all nominal compounds where both constituents are noun themes.

There is one subtype which is an apparent exception inasmuch as the first constituent is formally a noun word. However, the actual construction is unique in two ways: it consists of a prefix followed by the locative case suffix (canonically anomalous) and it occurs only in $\left\{\mathrm{im}_{2}\right\}$ compounds with the head noun \{kó•doJ\} 'place'. The only prefixes which have been recorded in this kind of compound are \{?én\} 'back(ward)' and \{hón\} 'down, below'. The normal order of attributives (intervening $\left\{\mathrm{im}_{2}\right\}^{\prime}$ 's omitted) in a maximally expanded compound is: demonstrativ̄e + numeral (as attribute) + attributive (i.e., $\{p e\}$ themes) + other theme(s): púnimkỉiku 'knotted counting string' ?àmam’ćy•jemwílawpemkólehpy 'those four noisy boys' dokdokomdỳ. 'black manzanita bush' pá-kamsỳmi 'cow, beef' hóndimkò $d o \quad$ 'all the way down there' sá ?éndimkò•dojnak cén. 'He saw the fire way back there behind (the mountain).'
660. The Demonstratives (D)

Demonstrative nouns have been formally defined above (see Sec. 631). They fall into two small subclasses: those themes which are derived by means of the demonstrative suffix $\{j e\}$ and all others.

The \{je\} class includes \{mó-je\} 'deictic' and \{mý-je\} 'general'. The other class has the following membership: \{?á-ma\} 'anaphoric' ( < \{?á\} 'anaphoric demonstrative' + \{ma\} 'nominalizer')
\{mo \} 'deictic'
and the demonstratives of spatio-temporal reference which show affinity to the diminutive-augmentative ablaut system (seeSec. 420) in their vocalic structures:
\{héde\} 'proximal: this, here, now'
\{hódo\} 'medial: that, there, then or later'
\{húdu\} 'distal: yon, yonder, much earlier or later'. Plural femonstratives are formed by the addition of either ||paJ || for human reference or ||nono || for non-human. ?ámapa•ma báden. 'Those people were happy.' Pámanakaj Týkojmêhki•n. 'I won't go there.' mósa•mpa hàn. 'Maybe it was those two (i.e., standing over there).'
mòm'á•mkàna•ni 'that spot (I'm pointing at) under the tree'
hède pep: 'Eat this!'
hédenakàde $\bigcirc y^{\prime} j e \cdot n$. 'Is he coming here?'
hödomlàjda. 'the day after tomorrow'
hédem ?ysí•s?ànano wénnekì•n. 'If you get out now, you
will be all right.'
húdumk̀̀•dojdi 'way over yonder'
mójehaj 'ăhkyn. 'I. own that tree.'
mýjesa•ma nik ćéko•n. 'They (those two) came to see me.'

## 670. Inalienably Possessed Nouns (K)

Noun stems of this class coincide almost exactly with the semantic class of kinship terms. With the exception of a few vocative forms, these stems are always bound, occurring as second constituents of pronominal compounds (see Sec. 620). The members of this class rarely occur with number suffixes, but, from the few available examples, it seems safe to assume that they take the $\|$ 'cok \| and \|paJ \| allomorphs of the dual and plural respectively. ${ }^{12}$

Non-singular possession is expressed by a redundant syntactic construction in which the dual or plural form of the pronoun, followed by the possessive suffix is in constituency with the following pronominal compound.
nísa•ki níkkili ${ }^{\prime}$ our (du.) father'
níseki níkỉ̉li 'our (pl.) father' (contrast an alienably possessed noun: nísa•ki púji 'our (du.) house').

With the exception of two older compounds, stems of this class are monomorphemic, but a few of them occur in what appear to be relatively recent descriptive compounds
(of the attributive type, see Sec. 650) devised to account for age and sex distinctions which were undoubtedly inherent in the meaning attached to the original base form but which, presumably due to the pressure of the local American kinship system, seem to be undergoing a transition from the older, more elaborate as to age and sex specification, to the more recent system. These compounds may be divided into two types:

1) the K-stem is the head of the compound, the attribute denoting an age distinction originally inherent in the head. pútdiপùmmù•tu 'his younger son' (< \{pút-di=?ú-im $\left.{ }_{2}\right\}$ 'younger', lit. 'while almost being there', + \{mýtútu\} 'his younger son')
hínwonomnìkpòs 'my oldest cousin' ( < \{hín-wono-im $\left.{ }_{2}\right\}$ 'oldest', lit. 'ahead of', + \{ník-pós\} 'my older cousin').
2) the K-stem is the attribute and, having lost an originai semantic component designating age and/or sex, these requisites are fulfilled by the choice of one of four possible heads: \{koleH\} 'male child', \{kýle\} 'female child' (elsawhere 'woman'), \{ká•no\} 'male parent' (elsewhere 'old, old man!), and \{?éssuj\} 'female parent' (elsewhere 'old woman'):
níkkupà•mkòle• 'my son-ịn-law' (< \{ník-kứpá-im $\left.{ }_{2}\right\}$
'my parent-in-law' [cf. níkpeti. 'my son-in-law']) mýpò•mkỳle 'his brother's daughter' (< \{mý-pó•-im $\}$
'his sibling's daughter')
mýkupà•mkà•no 'his father-in-law'
níkkupà•mPèssu• 'my mother-in-law'.
A few K-stems have dual privilege of occurrence as alienably possessed nouns or, in two instances, as verb stems. For most of these, an accompanying difference in meaning is iuvolved which can be characterized as specific kinship term (K-stems) vs. related general term (others). These stems are illustrated here (gloss $1=\mathrm{K}-\mathrm{stem}$, gloss 2 = other), other K-stems will be appropriately designated and described in the Dictionary.
\{jép\} 1. 'husband' 2. 'male, man'.
jépi 'man' jépimsỳmi 'buck (deer)'
níkjèpi 'my husband':
\{kátiH\} 1. 'father's sister' 2. affectionate term for wife.
mínki kàti. 'Your old lady'
minkàti• 'your father's sister'.
\{kónoJ\} 1. 'wife' 2: 'woman'.
kónojbè. 'girl' kónojto 'married couple'
mýkòno ' 'his wife'.
\{kill\} 1.'father' 2. 'bereft of one's spouse, widowed'. kúli 'widow, widower' kúlin 'lose one's spouse' mìnkúli 'your father'.
\{k̉́se\} 1. 'mother's mother, great grandmother, sister-inlaw' 2. 'rival' ( < *sister-in-law as co-wife). kuisekỳn 'have a rival' nikkúse 'my grandmother'。
\{né\} 1. 'mother' 2. 'female (animal)', as the prior constituent in attributive compounds. némmàji 'female salmon' mýseki mýnepà. 'their mothers' This morpheme also occurs in two frozen K -stem compounds: \{ká•ne\} 'brother's wife' ( < \{ká•\} 'mother's brother' + \{né\}, used reciprocally) and \{péjne\} 'daughter-in-law' ( $<$ \{péj\} 'grandchild' $+\{n e ́\}$ ).
\{pú•I\} 1. 'spouse, second spouse' 2. 'live together conjugally!.
pú•lin 'live together as man and wife'
nìkpú•li 'my spouse'.
\{súkku\} 1. 'pet, master' 2. 'pet', after \{ký\} 'have'. súkkukỳn 'have an animal for a pet' mỳsúkku 'his pet, his (pet's) master'.
\{kóleH\} 'boy, child' varies freely in possessive constructions between K-stem and non K-stem.
níkkòle. $\ddagger$ nỉki kóle• 'my boy, child' p’́s•skòle. 'small boy'.
kòlehwó•notìn . 'miscarry, abort'. See above for $\{\mathrm{k} \delta \mathbf{l} \mathrm{l} \mathrm{H}\}$ in K -compounds. \{tútu\} 'son, child' occurs as a non $K$-stem after \{ký\}. After $\{m y ́\},\|m u ́ t u\| \sim$ IIltútu $\|$, the former preferred.
tútukỳsam. '(He) had a son.' míntùtu 'your son' múrtu ~ mýtùtu 'her chila'。

## 680. Alienably Possessed Nouns

This open class is divided into five subclasses as noted in Sec. 610. For a detailed treatment of the classificatory criteria, see Sec. 633.1. Individual members of the five subclasses will be so marked and described in the Dictionary.

Although tactically members of different woùd classes may function adverbially (i.e., in constituency with the verb of a clause, or with a clause), there is only one overtly marked external distribution class which may be so designated. Adverbs are formed by the addition of the adverbial suffix $\left\{\right.$ ti $\left._{3}\right\}$ to any appropriate stem.
káduktisa nìk joko ${ }^{\prime}$. 'He hit me hard with his fist.' nèmsa min pókkỳltí césyn. 'He stared at you darkly.' mỳki mýkulpà•m jápajton, wénneti. 'Her parents instructed her carefully.'
býhby•tisa býhby•n. 'It's getting to be a little more quiet.'
810. General

Having identified the verbs, substantives, and adverbs, there remain a number of words which are either uninflected or exhibit peculiarities of distribution as verbs or substantives, and which fall into different tactic classes. These forms may be divided into four classes, the first three of which, with a few exceptions, consist of uninflected words.
820. The Connectives (C)

All of the members of this class are frozen constructions composed of the anaphoric demonstrative \{?á\} plus one or two suffixes. A connective normally occurs before comma juncture with or without an intervening enclitic or postfix, most often clause-initially. It thus constitutes a phrase (see Sec. 1034) in constituency with the following clause, which it relates to the preceding clause or sentence.
\{Páce\} 'so, therefore, then', as in:
pácesa, péminće kóloki•n. 'So, if you eat it, there will be no (more).'
Páce, májdym ’ama ríkaltin. 'Then the people dried it.' \{?ácete\} 'but, nevertheless, however'.

Pacète, sólbyny. 'But don't sing!'
?ácetekàp, wỳkte núktiwète pés: 'Nevertheless, I'll eat just one little bit.'

?ácewi•nàj ném wáskyn. 'Because of that, I got very angry.'
\{?àdiký\} functions as a stylistic phrase marker, roughly equivalent to $\{$,$\} . \|$ ?adiku• $\|$ is the alternant employed by informants other than LS, although the latter occasionally uses this form also. (cf. the noun postfix $\{k u \cdot\}$, Sec. 640)
séwim, ొàdiký, mona•nim, フàdiký, wà?a?áski•n. 'The river, that side of it, slowly subsided.'
 now, the one who was walking along...'
\{?ákym\} coordinating conjunction.
?ýppy• ?àkym dókdokohaj hýje•n. 'I picked red and black manzanita berries.'

Pákym, wóltimংù•ti wéje•n. 'And then, they knocked down many acorns.'
\{?ámwete\} 'but, although'.
?àmam hìma c’én, pàmwete, mý•me•n. 'He had already seen them, but he didn't shoot.'
nìhaj ?éptipemàn. ?ámwetehàj hèdem púsottimè•n. 'I am brave even though I donft look it now.'
\{?ánkani\} is another general connective translatable
as 'now, then, having done that, etc.'.
sákumihà dá•we, ?ànkani, Pýsippì•n. 'Wiping the sweat off, he came up to them.'
?ánkani ’adiký, mỳjem?éssu• ćés?àn... 'Finally, when they found that old woman...'
\{?ánte\} 'but (if), (but) of course' usually occurs in an emphatic context.
?àntehaj ká•mwete hàn hà•kyn! 'But I thought I was doing it gently:'
Pánte, níki pèma `ámamàn! 'But of course that's my food:'
\{?ápco\} often serves to introduce a resultative clause ('if...then...') and also an explanatory appositive ('i.e.'). wénnemmàjdymhas?àn, ? ?àp'o míPamè•peno. 'If you were a good man, you wouldn't say that.' クújnak hájonkani, kúmnak, ?ap’’̀̀. 'They carried it to the house, the roundhouse that is.'
\{?áwete\} is virtually a synonym of \{?ánkani\} in most contexts; however, when it constitutes a sentence (in constituency with emphatic intonation), it is used as the starting command for a race, contest, etc.

## ?áwete: 'Go!'

?áwete, mýtawe•sim sỳmi pén. 'Then, having roasted it orer a fire, they ate the deer.'
Two more forms which have somewhat wider distribution as nouns and/or verbs nevertheless deserve to be included here.
\{?ádi\} 'now, then' may occur before the subject case suffix as a temporal absolute and, uniquely, as a verb stem before \{py\} the hortatory optative, perhaps in its original locative sense 'there, thither' or as an interjection 'right now!'.

Pảdipé, คàp’ć́! 'Let's go then!'
Pádimkani, lólekwàda•n. 'Then, he ran away quickly.'
?áąihaj mìme píjehtomehwòn, ?áti. 'Now I told you not to swim like that.'
\{?ápe\} commonly occurs as a demonstrative-like noun with either general locative or temporal meaning. When it occurs before the subject case suffix or with no affix (this could just as well be construed as the object case), in the usual intonational context for connectives (i.e., between pause and comma), it functions as a connective. mỳmsa léjwo pèn, nàpehaj, nì mótupin. 'He ate part of it and I finished the rēst.'
nìhatema Píttun, ’àpemwete nì $9 \delta$ to $^{\circ} \mathrm{n}$. 'Although $I$ was sick, I got up.'
?ápem, kàkkinim nìse jánitokì•n. 'Now, the spirit will tell us.'

> 830. The Interjections (I)

Most interjections occur only as minor sentences but all appear in the context of \{!\}. Many of these are imi-
tative of sounds or cries and occasionally include phones and phonotactic sequences which ar not part of the regular phonemic system (see also Sec. 150). There are still other onomatopoetic stems which are verb forms and, as such, are not members of the present class. The complete list consists of 27 items, several of which are of unique or infrequent occurrence. A few exampies of some of the most commonly occurring interjections will suffice.
\{héw\} 'all right, yes' is the sole exception to the basic non-inflectionsl criterion for this class when it occurs before the $I D$ \{daw\} 'towards' to form a verb stem; elsewhere it appears as a normal member of the class.
héw, 'àp’ó: 'All right, then!'
héwàn 'agree (to), affirm'.
\{wáh\} is an exclamation expressive of mild emotion on the part of the speaker, 'Well! Oh!子', etc. It varies freely with || wá \|.
wáh! ? gnostà. 'Well, I'd better go:'
hómma•ti wà, minki páji! 'What's wrong with your foot!?'
wáh! sìmtó•dawbýny: 'Hey, don't you bring bad news:'
\{ొáj\} always occurs before a K-vocative (see Secs. 633.3 and 670). While K-vocatives are often introduced by \{?áj\}, the latter is not obligatory in such constructions. o̊àj já! 'Hey uncle:', ọaj péj! 'Hey grandchila!'
840. The Adverbials (Ad)

Members of this class may occur in constituency with a verb (most often), a phrase, or a clause. Although they have relative freedom of occurence with respect to other tactic elements in a larger construction, the favored positions are initially before the enclitic or before the (main) verb.
\{mý•mante\} 'probably' has only been recorded a few tines and with the following variant forms: mýmante ~ mýmante ~ mý•mate.

Pàdihaj mý•mate bó•nokỉ•n. II will probably have written by that time.'
mỳ•mante hýbo•nak ’y̌ko•n. 'He probably did EO home.' mihano mýmante mèhopin. 'You're probably telling the truth. ${ }^{\prime}$
\{wém \} 'just, for no reason'.
jìmhúdojbàwa•ntene hàn, wém. 'He made as if to raise his arm to shoot, he just did.'
wèmsa kémyhmỳ•n. 'He's smiling aimlessly.'
wémpajnihàj ?ýje••n. 'I came barefoot.'
\{?onko\} 'more than' is one of the devices for expressing comparative relationship. It is undoubtedly related to \{oonkoJ\} 'overcome, get the best of, excel'. \{?ónko\} usually precedes the verb or deverbative form. mỳmsa ník ?ònko hélin. 'He's bigger than I.'
hédemcủp̉imsa móje ?ònko lálamin. 'This stick is longer than that one.'
When \{ronko\} is in constituency with a \{pe\}-derived noun, a superlative is formed.
?ámamcà. ?ónko wénnepemàn. 'That tree is the best one.' \{ropa•nte\} 'continuously'.
?òpa•ntesa ?ýjehton. 'They keep on coming.'
kádi•n ?opà•nte. 'It rained steadily.'
?ópa•nte nèm hỳsbakwótoton. 'They jumped up and down
all the while.'
\{?ýskoj\} 'much' occurs only in constituency with negative verbs.

Pýskojhaj bóhkymèhkymàn. 'I don't walk along (this) road much.'
 2’̀skoj ḱápme•n: 'be half-cooked' (lit., 'not cooked much 1).

The following two morphemes may occur before the subject case suffix:
\{béle\} 'again, too' is also used as an emphatic particle following any tactic class.
béle ( $\stackrel{f}{\sim}$ bélem)hàj pekín. 'I'm going to eat again.' ni bele cíts, rapcò. 'I too better get dressed.'
héw bèle! 'That's right!'
\{néH\} functions as a general intensifier. It usually occurs before \{im\}, where it is represented by || né \|
(see $\|$ H \| , Sec. 232a). néhkandèno hản, ?éptin kà•nom. 'Gee, you're very good, old man!'
némsa kò•n. 'It's snowing hard.' némmòmi 'ocean' (< \{móm\} 'water') nèmsa kádukti kén. 'He laughed aloud.'
850. The Interrogative-Indefinites (Q)

This class is not structurally homogeneous with the other minor words inasmuch as its members are inflected as nouns, or have dual privilege of occurrence as verbs or nouns. Nevertheless, formally, all but one of them share certain features, and all are semantically related. With the exception of \{méne\} 'who', the members of this class appear to be frozen constructions consisting of a demonstrative element /he-/ or /ho-/ (cf. also \{héde\} proximal demonstrative, \{hódo\} distal or medial demonstrative; \{héw\}, \{hére\}, and \{ho•\} the affirmative interjections): followed by one or more residual elements, some of which may be susceptible to analysis.

Aside from occurrence in elliptical sentences which do not contain finite verbs, the members of this class are translated as interrogatives when they occur in interrogative clauses immediately preceding a case marker. As interrogative nouns, there is a strong tendency for
them to occupy clause-initial position. With the exception of \{hómma•ti\} from \{horma•\} 'however, whatever', they never occur before the concessive postposition \{wete\} or the indefinite postfix $\{t e H\}$ in an interrogative sense. In these and other environments, they are construed as indefinite themes. The six forms which comprise this class are described in two subclasses, based on distribution as nouns, or nouns or verbs.

Those which occur only before nominal suffixes are:
\{hésakkàn\} 'how much, many'. This form contains \{sákkan\} 'so many, an indefinite number of' which, in turn, may include the postposition \{kan\} 'just, only'. hésakkànimade hán. 'How many are there?' hésakkanim?èkim '(I don't know) how many days'. \{hómo\} 'which' is translatable as 'where, whither, etc.' before locative suffixes or stems with locative meaning. hómodihàni 9 ýko•n. 'Where are you going?' hómote•di 'somewhere' hómononohàde mén. 'Which ones did he take?' \{méne\} 'who'. méneḱana símyhmỳ•n. 'With whom was she chatting?' ménewete jànitobýny! 'Don't tell anyone:' ménete•mwete hàn... 'Whoever he is...'

Those which occur before either nominal or verbal suffixes are:
\{hés \} ' what, some(thing)'. The /s/ is probably to
be identified historically with the nominalizer \{si\} (Sec. 632, Class 1).
hésihani méjin. 'What did you give them?'
hèsiwete ?íttutimè•n. 'They didn't hurt him at all.'
hésdi... káwdi 'someplace... on the ground'
hésimmàjdymade hán. 'What kind of man is he?' min hésby. 'Something might happen to you.' \{héty\} 'how, somehow, some kind' has an additional allomorph || hétyh || which occurs only before stems or roots (with the exception of \{?á\} anaphoric demonstrative) as the prior constituent of a compound. Before the locative suffix \{di\}, this morpheme is translated as 'when'. As a verb, one of its functions is that of a common salutation.
hétynàni. 'How are you?'
hétyhlálaminàde. 'How long is it?'
hétydiwetehàj máko• pékymàn. 'Sometimes I eat fish.' héty`apemk̉̀•dojkana `ými•n. 'He went into some sort of place.'
hétyc'ete nèm Péptin. 'Somehow he did his best.' \{hóma•\} 'however ?, whatever 子'. When this morpheme occurs in immediate constituency with the causative. \{ti\}, the resultant construction has the general meaning 'however do?, whatever do?, how ever be able to (do) I'. Speakers of the North Fork dialect often employ a reduced alternant \|tíl \| f $\|$ tí\| of $\{$ hómma•ti\}. \{hómma•\} almost
always occurs in constituency with the emphatic terminal contour \{!\} or in a phrase which is in constituency with an emphatic clause. With the locative case suffix, as with other members of this class, \{homma•\} is translatable as a temporal 'when'.
hòmmá-dihàde mí?atisàm! 'When did all this happen!?'
hési pánani, hóma•: 'What did you say!?'
nise homma.! 'Woe is us!' (lit., 'Whatever [will become of] us:3')
hómma•ti'ce フénna•ndi bìsni! 'Why do you stay (lag)
behind:?'
?ýhjore•ntehàdes hómma•tikì•n! 'But how can $I$ be careful: ${ }^{\prime}$
hòmmá•tiwetesa sý•m गújna• ?ýsi•n! 'Somehow the dog got out of the house!'
nihaj ?ama tihpéme $n$ ! (LS) 'I can't eat that!' tícehani Pýspèpeme•n! 'Why don't you hurry!?'
900. Postpositions

The postpositions occur only after words but, unlike the modal auxiliaries (enclitics), are not inflected. They may occur in constituency with the immediately preceding word, phrase, or clause. Depending upon whether they may precede or follow the auxiliary, they fall into two position classes. The semantic range of the members of this class includes connectives, concessives, emphatics, and a distributive.

Postpositions which may precede the auxiliary are:
\{kan\} 'just, only' is often used to mildly emphasize the preceding word. It has an additional privilege of occurrence as a free root $\|$ kán $\|$ before nominal suffixes. As a postposition, it occasionally preceded \{te\} or \{tene\} (see below). \{kan\} is probably analyzable as \{ká\}, an emphatic base, plus the nominalizing suffix $\{n\}$ (see Sec. 632).
mì héjakankunkàn! 'You (there), wait a minute!'
PIpemkan ?étapwònon. 'Everything just stopped.'
mínkănaj méjin. 'I gave it to you alone:'
Pámamsa kánimbơ•màn. 'That's the only way to go.'
kándi ’źkojpỳ! 'Let's go right away!'
\{xana\} 'intermittentiy and individually distributed (phenomena)' always follows noun words and participials in \{we\} (see Sec. 560 for examples) but is affixed directly
to non-nominal stems.
nưktikàna 'a littie at a time'
ćájna•kànasa mósa•m ?ýda•n. 'They came from different places.'
bájahkanahàj witsèlin. 'I shelled some acorns, then cracked some (alternately).'
sápy jkànasa wón. 'He cried three times each time.'
\{kani\} functions as a coordinating connective relating two clauses or, more rarely, a phrase and a clause to one another. It is often translated as 'and, and then'.
wátaminkànisa mén. 'He chased him and caught him.'
pénkanisa tújkò•n. 'He ate and then he went to sleep.'
حákymkani, hénojkà•nom mýkunim hínnahwònon. 'And
then Coyote took the lead.'
\{wete\} appears most frequently as a concessive, translated as 'anyhow, in spite of, nevertheless, etc.', but it also acts much like a participial in a closely related sense as 'but (or) although having...' when it occurs appended to non-substantival stems or participials in \{in\} or \{ma\}. Aside from these last named environments, \{wete\} occurs only after words. \{wete\} always has the allomorph || wete || in allegro speech but only sporadically in normal speech. It seems most likely that this postposition is a frozen construction composed of the participle \{we\} (cf. Sec. 560 for additional examples) plus the postposition \{te\} 'but'.
làjảahtújkymwète, ćéjje•n. 'Although she was a late morning sleeper, she got up.'
hómonakwètepa 刀ýko•n. 'Wherever might they be going?' wí nilweteha méjin. 'Reluctantly (lit., 'refusing nevertheless') he gave it to her.'
mómimwete hétyn. 'How is the water, anyway'! cí•wete, hòmma•ti ?ýnomè•n. 'Although he was dressed, he couldn't go.'
jóhtajjete wéwe•n. 'He was speaking crazily (lit.,
'being crazy anyhow').'
\{te\} 'but, although' functions as a clause connective.
pínsypte céby! 'Listen, but don't look!'
nìhaj ?ýnomàkante wí•n. 'I ought to go but I'm not going to.'
mýkunim ๆýda•ntesa wássakymè•n. 'Although he got here first, he didn't win.'

Some postpositions follow the auxiliary verb.
\{kap\} is used to emphasize a proposition which is contrary to the one which has been proposed or implied. It probably contains the emphatic base \{ka\}, the /p/ possibly equatable with the imperative singular \{p\} (see Sec. 543). It has been recorded twice as a bound root and once as a minor word (i.e., uninflected, free), all three forms obtained from LS. ES found these constructions unacceptable. mikap! 'Just you (not him)!'
mìatinkàp! '(not like that...) He did it like this!'
?ámamćà•kap kájtip: 'Fell that tree (not the other)!' nìhajkàp méhki•n, `àmamsá.' 'I (not you) will get that fire.'
káphande Pánjapà•n. (LS) 'It seems as though he (not the other fellow) must have (hit her), doesn't it?' hú•kapmè•na. (IS) 'He doesn't think that way (he thinks otherwise).'
\{tene\} is an emphatic which is perhaps somewhat more intense than \{kan\} (see above). Rare occurrences of \{tene\} before the auxiliary verb appear in texts received from LS. Pámahajtène hú•pa•n, hú•pa•ntène: 'That's what I think, I do:' kádi•nsatène: 'It did rain!'
nítenehaj mý?atìn! (LS) 'I did that!'

# Chapter Three 

## SYNTAX

1000. Introduction

This chapter comprises a discussion of the constituent structure of constructions larger than word: phrases, clauses, and sentences. The statements made herein are to be taken as generally valid for most situations occurring in the corpus upon which this description is based. However, until such time as an exhaustive analysis of all the data, particularly insofar as some of the texts is concerned, some of these statements must be viewed as tentative, hence potentially subject to revision or rejection as further analysis dictates.

## 1010. Ultimate Constituents

The ultimate constituents of any syntactic construction may be broken down into three classes: major, which may occur as constituents of a clause; minor, which may occur in constituency with a clause; and junctural, including the intonation contours which comprise one of the immediate constituents of a phrase, clause, or sentence.
1011. The major constituents are coterminous with previously described word classes as follows:

Constituent Word Class
subject (S)
object (0)
possessive (Po)
locative ((I)

Finite verb (Vf):
auxiliary (Va)
depenủent (Vd)
independent (Vi)
Non-finite verb (Vnf):
participial (Vm) main clause participial
adverb (A)
adverbial (Ad)
(Vn) non-finite main verb participial
subject substantive
object substantive
possessive substantive
locative, comitative, ablative, allative, or instrumental
auxiliary verb dependent verb
all other finite verbs adverb adverbial (minor word).
1012. The minor constituents correlate with the word classes as follows:

Constituent Word Class
adverbial absolute (AA)
temporal absolute (TA)
vocative (Vo)
subject or object adverbial (Sec. 840) or adverbial absolute (see $\{i m\}$ and $\{i\}$, Sec. 633.2) noun locative temporal absolute (see \{di\}, Sec. 633.2)
vocative substantive

| connective (C) | connective (minor word) |
| :--- | :--- |
| interjection (I) | interjection (minor word). |

1013. The junctural constituents have been described in terms of phonetic detail and phonological status in Sec. 132. Since they occur in contrastive distribution and are both formally and semantically distinct, they constitute morphemes; but, unlike other classes of morphemes, the members of this class occur in constituency with syntactic constituents or constructions. For this reason, they are described here as a class of syntactic constituents (equivalent to the corresponding morphemes). For examples, see Sec. 132.

The non-terminal (i.e., sentence-terminal) intonation contours are:
$\{+\}$ ( space in transcription other than phonetic) word juncture is significant only at the ultimate constituent level as a marker of word class boundary.
\{,\} comma juncture signals a logical gap (in terms of the speaker's attitude) between the propositions of phrases and/or clauses.
\{...\} hesitation juncture characterizes an indefinite interruption of the utterance. Note that an utterance may sometimes terminatc in $\{\ldots\}$, in which case of course it would have to be regarded as a terminal contour.

The terminal contours (TC) are:
\{.\} period juncture signals the completion of an utter-
ance which i.s delivered by the speaker without any particular emotional bias, or typical of more or less neutral reporting.
\{!\} emphatic juncture indicates completion of an utterance concomitant with a fairly strong emotional bias.
\{8\} question juncture occurs infrequently and is usually restricted to minor sentences. Under normal circumstances, it never occurs in constituency with interrogative clauses (cf. Sec. 542).

## 1020. Expansions of Ultimate Constituents

1021. Substantival constituents are subject to a number of possible expansions. Possessives and pronouns may not be expanded with the exception of pronouns occurring in appositional constructions (see below).

A subject, object, locative, or vocative may be expanded in either of two ways:
I) $\mathrm{Po}+\mathrm{S}, \mathrm{O}, \mathrm{I}$, Vo , for example:

Po $+S$ : já•ski jé•m '(the) big trout's fin'
Po + $0:$ Pàmam'cáki báka 'that tree's leaves'
$\mathrm{Po}+\mathrm{L}:$ mímeki ?ýdiknomehmàkapèdi 'although you are not likely to reach that spot' (lit., 'to your ought not reach place')
Po + Vo : niki katih! ${ }^{\mathrm{M}} \mathrm{My}$ old lady (wife) ${ }^{\text {! }}$
2) by apposition of another $S, O$, $I$, or Vo bounded
by commas or comma and terminal juncture to the first one (cf. also Sec. 590).
 'That (woman), his wife, fell from the tree.'
$0+, 0$, : níhaj mý, niktýni, móhəp’in.: 'I told him, my brother, the truth.'
$\mathrm{L}+, \mathrm{L},:$ ?àmamsými módi, jàmamánkitdì, mý•n.
'I shot that deer there, at the foot of the hill.'
Vo + , Vo! : mín, nỉki hésky! 'You, my friend!'
A subject may be further expanded by means of a coordinate construction, $S+C+S$, where $C$ is \{?ákym\} (Sec. 820) or $\{$,$\} . This construction must be analyzed as$ consisting of three imnediate constituents.
 'Two and two is four.'
$\mathrm{S}+,+\mathrm{S}:$ mýnem, mỷkúlima wón. 'Her mother and father cried.'
1022. Temporal absolutes may be expanded in two ways or both conjointly as follows:
_ 0 + TA: ká•ja pínヤùdi 'when (he) heard the wolf'
$\mathrm{A}+\mathrm{TA}:$ býhby•ti cékatàdi 'while (he) was quietiy looking on'
$0+\mathrm{A}+\mathrm{TA}:$ sý• wènehné•ti sóhnodì 'ạs (he)
slowly released the dog'.
1023. Copulas occur only as depenüent or non-finite verbs. Auxiliaries may not be expanded. Other verbs are expandable as indicated below. Although the constituent order is theoretically optional, the normal order described here has the greatest frequency of occurrence.

In constructions which contain both adverb and object, ad̄verb and verb rank first as immediate constituents, then the resultant construction and object. In the case of two objects, binary constituency is indeterminable, the objects and verb being in three-way constituency with one another.
$0+V: k o ́ l e \cdot$ ćéni. 'Did you see the boy?'
$0+0+V:$ néno nik jántop! 'Tell me a story!'
$\mathrm{A}+\mathrm{V}:$ kádukti jóko•bỳny. 'Don't hịt him hard!'
$\mathrm{A}+\mathrm{Va}+\mathrm{Vn}:$ kélkeltihàj bá•kettòn. 'I stroked him lightly.'
$0+\mathrm{A}+\mathrm{V}$ : mìn wássati wíkistidè. 'Did he hurt you badly?'

The formula for direct discourse or quotation is a special instance of object expanded verb, whereby the quoted utterance is functionally equivalent to an expanded object, and the verb is an independent form of. \{rá\} 'say'.
$0(\mathrm{CL}, \mathrm{PH})+\mathrm{V}:$ níkùnimaj ?ýnoki•n, pàn. i"I will go first.", he saia.'
1024. Non-finite main verb participials occur in periphrastic constructions. When thereis no overt subject, the object may occur sentence-initially with the auxiliary


#### Abstract

enclitic to it. The auxiliary is always enclitic to the first constituent of the clause, optionally to the dependent verb in complex sentences. The participial or main Werb is clause-final with the optional reversal of auxi-liary-participial order when the clause consists of an independent periphrastic verb alone. For restrictions of occurrence of simple and periphrastic finite verbs, see Sec. 541. (... here indicates discontinuity)

Va...Vn : mỳhaj 'cámmi• méjin. 'I gave him the knife.' $\mathrm{Vn}+\mathrm{Va}:$ méjinàj. 'I gave it to him.'


## 1030. The Phrase (PH)

A phrase is a construction occurring either in constiturency with a clause or with a constituent (or expan ded constituent) in a minor sentence: One of the immediate constituents of a phrase is usually a comma. For examples of the various phrase types, see Sec. 1051.

103I. An interjectory phrase (IPH) consists of an interjection followed by comma. It usually occupies first tactic position in the sentence.

1032: Adverbial phrases (APH) consist of either temporal or adverbial absolutes ordinarily, but not always, in constituency with comma.
1033. A vocative phrase (VoPH) is composed of a vocative followed by comma. The VoPH occurs most often
sentence-initially except when preceded by the vocative interjection.
1034. A connective phrase (CPH) contains a connective in constituency with one comma when sentence-initial, or with two commas elsewhere. With the exceptions noted in Sec. 820, connectives do not occur in constituency with terminal contours, hence may not comprise minor sentences.
1035. Participial phrases (PPH) consist of main clause participials or expansions thereof optionally followed by comma, rarely occurring in sentence-final position.

> 1040. The Clause (CL)

A clause is a construction which must contain one and only one verb other than a main clause participial. Clauses may occur in constituency with other clauses, phrases, comma, or terminal contours. The principal clause types are illustrated here in the favored order of internal constituency, although theoretically any sequence is possible (with the exception of previously noted restrictions). The occurrence of a (overt) subject is optional. The subject is in immediate constituency with the verb. The locative is in constituency with the remainder of the clause. When two or more locatives occur in the same clause, constituent rank among them is indeterminable and they are
best regarded collectively as one constituent with respect to the balance of the clause. For the ordering of object and adverb within the clause, see Sec. 1023.
1041. Equational clauses (ECI) are those in which the main verb is always a copula and in constituency with two subjects. This type may occur as a dependent or an independent verb clause.
independent: $\mathrm{S}+\mathrm{Va}+\mathrm{S}+\mathrm{Vn}$
mònkýlema nìkpú•limàn. 'That woman is my wife.'
dependent: $S+S+V d$
Pàmammájdym jómimàce 'because that man was a shaman'
1042. Independent clauses (ICI) normally include an independent (periphrastic or non-periphrastic) verb which is never a copula. Particularly in texts or in other situations where the categories expressed by finite verb forms are clear from the immediate context, ellipsis of the underlying finite verb often occurs resulting in an independent but non-finite verb. Examples follow with and without included locatives.

$S+V i$ : minkúlim lúmitkojdè. 'Did your father go fishing!'
$S+\mathrm{L}+\mathrm{Vi}:$ mỳm hýbo•nak ?ýk̉ojbò. 'Let him go họme.'
$\mathrm{S}+\mathrm{I}+\mathrm{J}+\mathrm{Vi}:$ ní Pamadi mìnkan bíspes. ${ }^{\text {P }} \mathrm{I}$ would stay there with you.'
$\mathrm{L}+\mathrm{Va}+\mathrm{I}+\mathrm{L}+\mathrm{Vn}:$
hétydiha kékena• pákandi lúlun. 'When did he pull
him from the bank into the lake?'
(ellipsis) Vn : (mòmćá•hani ćén.) cén. '(Do you see that tree?) [I] see it.'

1043: Dependent clauses (DCL) differ from independent clauses in three respects:

1) they may contain copulias (see above),
2) they never occur in periphrasis,
3) the finite verb is always a dependent verb. With regard to various possible constituent relationships with subjects and locatives, DCLs are identical with ICLs.
$S \quad+\mathrm{Va}:$ ká•nom wéwejmè̀'cete 'although the old man didn't speak'
 the old man didn't speak to the boy'


> 1050. The Sentence (SE)

A sentence always has as one of its immediate constituents a terminal contour or hesitation juncture. Sentences are of two general types: major or minor.
1051. Major sentences must contain at least one clause in constituency with a terminal contour. As has been noted, the order of constituents in clauses is vir-
tually free but practically restricted to a few favorite types. A similar situation exists for major sentences. Thus, the subject tends to be sentence-initial or immediately after the first tactic constituent. In the case of periphrasis, this must of necessity be after the auxiliary. In complex sentences, the subject of the ICI may occur directly after the dependent verb (with or without intervening enclitic auxiliary, and the DCL usually precedes the ICI. Thus, when the ICL subject is first, with the $\operatorname{DCL}$ in normal order, the ICL subject and verb are in a discontinuous relationship. The DCL is in immediate constituency with the ICL. Connective phrases almost invariably occupy sentence-initial position.

Major sentences are either:

1) simple, i.e., those which include only one clause, e.g.,

ICL : mýmama cúkiku pèn. 'He ate acorn soup.'
$\mathrm{CPH}+\mathrm{ICI}:$ Pákym, kónojbe•mas wó•non. 'Then the girl died.'
IPH + ICL : wáh, ’ýnostà! 'Well, I'd better go!'
VoPH + ICL : kám, nìk bólopàj! 'Help me, nephew!'. APH + ICL : (temporāl) kájpidihàma ?ýda•n.
'He came yesterday.' (adverbial) bèlem móp! 'Drink again!: PPH + ICL : oóna•kana tépajjesa stwi pysí•ton. 'Stepping from stone to stone, she crossed the river.'
2) coordinate, i.e., those which are composed of two ICLs with an intervening connective postposition. The postposition is in constiturency with the verb of the first clause and the resultant construction with the second clause. The verb of either clause may be an elliptical form.

ICL + ICL : pénkanisa tújko•n. 'He ate and then he went to sleep.'
3) complex, i.e., those which include one ICL and one DCI.

DCL + ICL : nì bísissesa mỳm ワýsipkì•n. 'If I stay, he will leave.'
$\mathrm{CPH}+\mathrm{DCL}+\mathrm{ICL}:$ pácehani hómma•tice mípatìn. 'So why did you do it?'
$\mathrm{APH}+\mathrm{DCL}+\mathrm{ICL}:$ mỳ Ponko móssetesa mýkunim húda•syn. 'Although I drank more than he, he got drunk first.'

Additional subtypes of complex sentences may be obtained by combining DCLs with the simple sentence types noted above.
1052. Minor sentences do not include clauses and must include a terminal contour or hesitation juncture as a basic constituent. With the exception of interrupted discourse, participial phrases or constituents do not oceur in minor sentences. Some of the commonest types are:
I + TC : hêw! 'All right!'

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S + TC : cá•m. 'It's a tree.'
0 + TC : (hésihani c'én.) c'ć•. '(What did you see?)
    A tree.'
I + TC : pandakni. 'With a bow.'
AA + TC : (hómma•ticehàni ?ýda `n.) wém. '(Why did
                                you come?) For no reason.'
Vo + TC : nikné! 'Mother!'
IPH + Vo + TC : ?áj, pá! 'Hey, grandfather!'.
```


## NOTES

1
This is probably a loan also. Compare Central Sierra Miwok kawá•Či- 'pestle'; Southern Sierra Miwok kaw•a-ci- 'pestle', kaw•ac- 'elderberry'; and Lake Miwok kawáacu 'sugar' (from the sugar pine).

Nasalization of vowels following $/ \mathrm{h} /$ may be a peripheral feature (see Sec. 150) associated with a small number of interjections, including the examples cited above.

It is worth noting that almost all of the more than 100 attested Spanish and English loan words contain long vowels which correspond to an original stressed vowel in those languages, regardless of whether such vowel appears with stress in Konkow. Of course, at least some of these words were undoubtedly borrowed indirectly via neighboring indigenous languages (Nisenan, Patwin, Plains İiwok, etc.) which had already assimilated Spanish stress to length. Nevertheless, this strengthens the impression that vowel length only and not stress was a contrastive feature until the relatively recent past in Konkow.

However, postrocalically before period or emphatic
juncture, a glottal release (distinct from both glottalization of the preceding vowel, and glottal stop) may occur.

This lends additional support to the argument for excluding [c] from the phonemic system (see plain stops, Sec. 111).

Compare the empty morph || je || (p2 \{jó\}, Sec. 442) and $\|\operatorname{sih}\|$ (ID \{siP\} 'out and up', Sec. 465) as well as the morphophonemes $\|\mathrm{K}\|$ and $\|\mathrm{H}\|$ (Sec. 232).

See Sapir's Takelma Grammar for a description of a similar situation in another Penutian language.

Compare the anfilugous use of up in some English twopart verbs as a completive, e.g., clean up, beat up, write up, etc.

The other modal auxiliaries, $\{\mathrm{ma}\}$ and $\{\mathrm{pa}\}$, do not occur in equational clauses but this is probably due to insufficient data rather than any structural limitation.

Compare also Maidu \{máj\} third person pronoun.

11
The source of the various allomorphs poses some rather interesting questions. || tutu \| , \| py \|| , and || paj || may well have originated from earlier compounds. Compare \{tútu\} 'son' and/tún ~týn/ 'younger brother' as well as Maidu \{'ty'ty\} 'diminutive plural'; Maidu \{pý\} 'boy'; and Shoshonean *páj (?). The case for earlier *\{pý\} is strengthened by the fact that it may occur before the plural formants $/ h /$ and /j/. || nono || appears to be a reduplication (\{CV \} denoting collective distribution) of \{no\} nominalizer.

However, compare a hapax obtained from $\mathbb{E S}$, nìkkáhnono 'my younger sisters', where the K-stem \{káH\} occurs before || nono || instead of || paJ ||.

