# THE YAWELMANI DIALECT OF YOKUTS

## STANLEY S. NEWMAN

BEFORE the coming of the whites, the Yokuts people inhabited the exten-
sive plains and foothills of the southern San Joaquin basin of California.
Even two or three decades ago, traces of about forty Yokuts dialects could
still be found. But, at present, hardly more than a half-dozen dialects continue to
be spoken by the small native communities that have retreated to the foothills.
Among these dialects, Yawelmani exhibits the greatest vitality; it has become the
*lingua franca* of the Tule River Reservation, the largest of the Yokuts communities,
situated about fifty miles north of Bakersfield.

The relationship of Yokuts to other languages of the Penutian stock, even to
its California neighbor, Miwok, appears particularly remote when viewed from the
narrow perspective of the Yokuts dialects themselves. Except for occasional lexical
differences, manifested in distinct roots and suffixes, the dialects of Yokuts are
practically identical. A description of the Yawelmani dialect is in all essentials a
description of common Yokuts.

Yawelmani is characterized by a singular economy and consistency of form.
Its formal machinery is largely confined to a small number of suffixes employed in
conjunction with a fairly elaborate but strictly regular system of ablaut changes
occurring in stem vowels. The operation of these stem-plus-suffix processes has the
automatic regularity of a paradigm, for the processes appropriate to a given class
of words can be applied to every member of that class. In the formal hierarchy of
the language, every element seems to be rigidly clamped into place: each suffix is
allocated to a specific type of stem; each ablaut change conditioning the stem
vowels is part of a symmetrical system of vowel changes; with its vowels altered
according to an ablaut formula, each stem has its place among the set of stems
formed from a given type of root; each root, in turn, has membership in the con-
figuration of roots comprising a word class.

Two major types of root are to be distinguished. The base (symbolized by an
asterisk, as *de·yi, "lead") is a fundamental, unanalyzable root, which gives rise
to a number of vocalically diversified stems. The theme (symbolized by a diagonal
line, as diya·la·/, "cause to lead") is typically a secondary root composed of a stem
plus a thematizing suffix, the example quoted being made up of the causative -a·la·/
added to diy-, a stem of *de·yi. As compared with the base, the theme is relatively
limited in its stem formation.

A difference in syllabic structure also distinguishes the base from the theme.

There are only two types of syllable in Yawelmani: the open syllable, CV (C =consonant, V =vowel), and the closed syllable, CVC. Bases are disyllabic; they are either biliteral, consisting of two open syllables (CV +CV, as *de·yi, "lead," *xata, "eat"), or triliteral, consisting of an open plus a closed syllable (CV +CVC, as *hulɔ·ṣ, "sit down," *lɔgɔw, "pulverize"). But themes, like words, are made up of any number of open and closed syllables in any combination. Being limited by the two types of syllable, however, words and themes display a striking uniformity in phonetic structure. All words and themes begin in a single consonant followed by a vowel (CV + . . . , CVC + . . .). They may end in a vowel or in a consonant . . . +CV, . . . +CVC). Consonant clusters can occur only in medial position, and the number of consonants in a medial cluster is limited to two (CVC +CV, CVC +CVC). Vowels always occur singly; there are no vowel clusters in Yawelmani.

## PHONETICS AND PHONOLOGY

Consonants are sharply distinguished from vowels. There are no phonemes that can function as both consonants and vowels; y or w, for example can never be confused with i or u. The possibilities of syllabic structure, on the one hand, are sufficiently limited to define a given phoneme unambiguously as either a consonant or a vowel by its position in the syllable. In addition, these phonemes are clearly earmarked in the phonological system; whereas root vowels undergo an ablaut change in assuming their appropriate stem forms, the root consonants remain as a fixed unchanging framework throughout the various stems.

Some conception of the consonantal rigidity and the vowel plasticity of Yawelmani can be gained from the following words, composed of suffixes added to various stems of the base *de·yi, "lead"; de·y-en ,"he will lead";[1] dey-hin, "he led"; diy-hatin-hin, "he wanted to lead"; diye·-'iy, "the place where one got the lead" (subjective case); diya·-'an, "he is leading"; deydiy-en, "he will lead repeatedly"; diyidy-i·sa·-hin 'aman, "they led each other repeatedly"; diye·diy-ič, "one who is leading repeatedly" (subjective case); deyday, "the act of leading repeatedly" (subjective case).

The consonant phonemes of Yawelmani fall into three major sets.

I. Voiceless
    Stops and Affricatives
        Intermediate: b, d, ḍ, g, ż, ẓ
        Aspirated:    p, t, ṭ, k, c, ç
        Glottalized:  p̓, t̓, ṭ̓, k̓, č̓, ç̓
    Fricatives and Sibilants: x, s, ṣ

[1] These examples illustrate predications containing no expressed pronominal reference; a third person singular subject is understood in such instances. Where they are expressed, pronominal references are made by independent words (see page 244).

II. Voiced
     Simple:     m, n, w, y, l
     Glottalized: m̓, n̓, w̓, y̓, l̓
III. Faucal: h, '

The voiceless consonants are positionally free; they may occur initially, me-
dially (intervocalically, preconsonantally, postconsonantally), or finally in the
word. They undergo no changes whatever, and they have no influence on adjacent
phonemes. For typographical convenience, voiced symbols are used to indicate the
intermediates, which have the nonaspirated quality of French voiceless stops (as
in French par, temps, car). The aspirated consonants are pronounced in all posi-
tions with a considerable degree of aspiration, much like the English aspirated
stops in initial position. A light degree of glottal plosion characterizes the glottal-
ized stops and affricatives of Yawelmani; in acoustic effect these consonants are
markedly different from the violently glottalized consonants which occur in the
languages of the Northwest Coast, such as Nootka or Bella Coola. The subscript
dot in d, t, t̓, z, c, c̓, and ṣ symbolizes a retroflex aveolar articulation, with the
tongue slightly arched and the tip touching the alveolar ridge.

The voiced phonemes exhibit some special features. The glottalized conso-
sonants of this set are positionally limited, for they do not occur initially or post-
consonantally in the word. In addition, a special phonological process applies to
the voiced phoneme; when it occurs as the second consonant of a stem, the voiced
phoneme absorbs the floating glottal stop of suffixes, which will be indicated by
-'. . . . in suffixes. The glottal-absorbing process is illustrated in the addition of the
agentive suffix, -'. . . a·/, to such stems as diy- or hulṣ-, resulting in diy̓a·/, "one
who is in the lead," and hulṣ̓a·/, "one who is seated." Here the glottalized pho-
nemes y̓ and l̓ are secondary, composed of a fundamental y and l of the stem plus
an extrinsic glottal inflection from the suffix. The glottalized voiced phonemes,
which also appear as fundamental consonants, likewise absorb the floating glottal
stop of suffixes. Such stems as giy̓- ( <*giy̓i, "touch") and mun̓- ( <*mun̓u, "turn
around, turn the back") append the agentive -'. . . a·/ to form giy̓a·/, "one who has
touched," and mun̓a·/, "one who has his back turned." No other consonants can
absorb the floating glottal stop: e.g., xat'a·/, "one who has eaten," 'ut̓'a·/, "one
who has stolen," composed of -'. . . . a·/ suffixed to the stems xat- ( <*xata, "eat")
and 'ut̓- ( <*ɔ·t̓u, "steal").

The two faucal consonants also constitute a separate phonemic set. The glot-
tal stop, however, presents some phonological peculiarities that do not apply to h.
As distinguished from the floating glottal stop of suffixes, the organic glottal stop
is a fixed consonant found in roots as well as in suffixes: e.g., *'ɔ·t̓u, "steal,"* ẓu'ub,
"divide," -'an, durative present suffix. In contrast to the treatment of the floating
glottal stop of -'. . . a·/, the initial consonant of -'an is immovable: e.g., hulɔṣ-'an,
"he is sitting down." A third type of glottal stop, an inorganic consonant sym-
bolized by ('), is added only to vowel-ending stems when these are followed either

by a suffix beginning in a vowel or by a final zero suffix: among the case forms of huṛṣa·/, "one who is seated," are huṛṣa·(')-in (-in, possessive case) and huṛṣa(')-] (-], subjective case).[2] This inorganic element does not appear before suffixes beginning in a consonant: e.g., huṛṣa·-nit (-nit, ablative case).

The glottal stop and h have a similar influence upon vowels. When either of these phonemes occurs intervocalically, the preceding vowel of a stem is assimilated to a strong quality if the following vowel is strong (ɔ·, a·, e·). Thus, to add the agentive -uč/, a stem is normally demanded whose first and second vowels are respectively weak and strong—u and ɔ·, for example. But the first vowel of a stem assimilates the strong quality of the second vowel when ' or h intervenes: contrast the weak first vowel of the stems in 'uṭɔ·(')-uč/, "one who is stealing" ( <*ɔ·ṭu, "steal"), and in hulɔ·ṣ-uč/, "one who is sitting down" ( <*hulɔ·ṣ, "sit down"), with the strong-assimilated first vowel in mɔhɔ·(')-uč/, "one who is diving" ( <*muhu, "dive"), and in wɔ'ɔ·y-uč/, "one who is falling asleep" ( <*wɔ·'uy, "fall asleep").

These two consonants also share a positional restriction: neither ' nor h occurs as a root final. These phonemes may, however, appear finally in stems and even in words. Under certain conditions a root with medial ' or h, such as the bases *ma'a, "look down," or *muhu, "dive," will drop the final vowel to form a stem in which the second consonant becomes final, as in ma'-, muh-. With the addition of a final zero suffix to such stems, the ' or h becomes a word final: e.g., ma'-], "the act of looking down" (subjective case), muh-], "the act of diving" (subjective case). The use of an inorganic glottal stop before a zero suffix adds to the possible occurrences of this phoneme as a word final: e.g., muh'a(')-], "one who has dived" (subjective case).

The characteristics of Yawelmani consonants can be summed up briefly. The voiceless consonants are immutable and positionally unrestricted. When occurring as second consonants in stems, the voiced phonemes absorb the floating glottal stop of suffixes, the simple voiced consonants becoming secondarily glottalized by this process; whether secondary or primary, the glottalized voiced consonants are restricted to intervocalic, preconsonantal, and final position in the word. The two faucals are the only consonants which may, under certain conditions, influence the assimilation of stem vowels; in roots these two consonants are restricted to initial and medial position. Of all consonants, the glottal stop is phonologically the most complex, for three phonological types are to be distinguished: 1) the organic glottal

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[2] Yawelmani possesses three zero suffixes, that is, suffixes with no overt phonetic content. One ot these is a final suffix, -], denoting the subjective case. The other two are thematizing suffixes: e.g., the verbal noun suffix -/, as in hulɔ·ṣ- /, "the act of sitting down." No theoretical significance is to be attached to the fact that these suffixes are phonetically zero. Like other suffixes, they have a definite semantic content; they are allocated to specific stems; and the distinction between final and thematizing suffixes applies to them as well as to all other suffixes (see pages 231–232 for a discussion of suffixes).

stop, a fixed phoneme in roots and suffixes; 2) the floating glottal stop of suffixes, which is absorbed by a second voiced consonant of stems; and 3) the inorganic glottal stop, which is employed after vowel-ending stems, a) as the final consonant before a zero final suffix, b) as a hiatus-filling consonant before a suffix beginning in another vowel.

Yawelmani possesses ten vowel phonemes: i, i·, e, e·, a, a·, ɔ, ɔ·, u, u·. These ten phonemes, however, do not have the same phonological status: i·, u·, and e are ablauted forms of root vowels and appear only in stems; the remaining seven vowel phonemes occur in roots as well as in stems. These seven phonologically funda-mental vowels of Yawelmani are patterned as follows:

|  | Vowel Series | | | |
|---|---|---|---|---|
|  | ɔ | a | i | u |
| Light | ɔ | a | i | u |
| Heavy | ɔ· | a· | e· | ɔ· |

The ɔ· phoneme, it will be noted, plays two distinct rôles in this configuration. It is a striking feature of Yawelmani that the only two phonological entities actual-ized in a single vowel phoneme (ɔ· of the ɔ series and ɔ· of the u series) are maximally differentiated in their treatment. For this reason, the phonological principles of vowel harmony and vowel change can best be illustrated by an examination of these two types of ɔ· vowel, as they appear in *dɔ·sɔ, "report," and in *'ɔ·ṭu, "steal."

In one of its aspects, vowel harmony is exhibited in bases, all of which con-tain two vowels belonging to the same vowel series.[3] Because of this harmony in base vowels, the vowel series membership of an ɔ· vowel is defined by the base in which it occurs. Thus, the second vowel of *dɔ·sɔ marks this base as being com-posed of ɔ series vowels; in the same way, *'ɔ·ṭu is identified as a base containing vowels of the u series. There is no base which is ambiguous in its vowel series membership.

Another type of vowel harmony, operating on somewhat wider principles, is imposed upon suffixes by stems. Suffixes occur in twin vocalic forms. For ex-ample, -it, passive aorist, is appended to stems whose last vowel belongs to the ɔ, a, or i series; but if the last stem vowel is of the u series, the suffix takes the form -ut: e.g., dɔ·s-it, "it was reported," but 'ɔ·ṭ-ut, "it was stolen." The dubitative -ɔl is added only to stems having the last vowel in the ɔ series, the twin form -al being employed with stems whose last vowel is in the a, i, or u series: e.g., dɔ·s-ɔl, "he might report," but 'ɔ·ṭ-al, "he might steal." The same harmonic principles apply to suffixes containing more than one vowel in the same series: e.g., dɔ·s-e·ni, "in order to report," 'ɔ·ṭ-ɔ·nu, "in order to steal" (-e·ni and -ɔ·nu, resultative gerundial); dɔs-ɔ·lɔ·/, "cause to report," 'uṭ-a·la·/, "cause to steal" (-ɔ·lɔ·/ and -a·la·/, causa-tive). But if the suffix vowels differ in vowel series, only the first is harmonically varied: e.g., dɔs-'iṅay, "while reporting," 'uṭ-'uṅay, "while stealing" (-'. . . iṅay

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[3] A more detailed discussion of bases, with examples, will be found on pages 233-234.

and ·'. . . uṅay, contemporaneous gerundial); dɔs-hɔtin/, "desire to report," 'uṭ-hatin/, "desire to steal" (-hɔtin/ and -hatin/, desiderative).

The system of suffix vowel harmony is schematized in the following table:

|  | | Series of Last Stem Vowel | | | |
|---|---|---|---|---|---|
|  | | ɔ | a | i | u |
| Series of | { | i | i | i | u |
| Suffix Vowel | { | ɔ | a | a | a |

As the table shows, each suffix possesses one vocalic form for stems of three vowel series, and another for stems of the fourth vowel series. In citing suffixes hereafter, the practice will be adopted of quoting that vocalic form employed with stems in three of the four vowel series; thus, a reference to the aorist -hin will imply its twin vocalic form -hun, and a reference to -xa, precative, will similarly imply the paired form -xɔ, each member of the suffix pair being distributed among stems in accordance with the principles of suffix vowel harmony.

Stems are formed from roots by processes of vowel change. These processes are to be regarded as operating on two planes: on the one hand, dynamic vowel processes effect ablaut changes that are to be defined in terms of morphological conditions; on the other hand, a few phonetic processes introduce additional vowel changes of a mechanical nature. In the formation of stems these two planes interact; a stem which has undergone dynamic vowel changes may, in turn, be subjected to secondary phonetic changes. For example, dɔsɔ·- and 'uṭɔ·- (stems ablauted from *dɔ·sɔ, "report," and *'ɔ·ṭu, "steal") appear without any secondary vowel changes in dɔsɔ·(')-iċ/, "one who is reporting," and in 'uṭɔ·(')-uċ/, "one who is stealing." In accordance with the rule that long vowels are shortened in closed syllables, these stems have their last vowel secondarily shortened in dɔsɔ[·]-hnil,/ "place where it was reported," and in 'uṭɔ[·]-hnul/, "place where it was stolen."[4] To the same ablaut type of stem are allocated several suffixes beginning in -'a or -'a· which have an assimilative effect upon the last vowel of vowel-ending stems; but the last vowel of stems ending in a consonant is not subject to this secondary assimilation: contrast the assimilated stem vowel in 'uṭa·-'an, "he is stealing," with the merely shortened stem vowel in hulɔ[·]ṣ-'an, "he is sitting down." Finally, a secondary vowel change, termed glottal-weakening, affects vowels occurring before a final glottal stop: e.g., hulu'ṣu-', "he will cause . . . to sit down," in which the final vowel of the stem hulu'ṣɔ· is weakened before -' , future; p̓a'a·ṣi(')-], "lake" (sub-jective case), in which the final glottal stop, even though inorganic, weakens the final vowel of the stem p̓a'a·ṣe·-.

The dynamic vowel processes are configurational in character, for under given morphological conditions the root vowels change in uniform cycles, or sets. The

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⁴ Brackets will enclose the length sign of an organically long vowel which has been secondarily shortened.

suffix -'e·y/, for example, demands a stem whose first vowel is ɔ, a, i, or u and whose second vowel is, respectively in each of the four vowel series, ɔ·, a·, e·, or ɔ·:

> dɔsɔ·-'e·y/, "that which was reported" ( <*dɔ·sɔ, "report")
> xata·-'e·y/, "that which was eaten" ( <*xata "eat")
> 'ile·-'e·y/, "that which was fanned" ( <*'ile·, "fan")
> 'uťɔ·-'ɔ·y/, "that which was stolen" ( <*'ɔ·ťu, "steal")

The causative-repetitive -lsa·/ is suffixed to stems whose first vowel is again ɔ, a, i, or u but whose second vowel is respectively e·, e·, e·, or ɔ·:

> dɔse·-lsa·/, "cause to report often"
> xate·-lsa·/, "cause to eat often"
> 'ile·-lsa·/, "cause to fan often"
> 'uťɔ·-lsa·/, "cause to steal often"[5]

By following different dynamic vowel processes stems may sometimes overlap in objective form. The stems of 'uťɔ·-'ɔ·y/ and 'uťɔ·-lsa·/, in spite of their objective similarity, are differently configurated in the ablaut system; the first stem is aligned with other stems whose vowels are consistently ɔ plus ɔ·, a plus a·, i plus e·, or u plus ɔ·, and the second stem belongs with other stems containing the vowels ɔ plus e·, a plus e·, i plus e·, or u plus ɔ·.

The vocalic form of stems can be most conveniently expressed in terms of an ablaut formula operating upon roots: thus, the suffix -'e·y/ is added to stems whose formula is W +S (weak first vowel plus strong second vowel); -lsa·/ is suffixed to W +E· stems (weak first vowel plus E·-induced second vowel). Each of the dynamic vowel sets, with the terms and symbols referring to them, are indicated in the following table. The first line contains the fundamental vowels of roots. Below this, each line represents one of the dynamic vowel sets which, in stems, replaces the root vowels.[6]

| Fundamental Vowels | ɔ | ɔ· | a | a· | i | e· | u | ɔ· |
|---|---|---|---|---|---|---|---|---|
| F (full) | ɔ | ɔ· | a | a· | i | e· | u | ɔ· |
| S (strong) | ɔ· | ɔ· | a· | a· | e· | e· | ɔ· | ɔ· |
| W (weak) | ɔ | ɔ | a | a | i | i | u | u |
| W' (weak-glottal) | ɔ' | ɔ' | a' | a' | i' | i' | u' | u' |
| W· (weak-long) | ɔ· | ɔ· | a· | a· | i· | i· | u· | u· |
| Z (zero) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I (I-induced) | i | i | i | i | i | i | u | u |
| E· (E·-induced) | e· | e· | e· | e· | e· | e· | ɔ· | ɔ· |

[5] The presence of a long vowel in the closed syllable before -lsa·/ is one of the two exceptions to the general rule of vowel shortening. The other exception occurs in a rhetorically lengthened vowel (see page 237).

[6] In the table the symbol 0 is used to refer to a zero-grade vowel. The dash indicates that the process does not apply to the root vowel in question: e.g.,dulled vowels in the stem are formed only from the light fundamental root vowels (ɔ, a, i, u), not from the heavy vowels (ɔ·, a·, e·, ɔ·).

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A (A-induced) | ɔ | ɔ | a | a | a | a | a | a |
| R (reduced): | | | | | | | | |
| z (zeroed) | 0 | — | 0 | — | 0 | — | 0 | — |
| d (dulled) | i | — | i | — | i· | — | u | — |
| z¹ (heavy-zeroed) | — | 0 | — | 0 | — | 0 | — | 0 |
| r (retained) | — | ɔ· | — | a· | — | e· | — | ɔ· |

The dynamic vowel processes may operate upon each vowel of the root; thus, the W +S—I +Z stem, employed with the agentive -ič/, is an example of the four-fold ablaut change exhibited in stems of reduplicated bases:

dɔsɔ·dis-ič/, "one who reports often"  ( <*dɔ·sɔdɔ·sɔ, "report often")
xata·xit-ič/, "one who eats often"   ( <*xataxata, "eat often")
'ile·'il-ič/,   "one who fans often"   ( <*'ile·'ile·, "fan often")
'uṭɔ·'uṭ-uč/, "one who steals often"  ( <*'ɔ·ṭu'ɔ·ṭu, "steal often")

Reduction (R) is the only dynamic vowel process which does not have a uni-form effect upon a given type of root vowel; this process is conditioned by variables of phonetic structure, arising from the union of stems and suffixes. In the process of reduction, which operates only upon the last vowel of roots, a light root vowel (L) is zeroed (z) in the stem, unless the stem would end in two consonants and be followed by a suffix beginning in a consonant, in which case the root vowel is dulled (d); a heavy root vowel (H) is retained (r) in the stem, unless the stem would end in a vowel and be followed by a suffix beginning in a vowel, in which case the root vowel is heavy-zeroed (z'). A schematic presentation of the F +R stem of bases, with examples, will clarify the conditions determining the various types of reduction.

| Base | F+R Stem | |
|---|---|---|
| | preconsonantal | prevocalic |
| *CVCL (*xata, "eat") | CVCz- (xat-) | CVCz- (xat-) |
| *CVCLC (*lɔgɔw, "pulverize") | CVCdC- (lɔgiw-) | CVCzC- (lɔgw-) |
| *CVCH (*'ile·, "fan") | CVCr- ('ile·-) | CVCzˡ- ('il-) |
| *CVCHC (*hulɔ·ṣ, "sit down") | CVCrC- (hulɔ[·]ṣ-) | CVCrC- (hulɔ·ṣ-) |

The dynamic processes of vowel change have no assignable semantic function. Stems whose vowels have been modified by these processes are employed merely as formal counters for the addition of appropriate suffixes. Examples illustrating the various dynamic vowel processes will be found in the stem table (page 235).

Somewhat parallel to the inorganic consonant ('), which is used to separate verb or substantive stem vowels from suffix vowels, is the inorganic vowel, em-ployed only with substantive stems. This vowel varies in quality according to the theme classification of the substantive and according to the character of the follow-ing suffix, a weak inorganic vowel occurring before the monoconsonantal suffix -w, locative, a strong vowel being used before all other suffixes beginning in a conso-nant. The inorganic vowel is inserted 1) between substantive stems ending in one

or more consonants and a monoconsonantal suffix, as in wite·b(a)·w, "toward the child" ( <wite·b/, "child"), or in 'axċ(i)·w, "toward the bed" ( <'axiċ)/, "bed"); 2) between substantive stems ending in two consonants and a suffix beginning in a consonant, as in 'axċ(e·)·nit, "from the bed"; 3) before the last two consonants of substantive stems which, having dropped the last vowel of the theme, would end in three consonants, as in yaw̓(i)lċ· (theoretically **yaw̓lċ·, a stem of yaw̓liċ/, "wolf"). The inorganic consonant and vowel may be regarded as protective de-vices, for they are employed to separate phonemes which, if combined in accord-ance with morphological stipulations, would violate the syllabic dictates of the language.

Still another phonological technique for preserving the syllabic regulations is that of suffix truncation. In the process of truncation the first or the last phoneme of a suffix is dropped. Initial truncation, either of consonants or of vowels, fulfills a protective function; thus, the desiderative ·hatin/, which appears in its complete form when suffixed to W +Z stems ending in one consonant (e.g., 'uṭ·hatin/, "de-sire to steal"), occurs in a truncated form when added to W +Z stems ending in two consonants (e.g., hulṣ·atin/, "desire to sit down"); similarly, the dubitative ·al is employed in its complete form with F +R stems ending in a consonant (e.g., 'ɔ·ṭ·al, "he might steal"), but an initially truncated form of this suffix is added to F +R stems ending in a vowel (e.g., 'ile[·]·l, "he might fan"). Final truncation, which has no protective function, applies only to suffix vowels. Certain stems end-ing in a vowel demand a finally truncated suffix: for example, the imperative ·ka, allocated to F +R stems, appears in its complete form in 'ɔ[·]ṭ·ka, "steal!" but in its truncated form in 'ile[·]·k̓, "fan!" Morphological as well as phonetic conditions determine the occurrence of truncation: impending vowel clusters are avoided by the truncation of initial suffix vowels in certain morphological processes, by the insertion of the inorganic glottal stop in others; in substantives a cluster of conso-nants is prevented from violating syllabic rules by initial consonant truncation or by the use of an inorganic vowel, depending upon morphological conditions, but verbs consistently employ the truncating technique under the same phonetic cir-cumstances.

In its vowel phonology, then, Yawelmani operates with ten phonemes, of which only seven are the fundamental vowels of roots. Among these seven, how-ever, the vowel ɔ· plays a double rôle, being the heavy member of both the ɔ series and the u series. The fundamental pattern of vowels is based on four series (ɔ, a, i, u), each containing a light and a heavy member. The base root exhibits vowel harmony in that its two vowels belong to the same vowel series; vowel harmony of a somewhat different order operates upon suffix vowels, for a suffix is vocally harmonized with its stem. The stem itself is formed from the root by means of vowel changes. These changes are of two types. On the one hand, root vowels assume their stem forms by undergoing ablaut changes, each of which is configu-rated in a set of dynamic vowel processes; these stems, which can be defined in

terms of an ablaut formula, may then be subjected to secondary vowel changes, such as shortening, a-assimilation, strong assimilation, glottal weakening. In addition to these changes impressed upon stem vowels, Yawelmani possesses an inorganic vowel inserted after substantive stems to prevent consonant clusters. Under certain morphophonetic conditions, suffix vowels are truncated initially or finally, suffix consonants only initially.

## SUFFIXATION

Among the grammatical techniques of Yawelmani, suffixation and ablaut change are the most important. Reduplication is employed to a limited extent in the formation of roots and stems, and a considerable number of roots, particularly substantive themes, are petrified in a reduplicated form. Another grammatical technique, which may be roughly described as proclisis, has an even more limited scope, being restricted to the formation of roots in the small and anomalous word class of -wiyi verbs (pages 236–238). But suffixation and ablaut account for most of the functional expression in Yawelmani; these two processes occur jointly in the formation of every word, even when reduplication or proclisis, or both, also play a part in the same morphological operation.

Each suffix is to be defined, on the one hand, in terms of its stem affiliation: thus, -lsa·/, causative repetitive, demands the W +E· stem; -en, future, demands the F +R stem. In addition, each suffix may be defined with respect to the type of grammatical unit which it forms. On this basis, two major types of suffixes are to be distinguished: 1) thematizing (i.e., theme-forming) suffixes that may be combined with each other or with 2) final (i.e., word-forming) suffixes, of which only one can appear in a word. The unit composed of stem plus thematizing suffix is a theme, which serves as a new point of departure for the formation of stems to which additional suffixes are attached: thus, from the theme 'ile·kič/, "one who is singing" (composed of the thematizing -ič/, agentive, with the W +S stem of *'ilik, "sing") are formed the absolutive case stem 'ile·kič-, the oblique case stem 'ile[·]kč-, the absolutive plural stem 'e[·]lke·č-, the oblique plural stem 'e[·]lkač-. A complete word is formed only by the addition of a final suffix to a stem, whether it be the stem of a base, as in 'ilk-en, "he will sing" (-en, future, with the prevocalic F +R stem of *'ilik), or the stem of a theme, as in 'ile[·]kč-i lanhin, "he hears the one who is singing" (-i, objective case, with the oblique case stem of 'ile·kič/).

To these two major types of suffixes must be added a third special type, the auxiliary suffixes -xɔ·.., durative, and -'...exɔ·.., consequent (referring to the state consequent to an activity). The auxiliary type of suffix, which will be symbolized by two final dots, displays several peculiarities. Like the thematizing suffix, the auxiliary cannot end a word; but the thematizing suffix may be followed by any one of a large number of suffixes, either thematizing, final, or auxiliary in type, whereas the auxiliary is limited in its combinations to one of only five final suffixes. The auxiliary exhibits the phonological peculiarity of not harmonizing vocalically

with its stem; instead of possessing the twin vocalic forms that characterize all other suffixes, the auxiliary has only one fixed vocalic form. Furthermore, the durative auxiliary xɔ·. . causes an irrational shortening of a final stem vowel; and, when added to vowelending stems, a monosyllabic combination of xɔ·. . plus final suffix has the effect of displacing the word stress to the antepenultimate syllable: note the irrationally shortened stem vowel in 'ili'ke[·]xɔ·nit, "he is being made to sing," and, in addition, the aberrant stress in 'ili'ke[·]xɔ[·]t, "he was being made to sing."[7] Although they are minor details characterizing the auxiliary, these departures from normal phonological practice stand out sharply in a language such as Yawelmani, where phonological rules tend to be uniform and inflexible.[8]

Each suffix type expresses certain of the functional categories. The auxiliaries are purely aspectual in function. The final suffixes include 1) all tense suffixes, whether their tense reference is pure, as in en, future, or mixed, as in 'at, which expresses durative aspect and passive voice as well as aorist (past or present) tense; 2) all modal suffixes, as ka, imperative; 3) all gerundial suffixes, which form subordinate verbs, as '. . . iṅay, contemporaneous gerundial; 4) all case suffixes, as in, possessive. The thematizing suffixes include 1) all suffixes of modal derivation, i.e., suffixes having a modal reference that is more concrete and external than that of mode proper, as xas/, exclusive ("do nothing but . . . "); 2) all suffixes referring purely to voice, as in/, mediopassive; 3) all suffixes, other than the auxiliaries, referring purely to aspect, as le·/, continuative; 4) all nominalizing suffixes, added to the stems of verb roots, as ič/, agentive; 5) all verbalizing suffixes, added to the stems of noun roots, as '. . . in/, attributive.

## WORD CLASSES AND THEIR PARADIGMS

Yawelmani words fall into three major classes: verbs, substantives, particles, and interjections. The verb expresses a predication; if it is the main predication, the verb is marked by a final suffix of tense or of mode; if the verb expresses a subordinate predication, it ends in one of the gerundial suffixes. The substantive, which expresses an entity reference, is formally earmarked by a final case suffix. The particle is an uninflected word, expressing notions that are primarily of an adverbial character.

The three word classes are subdivided as follows:

[7] Stress appears normally on the penult of words. Since it is a mechanical, nonphonemic feature of the language, it will not be marked except in those words having the abnormal, antepenultimate stress.

[8] From a configurational point of view, it is interesting to note that the auxiliary has disappeared as a distinct type of suffix from the other five dialects of Yokuts that have been studied. All that is left of this exceptional suffix type in most dialects is one final suffix, a petrified combination of the old durative auxiliary plus a final suffix, which still retains the peculiarity of nonharmonic behavior but does not shorten a final stem vowel or displace the word stress.

I. Verbs
    A. Basic verbs (verbs having the base as their root)
        1. Primary verbs
        2. ʻwiyi verbs
        3. Reduplicated verbs
    B. Thematic verbs (verbs having the theme as their root)
II. Substantives (all substantive roots are themes)
    A. Nouns
    B. Personal pronouns and demonstratives
    C. Interrogative pronouns and interrogative demonstratives
III. Particles and interjections

Each word subclass is formally defined by its configuration of root types, by the paradigm of stems formed from these roots, and by the suffixes affiliated with each stem of the stem paradigm. The main distinction among root types is that between base and theme, a distinction cutting across the word classification of verb and substantive.

Several phonological features of the base and of base types have already been touched upon. Syllabically, bases conform either to a biliteral CVCV structure or to a triliteral CVCVC structure. Vocalically, bases contain two vowels, both of which belong to the same vowel series. Since each of the four vowel series is made up of a light (L) and a heavy (H) member, as i and e· of the i series, the bases are confined to permutations between the two members of the same vowel series. The two vowels in a base may be either L and L, H and L, or L and H (there is no base type containing the fourth theoretical permutation, H and H). These three vocalic possibilities vary independently with the two syllabic possibilities, result' ing in six types of base, which may be schematized as follows:

    I. Biliteral bases
        A. With a light last vowel
            1. With a light first vowel       CLCL
            2. With a heavy first vowel     CHCL
        B. With a heavy last vowel         CLCH
    II. Triliteral bases
        A. With a light last vowel
            1. With a light first vowel       CLCLC
            2. With a heavy first vowel     CHCLC
        B. With a heavy last vowel         CLCHC

The following examples will illustrate this configuration of six base types in each of the four vowel series:

IA1)   CLCL:    *k̉ɔʼɔ, "strike," *xata, "eat," *wiyi, "say, do," *muhu, "dive"

IA2)   CHCL:   *dɔ·sɔ, "report," *ṣa·pa, "burn," *de·yi, "lead," *'ɔ·t'u, "steal"

IB)     CLCH:   *hɔyɔ·, "name," *xaya·, "place," *'ile·, "fan," *ćuyɔ·, "urinate"

IIA1) CLCLC: *lɔgɔw, "pulverize," *pa'aṭ, "fight," *'ilik, "sing," *hubuṣ, "choose"

IIA2) CHCLC: *mɔ·xɔl, "grow old," *'a·mal, "help," *be·win, "sew," *wɔ·'uy, "fall
                 asleep"

IIB)    CLCHC: *lɔʒɔ·x, "frighten," *p̓axa·t́, "mourn," *hiwe·t, "walk," *hulɔ·ṣ, "sit
                 down"

     The basic verbs draw upon this configuration of bases for their roots. But there are three subclasses of basic verb (see page 233), and each subclass is characterized by a somewhat different set-up of bases. The triliteral bases, for example, do not appear in the reduplicated verb subclass, which has as its roots only the biliteral bases in a completely reduplicated form.

     The root configuration of primary verbs, however, is made up of the entire set of six base types, in a simple unmodified form. Ablaut changes operating upon these primary verb bases create primary verb stems, which are then ready for the application of secondary phonetic processes and for the addition of suffixes. The primary verb suffixes, which number about fifty, are very unevenly distributed among the stems. Most of the stems of the primary verb paradigm are limited in their productiveness to one suffix. The F+R stem, on the other hand, is the most prolific in the formation of words and themes, for to this stem are allocated the majority of primary verb suffixes.

     As the table of stem paradigms indicates (see page 235), some of the stems occur for only certain types of primary verb bases. The biliteral bases do not form W+A, W+W·, W+W', or W+I stems, these being part of a stem-plus-suffix process applied only to triliteral bases. Thus, the repetitive -da·/ is the sole suffix allocated to the W+A stem, and only triliteral bases undergo this process for the repetitive. The same function is expressed for biliteral bases by complete reduplication, which converts the primary verb base into a reduplicated verb base. Similarly, the causative is expressed by -e·/ with the W+W· stem of triliteral bases, but by -a·la·/ with the W+Z stem of biliteral bases. But these instances of a split in the formal expression of a given function are not at all typical of Yawelmani morphology. For the most part, a function is expressed by a uniform stem-plus-suffix process operating upon all base types.

     A few examples will help to actualize the stem-plus-suffix processes of the primary verb subclass:

     wiy-hin, "he said": -hin, aorist, with the preconsonantal F+R stem of all primary verb bases.

     lɔgw-e·ni, "in order to pulverize": -e·ni, resultative gerundial, with the prevocalic F+R stem of all primary verb bases.

     xaya·-n/, "act of placing": -n/, verbal noun, with the W+R stem of primary verb bases of type IB. All other base types of the primary verb form the verbal noun by adding the suffix -/ to the W+R stem: e.g., biwin-/, "act of sewing,"

## STEM PARADIGMS

### Primary Verbs

| Base | F+R Stem | | W+R Stem | W+Z Stem | W+S Stem | | | W+I Stem |
|---|---|---|---|---|---|---|---|---|
| | precons. | prevoc. | | | a-assim. | precons. | prevoc. | |
| IA1) *wiyi, "say, do" | wiy· | wiy· | wiy· | wiy· | wiya· | wiye· | wiye(')· | |
| IA2) *'ɔt'u, "steal" | 'ɔ[·]t'· | 'ɔt'· | 'ut'· | 'ut'· | 'ut'a· | 'ut'ɔ· | 'ut'ɔ(')· | |
| IB) *xaya, "place" | xaya· | xay· | xaya· | xay· | xaya· | xaya· | xaya(')· | |
| IIA1) *lɔgɔw, "pulverize" | lɔgiw· | lɔgw· | lɔgiw· | lɔgw· | | lɔgɔ[·]w· | lɔgɔ·w· | lɔgiw· |
| IIA2) *be·win, "sew" | be·win· | be[·]wn· | biwin· | biwn· | | biwe[·]n· | biwe·n· | |
| IIB) *hulɔ·s, "sit down" | hulɔ[·]s· | hulɔ·s· | hulɔ·s· | huls· | | hulɔ[·]s· | hulo·s· | hulus· |

| Base | S+Z Stem | W+E Stem | W+A Stem | W+W· Stem | W+W· Stem | W+I Stem |
|---|---|---|---|---|---|---|
| IA1) *wiyi, "say, do" | we·y· | wiye· | | | | |
| IA2) *'ɔt'u, "steal" | 'ɔt'· | 'ut'ɔ· | | | | |
| IB) *xaya, "place" | xa·y· | xaye· | | | | |
| IIA1) *lɔgɔw, "pulverize" | lɔ[·]gw· | lɔge·w· | lɔgɔw· | lɔgɔ·w· | lɔgɔ·w· | lɔgiw· |
| IIA2) *be·win, "sew" | be[·]wn· | biwe·n· | biwan· | biwi·n· | biwin· | |
| IIB) *hulɔ·s, "sit down" | hɔ[·]ls· | hulɔ·s· | hulas· | hulu·s· | hulu·s· | hulus· |

### Reduplicated Verbs

| Base | F+Z-W+Z Stem | F+Z-A+Z Stem | W+Z-A+Z Stem | W+S-I+Z Stem | W+S-Z+Z Stem | W+I-Z+Z Stem |
|---|---|---|---|---|---|---|
| IA1) *wiyiwiyi, "say often, do often" | wiywiy· | wiyway· | wiyway· | wiye·wiy· | wiye[·]wy· | wiyiwy· |
| IA2) *'ɔt'u'ɔt'u, "steal often" | 'ɔ[·]t'ut'· | 'ɔ[·]t'at'· | 'ut'at'· | 'ut'ɔ'ut'· | 'ut'ɔ[·]t'· | 'ut'ut'· |
| IB) *xaya·xaya, "place often" | xayxay· | xayxay· | xayxay· | xaya·xiy· | xaya[·]xy· | xayixy· |

'uť-/, "act of stealing." These two verbal noun suffixes are the only ones affiliated with the W +R stem.

'uť-hatin/, "desire to steal": -hatin/, desiderative, with the W +Z stem of biliteral primary verb bases. For triliteral bases this suffix appears in an initially truncated form: e.g., lɔgw-ɔtin/, "desire to pulverize."

hulɔ[·]ṣ-'a·hin, "he was sitting down": -'a·hin, durative preterit, with the preconsonantal W +S stem of triliteral primary verb bases, with the a-assimilated W +S stem of biliteral primary verb bases (see page 227).

wiye·(')-ič/, "one who is saying": -ič/, agentive, with the prevocalic W +S stem of all primary verb bases.

be[·]wn-a·/, "keep sewing": -'. . . a·/, continuative, with the S +Z stem of all primary verb bases.

xaye·-lsa·/, "cause to place often": -lsa·/, causative-repetitive, with the W +E· stem of biliteral primary verb bases. This suffix is initially truncated for triliteral bases: e.g., lɔge·w-sa·/, "cause to pulverize often." The W +E· stem is employed only with the causative-repetitive suffix.

biwan-da·/, "sew often": -da·/, repetitive, with the W +A stem of triliteral primary verb bases. This is the only suffix affiliated with the W +A stem.

hulu·ṣ-ɔ·/, hulu'ṣ-ɔ·/, "cause to sit down": -ɔ·/, causative, with either the W +W· stem or the W +W' stem of triliteral primary verb bases. These two stems, which are optional in the formation of the causative, are limited to the one suffix.

lɔgiw-le·/, "keep pulverizing": -le·/, continuative, with the W +I stem of a few primary verb bases of types IIA1 and IIB. There is no other suffix affiliated with the W +I stem. This stem-plus-suffix process is one of the rare instances of a morphological operation applied to only a few representatives of a given base type. Yawelmani morphology, on the whole, is characterized by the free, regular, and machine-like operation of its processes; every base belonging to a given type is, with rare exceptions, subject to the processes appropriate to that type.

The root of the -wiyi verb, another subclass of basic verbs, is composed of a semiproclitic element plus -wiyi. The -wiyi portion of the verb may assume any of the stem-plus-suffix processes that apply to the primary verb base *wiyi, "say, do." With the primary verb examples presented above, compare the following stem-plus-suffix forms of *'uhwiyi, "cough": "uhwiy-hin, "he coughed," 'uhwiy-hatin/, "desire to cough," 'uhwiya·-'a·hin, "he was coughing," 'uhwiye·(')-ič/, "one who is coughing," 'uhwiye·lsa·/, "cause to cough often." As these examples indicate, the proclitic element may remain unchanged while the -wiyi portion of the verb is subjected to the processes of the primary verb. But there are, in addition, several processes which the proclitic itself undergoes.

According to their proclitic behavior, three types of -wiyi verb base are to be distinguished, the types being marked by the syllabic structure of the proclitic: the -wiyi verb base with 1) a biliteral proclitic, 2) a triliteral proclitic, and 3) a

quadriliteral proclitic. Of these three types, the -wiyi verb base with a quadriliteral proclitic is the least creative, for the proclitic element is fixed and immutable; this type of -wiyi verb is, in short, limited in its formal behavior to the stem-plus-suffix processes of the primary verb. Most of the quadriliteral proclitics are cast in a double finally reduplicated form: e.g., *simimimwiyi, "keep drizzling," *t̓ababab-wiyi, "make fluttering sounds," *'ununwiyi, "shiver." But only a few are actually created by double final reduplication of a biliteral proclitic; *simimimwiyi is reduplicated from *simwiyi, "drizzle," but *t̓abababwiyi and *'ununwiyi are petrified in their reduplicated forms. A few of the quadriliteral proclitics do not exhibit a reduplicated form, and these are also petrified: e.g., *čiwak̓aywiyi, "turn green."

The biliteral proclitics are somewhat more productive in undergoing formal change. Complete reduplication of the biliteral proclitic serves to express a repetitive function: e.g., *t̓apwiyi, "slap," *t̓apt̓apwiyi, "clap the hands"; *xip̓wiyi, "rub once," *xip̓xip̓wiyi, "rub several times." Double final reduplication of the biliteral proclitic denotes a semelfactive or continuative activity (see the quadriliteral proclitics, discussed above). A rhetorical lengthening of the biliteral proclitic vowel expresses a retardative function: e.g., *t̓olwiyi, "get peeled off quickly," *t̓o·lwiyi, "get peeled off slowly"; *hik̓wiyi, "make a hiccuping sound," *hi·k̓wiyi, "make a panting sound." These changes of reduplication and vowel lengthening, which affect the biliteral proclitic of the -wiyi verb base, are the only formal processes applied to this type of -wiyi verb in addition to the stem-plus-suffix processes of the primary verb.

The most productive type of -wiyi verb is that with a triliteral proclitic. This proclitic, like the biliteral type, may be completely reduplicated, and it may have the last vowel rhetorically lengthened: e.g., *gababwiyi, "wave the hand once," *gababgababwiyi, "wave the hand several times";[9] *bidinwiyi, "tumble from a high place," *bidi·nwiyi, "walk over a high place." No creative process, however, is responsible for the finally reduplicated form displayed by a large number of triliteral proclitics, such as *gababwiyi; all of these are petrified in their present form.

In contrast to the other proclitic types, the triliteral proclitic assumes stem forms detached from the -wiyi portion of the verb. The following are examples of the triliteral proclitic stems with their affiliated suffixes:

'ime[·]k̓-la·/, "cause to drop out of sight": -la·/, causative, with the W+S proclitic stem of *'imik̓wiyi, "drop out of sight."

dugg-al/, "that which is straight": -al/, consequent agentive, with the W+Z proclitic stem of *dugugwiyi, "straighten out" (medio-passive).

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[9] In general, the complete reduplication of triliteral elements is uncongenial to Yawelmani. Biliteral primary verb bases and biliteral proclitics of the -wiyi- verb base undergo complete reduplication quite freely; but the triliteral primary verb bases are totally impervious to this process, and only a very small proportion of the triliteral proclitics may be completely reduplicated.

ḳɔ·ẏiẏ-it/, "several objects bent sideways' · -it/, distributive, with the S+I proclitic stem of *ḳɔẏɔẏwiyi, "bend sideways" (medio-passive).

waḳwaḳ-iṣ/, "one who always has his mouth open": -iṣ/, habitual agentive, with the initially reduplicated proclitic stem of *waḳaḳwiyi, "open the mouth."

The -wiyi verb base with a triliteral proclitic may be regarded as something in the nature of a compound base, for this type of proclitic element has the charac- teristic of a detachable root. Other types of proclitic, however, remain constantly joined to the -wiyi portion of the verb and, in this respect, are genuinely proclitic in nature. The fact that no grammatical technique resembling either proclisis or compounding occurs elsewhere in the language marks the -wiyi verbs as a peculiar and anomalous class of words.

Another peculiarity of -wiyi verbs is their direct expressive force, which stands out sharply in such a highly formalized language as Yawelmani. Many of the proclitics, particularly those of the biliteral type, are patently onomatopoetic, and these combined with the -wiyi element (obviously related to *wiyi, "say, do") result in a "do so-and-so" type of mimetic reference: e.g., *tuhwiyi, "spit" ("do tuh"), *ga·gwiyi, "cackle" ("do ga·g"), *ṭɔḳwiyi, "make a popping sound" ("do ṭɔḳ"). To the Yawelmani native, at any rate, the -wiyi verbs have a special and distinct status. They represent a type of linguistic playfulness which is apparently considered to be not quite in keeping with the essential sobriety of adult behavior. These verbs are used by adults only for humorous or grotesque effect; they also appear in the comic portions of mythical narratives, particularly in those describing the antics of Coyote. But in everyday speech the -wiyi verbs are primarily the linguistic property of children.

A reduplicated form of base with its distinctive stem paradigm characterizes the reduplicated verb, a third subclass of basic verbs. Reduplicated verb bases, which express repetitive notions, are created by complete reduplication of primary verb bases, but it is only the biliteral bases of the primary verb that may be con- verted into reduplicated verb bases. The stem paradigm of the reduplicated verb is presented in the table on page 235.

With minor additions and omissions, the suffixes affiliated with the F+R stem of primary verbs are also allocated to the F+Z—W+Z stem of reduplicated verbs: e.g., 'ɔ[·]ṭ-hun, "he stole," 'ɔ[·]ṭ'uṭ-hun, "he stole often"; 'ɔ·ṭ-al, "he might steal," 'ɔ[·]ṭ'uṭ-al, "he might steal often." Since these two stems share the ma- jority of verb suffixes, they are the nuclear stems in the creation of words and themes for their respective verb subclasses. Only one or two suffixes are affiliated with each of the reduplicated verb stems other than the F+Z—W+Z stem: e.g., 'ɔ[·]ṭ'aṭ-/, "the act of stealing often," contains the suffix -/, verbal noun, the only one employed with the F+Z—A+Z stem of reduplicated verb bases; wiẏway-a·/ "one who has often said," contains -'. . . a·/, consequent agentive, the sole suffix allocated to the W+Z—A+Z stem of reduplicated verb bases; xaya·xiy-ič/,

"one who often places," contains the agentive ⸱ič̣/, the only suffix added to the W +S—I +Z stem of reduplicated verb bases.

The root of thematic verbs and of substantives is the theme, which differs in several fundamental respects from the base. The theme is not defined in its phonetic structure by limitations of a syllabic or vocalic nature, such as those applying to the base; like the word, the theme may be composed of any number of open or closed syllables in any combination, and the vowels of these syllables are not restricted to any particular series. For the most part, the theme is a secondary root, made up of a thematizing suffix added to a stem: e.g., ʼuṭ̓ɔ·lsa·/, "cause to steal often" (⸱lsa·/, causative-repetitive, with the W +E· stem of *ʼɔ·ṭ̓u); xathatin/, "desire to eat" (⸱hatin/, desiderative, with the W +Z stem of *xata); hɔy̓le·xas/, "do nothing but hunt" (⸱xas/, exclusive, with a stem of the theme hɔy̓le·/, "hunt"). As the last example indicates, a thematizing suffix may be added to the stem of a theme as well as to the stem of a base. Theoretically, there is no limit to the number of thematic layers that can lead up to an eventual theme: e.g., xathatinxas/, "do nothing but desire to eat." Not all themes, however, can be demonstrated by analysis to be secondary roots; hɔy̓le·/ is an example of a primitive, unanalyzable theme. Such primitive themes are particularly numerous among substantives.

The theme paradigm contains only one characteristic stem—the case stem of substantives, the normal stem of thematic verbs. In this stem it is solely the last vowel which undergoes ablaut change. The theme types and the normal stem of thematic verbs are illustrated in the following table:

| Theme Types | Normal Stem | |
|---|---|---|
| | preconsonantal | prevocalic |
| IB) hɔy̓le·/, "hunt" | hɔy̓le·⸱ | hɔy̓l⸱ |
| IIA a) pana·mix/, "arrive with" | pana·mix⸱ | pana[·]mx⸱ |
| b) xatmix/, "eat with" | xatmix⸱ | xatmix⸱ |
| IIB ʼa·ḍay/, "boast" | ʼa·ḍay⸱ | ʼa·ḍay⸱ |

The treatment of theme vowels in the normal stem corresponds, on the whole, to the treatment of base vowels under the processes of reduction, and it is this correspondence between themes and reduced bases which the numbering of theme types is intended to indicate.[10]

Simple phonetic criteria determine the classification and the stem treatment of theme types among thematic verbs. All themes ending in a vowel are members

[10] The reduction processes are best exemplified in the F +R stem of primary verb bases. This stem is presented in a schematic form and illustrated on page 229; compare the stem treatment of root vowels in *ʼile· (base type IB) and hɔy̓le·/ (theme type IB), in *lɔgɔw (base type IIA) and pana·mix/ (theme type IIA), in *hulɔ·ṣ (base type IIB) and ʼa·ḍay/ (theme type IIB). The correspondence between reduced bases and themes, however, can be more readily demonstrated in the theme configuration of substantives, where the correspondence emerges in more obvious and overt resemblances because of the presence of additional theme types (see page 241 ff.).

of theme type IB, and only a heavy vowel occurs finally in themes; in its normal stem treatment, this final vowel is retained preconsonantally but assumes the zero grade prevocalically. Themes ending in a consonant preceded by i or u belong to theme type IIA; if the penultimate syllable is open, the theme (type IIAa) loses its last vowel prevocalically; if the penult is closed, the theme (type IIAb) keeps its last vowel in both the preconsonantal and prevocalic forms of the normal stem. In the prevocalic normal stem of theme type IIAb, the resistance of the last vowel to zeroing is due to a syllabic interference rather than to the character of the vowel itself, for identical processes create verb themes of type IIAa and IIAb, the examples in the normal stem table (page 239) being composed of ˈmix/, comita-tive, with stems of *pana·, "arrive," and *xata, "eat." Finally, themes of type IIB end in a consonant preceded by a or ɔ; this vowel is retained in both forms of the normal stem.

The same set of suffixes affiliated with the F+R stem of primary verb bases and with the F+Z—W+Z stem of reduplicated verb bases are employed with the normal stem of thematic verbs: e.g., hɔy̆le·ˈhin, "he hunted"; pana[·]mx̌ˈal nan, "he might come with me." In addition to these suffixes, the normal stem employs several others which are identical in function to suffixes affiliated with basic verb stems other than the F+R stem and the F+Z—W+Z stem: e.g., the agentive ˈihne·/, added to the normal stem of thematic verbs, parallels the function of ˈič/, agentive, allocated to the W+S stem of primary verbs and to the W+S—I+Z stem of reduplicated verbs.

The morphological system of thematic verbs, the system of stem-plus-suffix processes common to all members of this word class, is the normal stem with its suffixes. But, by analogy, some of the stem-plus-suffix processes appropriate to basic verbs are sporadically applied to a few thematic verbs. These analogical proc-esses, however, are not to be considered part of the thematic verb paradigm; for, with the exception of the fake base (see below), no thematic verb can partici-pate systematically in the processes of the basic verb paradigm. As a matter of fact, the analogical processes number no more than half a dozen.

Verb themes assume the processes of those verb bases to which they have an adventitious structural similarity: some processes applied to triliteral primary verb bases are analogically carried over to triliteral verb themes, and processes operat-ing upon reduplicated verb bases, which are quadriliteral in structure, are similarly extended to quadriliteral verb themes. Thus, the repetitive ˈda·/, regularly al-located to the W+A stem of triliteral primary verb bases (see page 236), is added to an analogical W+A stem of a few triliteral verb themes: compare ˈilak-da·/, "sing often" ( <*ˈilik, "sing") with wilal-da·/, "prepare to depart often" ( <wella·/, "prepare to depart"); in the same way the agentive ˈič/, affiliated with the W+S—I+Z stem of reduplicated verb bases, is suffixed to an analogical W+S—I+Z stem of a few quadriliteral verb themes: compare dɔsɔ·dis-ič/, "one who reports often" ( <*dɔ·sɔdɔ·sɔ, "report often") with hɔyɔ·nil-ič/, "one who

incites" ( <hɔynil/, "incite, rally"), the last example having the same function as hɔynil-ihne·/, in which the agentive -ihne·/ is added to the normal stem of the verb theme.

The only variety of thematic verb that may undergo the entire gamut of basic verb processes is the fake base, a theme of type IIAa formed by the medio-passive -in/ appended to the F+R stem of biliteral primary verb bases: e.g., xay-in/, "get placed" ( <*xaya·, "place"), he·x-in/, "get fat" ( <*he·xi, "fatten").[11] No other thematizing process creates a verb theme which is so base-like in its struc-ture: compare he·xin/ with the base *be·win, "sew." When it is recalled that the normal stem treatment of themes corresponds in certain configurational features to the F+R stem treatment of primary verb bases and that these two stems share most of their suffixes, it will be realized that the fake base is merely a variety of theme which, in its stem-plus-suffix processes as well as in its structure, exhibits a maximal resemblance to the base: compare the normal stem-plus-suffix forms, he·xin-hin, "he got fat," and he[·]xn-al, "he might get fat," with the F+R stem-plus-suffix forms, be·win-hin, "he sewed," and be[·]wn-al, "he might sew." With this fortuitous but far-reaching parallelism to the base offering an optimum condi-tion for analogical intrusion, the fake base takes over the entire formal apparatus of the true base: e.g., hixn-atin/, "desire to get fat" (compare biwn-atin/, "desire to sew"), hixe[·]n-'an, "he is getting fat" (compare biwe[·]n-'an, "he is sewing"), hixi'n-e·/, "cause to get fat" (compare biwi'n-e·/, "cause to sew"). But the pro-cesses forming he[·]xn-ihne·/, "one who is getting fat," or he·xin-xɔ·hin, "he was getting fat," cannot be applied to *be·win, for the agentive -ihne·/ and the dura-tive -xɔ·. . are distinctively normal stem suffixes which are not affiliated with any of the primary basic verb stems. The fake base, in short, is a base-like theme which undergoes the processes of both the basic verb and the thematic verb.

Like the normal stem of thematic verbs, the case stem of substantives appears in two forms, the absolutive case stem corresponding to the preconsonantal nor-mal stem, the oblique case stem corresponding to the prevocalic normal stem. Whereas the divisions of the normal stem are phonetically conditioned, those of the case stem are based upon an alignment of suffixes. To the absolutive case stem is added only the subjective suffix; suffixes expressing the possessive, objective, indi-rect objective, ablative, and locative cases are added to the oblique case stem. The substantive theme types and their case stems are as follows:

| Substantive Theme Types | Case Stem | |
|---|---|---|
| | absolutive | oblique |
| IA k̓ač/, "obsidian" | k̓ač- | k̓ač- |
| IIB a) pitelse·/, "act of advising" | pitelse·- | pitels- |
| b) k̓e·xa·/, "money" | k̓e·xa·- | k̓e·xa·- |

[11] The suffix -in/ is also added to the F+R stem of the triliteral type of primary verb base: e.g., lɔgw-in/, "get pulverized" ( <*lɔgɔw, "pulverize"). But such thematic verbs are not subject to the basic verb processes; i.e., they are not fake bases.

IIA čɔnɔ·xis/, "sugar pine"          čɔnɔ·xis·          čɔnɔ[·]xs·
IIB a) k̓ile·y/, "cloud"               k̓ile·y·            k̓ile·y·
    b) silelhal/, "stones"           silelhal·          silelhal·
    c) bɔnɔy/, "two"                 bɔnɔy·             bɔny·

The correspondence of themes to reduced bases is more apparent among substan-
tives than among thematic verbs (see page 239, especially footnote 10). Theme type
IA, which does not occur among thematic verbs, is a biliteral substantive theme
whose case stem corresponds to the F+R stem of biliteral bases of type IA: com-
pare the F+R stem of *xata, "eat," appearing as preconsonantal and prevocalic
xat· (see page 229), with the case stem of k̓ač/, indicated in the above table.

Themes of type IB end in a heavy vowel. The IBa substantive theme follows
the stem pattern of the IB verb theme (compare hɔy̓le·/, page 239) and the IB verb
base (compare *·ile·, page 229) in retaining its final vowel in the absolutive case
stem and losing it in the oblique. Peculiar to substantives is the stem pattern for
IB roots occurring in substantive theme IBb, which retains its final vowel in both
the absolutive and the oblique forms of the case stem. Membership in subtype
IBa is morphologically determined: vowel-ending substantive themes composed
of a verbal noun suffix added to the normal stem of thematic verbs belong to sub-
type IBa; all other vowel-ending substantive themes belong to subtype IBb.

Theme type IIA is made up of themes with a final consonant preceded by i
or u. Among certain verb themes of this type, a syllabic interference prevents the
zeroing of the last vowel in the prevocalic normal stem (see page 240). But substan-
tive themes of type IIA consistently zero their last vowel in the oblique case stem,
regardless of syllabic conditions: e.g., in spite of the closed penult in 'ɔnmil/,
"daughter-in-law," the last vowel is zeroed and an inorganic vowel is inserted in
the oblique case stem 'ɔn(i)ml·. The F+R stem pattern of IIA bases is more con-
sistently maintained, therefore, by IIA substantive themes than by verb themes of
this type.

Substantive themes of type IIB fall into three subtypes. Like the IIB base
with its F+R stem pattern, the IIBa substantive theme ends in a consonant with
a preceding heavy vowel, this vowel being retained in the absolutive and oblique
case stem. Like the IIB verb theme with its normal stem pattern, the IIBb substan-
tive theme ends in a consonant preceded by a or ɔ, this vowel also being retained
in both forms of the case stem. But the IIBc substantive theme, whose last a or ɔ
vowel is zeroed in the oblique case stem, is a type of root peculiar to the substantive
configuration. This unique theme is a moribund and probably archaic type, for
only a handful of IIBc themes occur in Yawelmani. All other theme types are un-
limited categories, containing themes formed by thoroughly productive processes.

The entire set of substantive theme types is represented among nouns, one
of the three substantive classes (see page 233). The case stem with its six case suffixes
is the paradigm common to all nouns. The following examples will illustrate the
case paradigm of nouns.

| | k̓ač/<br>"obsidian" | k̓e·xa·/<br>"money" | ċɔnɔ·xis/<br>"sugar pine" | k̓ile·y/<br>"cloud" |
|---|---|---|---|---|
| Subjective | k̓ač·] | k̓e·xa(')·] | ċɔnɔ·xis·] | k̓ile[·]y·] |
| Possessive | k̓ač·in | k̓e·xa·(')·in | ċɔnɔ[·]xs·in | k̓ile·y·in |
| Objective | k̓ač·a | k̓e·xa·(')·in | ċɔnɔ[·]xs·ɔ | k̓ile[·]y·] |
| Ind. objective | k̓ač·ni | k̓e·xa··ni | ċɔnɔ[·]xs(ɔ·)·ni | k̓ile[·]y·ni |
| Ablative | k̓ač·nit | k̓e·xa··nit | ċɔnɔ[·]xs(ɔ·)·nit | k̓ile[·]y·nit |
| Locative | k̓ač(a)·w | k̓e·xa[·]·w | ċɔnɔ[·]xs(ɔ)·w | k̓ile·y(a)·w |

Among the case suffixes only the objective suffix differs in form according to the theme type of the noun to which it is attached.

Beyond the case paradigm, the stem-plus-suffix processes applied to the noun are extremely sporadic and unproductive. Some of these special processes operate upon only two or three nouns, while others can be applied to as many as a score of nouns; but all of them, in contrast to the processes of the case paradigm, are narrowly limited in scope. In this respect, they have much the same status as the analogical processes of the thematic verb, neither the special processes of the noun nor the analogical processes of the thematic verb being part of the paradigm of thoroughly creative processes that can be systematically applied to every word-class member.

On a functional basis the special processes of the noun may be conveniently divided into verbalizing, nominalizing, and pluralizing processes. Among the verbalizing processes, for example, is the suffix -na·/, "procure, make," added to a W +A stem of a few nouns, to a W +I stem of a few others: e.g., 'inat̓·na·/, "get magic power" ( <'e·nit̓/, "magic power"), t̓alip-na·/, "make arrows" ( <t̓ala·p/, "arrow"). An example of a nominalizing process is the bahuvrihi intensive -iyin/, whose first consonant varies considerably, sometimes assimilating to the last consonant of the stem and sometimes varying irrationally, added to a W +Z stem of a few nouns: e.g., xisx-iyin/, "one with long fingernails" ( <xe·six/, "fingernail"), k̓ut̓ṣ-uyun/ or k̓uṫṣ-uṣun/, "one with a long tail" ( <k̓uṫuṣ/, "tail"), balk̓-idin/, "one with a large belly" ( <balik̓/, "belly").

Two techniques for pluralizing nouns occur in Yawelmani. One is the addition of a plural suffix to a noun stem, the stem-plus-suffix unit being a theme which is inflected for case like any theme of its type: e.g., sile[·]l-hal/, "stones," is a theme of type IIBb, composed of -hal/, plural suffix, with the W +E· stem of sile·l/, "stone." In contrast to this plural thematizing technique is the formation of a plural stem to which the case suffixes are added, the subjective case suffix being attached directly to the plural stem, the other case suffixes being added to the plural stem with an intervening oblique suffix -h·: e.g., nɔ·sas-, plural stem, and nɔ·sas-h-, plural stem with oblique suffix ( <nusɔ·s/, "paternal aunt"). Only a very small proportion of nouns can be formally pluralized, and even in these nouns the plural form is not obligatory for expressing a plural function: e.g., mani' silel, literally "many stone," is as acceptable as mani' silelhal, "many stones."

The personal pronouns and demonstratives constitute another class of substantives, based upon themes of type IBb: na·/, first person, ma·/, second person, 'ama·/, third person; ke·/, "this," ṭa·/, "that." The paradigm of these themes is made up of a singular, dual, and plural in each of the six cases. The forms of the first person na·/ will serve to illustrate the paradigm of this substantive class.[12]

|                   | Singular | Dual        | Plural       |
|-------------------|----------|-------------|--------------|
| Subjective        | na'      | na'ak̉      | na'an        |
| Possessive        | nim      | nimgin      | nimɔ·gun     |
| Objective         | nan      | na·nikwa    | na·ninwa     |
| Indirect objective| nanni    | na·nikwa·ni | na·ninwa·ni  |
| Ablative          | nannit   | na·nikwa·nit| na·ninwa·nit |
| Locative          | na·naw   | na·nikwaw   | na·ninwaw    |

For the first person dual and plural Yawelmani distinguishes between an exclusive and an inclusive, denoting that the person being addressed is either excluded or included in the first person reference. The dual and plural forms of the first person pronoun, as given in the above table, denote the exclusive; the inclusive is expressed by a special paradigmatic inflection of the pronominal theme ma·/, second person, in the dual and plural cases: compare in their dual subjective forms the first person exclusive na'ak̉, "we two (he and I), "the inclusive mak̉, "we two (you and I)," and the second person ma'ak̉, "you two."

The third class of substantives is composed of interrogatives, whose paradigm is extremely defective. The interrogatives ordinarily appear in three case forms, to which is attached a constant, enclitic-like element -uk. Although a distinct form denoting the subjective case occurs for all interrogatives, the oblique case functions are variously combined in their formal expression; usually the indirect objective, locative, and ablative functions are fused in an adverbial case form. Some of the interrogatives are:

subjective watuk, "who?" possessive wa·tinuk, objective and adverbial wa·tɔ'uk

subjective ha'uk, "what thing?" objective ha·nuk, adverbial ha·nɔ'uk

subjective hiyuk, "what place?" ablative hiye·tuk, objective, indirect objective, and locative hiyɔ'uk

subjective hawiyuk, "what kind of . . . ?" objective hawyɔ'uk, adverbial hawye·nɔ'uk

subjective hawṣinuk, "how many?" oblique hawṣe·nɔ'uk

As opposed to verbs and substantives, which constitute the inflected word classes of Yawelmani, the particles and interjections are uninflected. For the most part, the particles are primitive elements not derived from verb or substantive

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[12] No attempt is made at an analytical presentation of these paradigmatic forms. Although the pronouns and demonstratives belong to the substantive category, their paradigm, as might be expected, exhibits a number of special phonetic and morphological details, which cannot be taken up in this brief sketch.

roots, but a few semantically specialized derivatives appear among the particles: e.g., ʼut̓al, "solely, nothing but" (literally, "that which is perched on a summit"), composed of ⹁al/, consequent agentive, with the W +Z proclitic stem of *ʼut̓ut̓wiyi, "perch on a summit" (see page 237).

According to their function, particles may be classified as 1) predicational modifiers, 2) conjunctives, and 3) sentence words. The predicational modifiers form the largest group among the particles. A number of these express modal ideas: e.g., hinaʼ, "perhaps"; ʼaxaṁ, "probably, it is to be believed that . . . "; ʼanaxdiʼ, "it is to be doubted that . . . "; ʼahmun, "it is to be expected that . . . "; ʼe·man, "to no avail, without success"; ʼax, "unintentionally, unwittingly"; ʼaṣ, "actually, really"; wil̓, "of course, certainly"; miẓnaʼ, "indeed, surely"; naʼaṣ, a dubitative tag, always employed in a sentence containing a verb with the dubitative suffix ⹁al. Some examples in context are:

ʼaxam xata nimɔ·gun ʼɔ·t̓ɔn, "probably he will steal our food"

cawhin ʼe·man, "he shouted, to no avail"

ʼangi maʼ tan ʼaṣ dɔshin, "did you actually report it?"

Particles with a temporal force are also numerous among the predicational modi⹁ fiers: e.g., hiya·ṁiʼ, "a long time ago"; ʼalid, "some time ago"; walan, "yester⹁ day"; he·ẓiʼ," today"; t̓iymi, "right now"; canum, "immediately"; ʼaċa·wis, "in a short while"; miʼin, "soon"; wisa, "not yet, after a while"; hiyaʼ, "later on."

hiya·ṁiʼ kew naʼan hɔẏle·hin, "a long time ago we hunted here"

xaten naʼ t̓iymi, "I shall eat right now"

miʼin hulɔṣhun, "soon he sat down"

Several particles convey notions of an aspective nature: e.g., xɔ·nɔw, "always"; t̓aʼaṣ, "continuously"; hiyam, "already." The interrogative is expressed by ʼangi, which is placed at the head of a sentence to interrogate the entire predication, and by gi, which follows the word that it interrogates: e.g., maʼ gi tan dɔshin, "was it you who reported it?" Negation is expressed by ʼa·ṅi with verbs containing the suffix ⹁ka, imperative, and by ʼɔhɔm in all other instances: e.g., ʼa·ṅi tan wiẏka, "don't do that!" ʼɔhɔm naʼ naʼaṣ taxnal, "I might not come."

The conjunctive particles have the function of coordinating or subordinating predications or the parts of a predication. The particle ʼamaʼ, "and, then," which occurs at the beginning of a sentence, is employed only as a coordinator of predica⹁ tions; yɔw, "and, also, again," may be used in the same way, but it also acts as a word coordinator: ʼamaʼ binethin kaẏwa, "and he asked Coyote"; yɔw ʼaman ilekʼan, "and they are singing"; ʼamaʼ kaẏiw yɔw be·mamguċ pana·hin, "and Coyote and Humming Bird arrived." Other conjunctive particles are: dab, "next, on the other hand"; ʼiʼ, ʼɔʼ, "or"; waʼaṣgi, "therefore"; meʼẓi, "because"; wil̓sin, "but, in spite of that"; ʼaṅuṁ, "at any rate, at least"; t̓aw, "if"; ki, "when."

kaẏiw ʼɔʼ be·mamguċ taxnen, "Coyote or Humming Bird will come"

ʼamaʼ hɔẏle·hin meʼẓiʼ ʼe·dilhin, "and he hunted because he got hungry"

t̓aw maʼ xaten ʼɔhɔm ʼedlen maʼ, "if you will eat, you will not get hungry"

The sentence words include the negative 'ɔhɔm, "no, not," which is employed also as a predicational modifier; the affirmative hɔ·hɔ', "yes," pronounced with nasalized vowels;[13] the exclamatory híydege', expressing surprise; and the greeting hiyuk, "hello," a special usage of the interrogative demonstrative meaning "what place?" (see page 244).

Interjections, regarded as appropriate only in women's speech, are earmarked by protracted vowels: e.g., wi . . . expresses annoyance; 'ina . . . is an exclamation of fear; 'e . . . expresses amazement and surprise.

## SYNTAX

Yawelmani is singularly bare and simple in its syntax. Because the verb expresses no pronominal references, it is free of any ties of concord to its subject or object. Nor is the syntactic relationship between the words in a sentence indicated by word order; with the exception of certain particles, some occurring at the head of a sentence and others following the term they modify, words may take any position within the sentence. In its syntactic style, as a matter of fact, Yawelmani is even more loose-jointed than the formal description of its unambitious syntax might suggest, for the few devices offering a means of syntactic elaboration tend to be used sparingly. Typical Yawelmani prose consists of a sequence of independent simple sentences.

The sole obligatory feature of Yawelmani syntax is the expression of case in the substantive. The obligation, however, is morphological as well as syntactic: the inflected words (verbs and substantives) must end in a final suffix, and suffixes referring to case are the only final suffixes in the substantive paradigm; consequently, substantives must appear with a final case suffix. There are six cases— subjective, possessive, objective, indirect objective, ablative, and locative. The subjective case suffix, -] with the absolutive case stem, -i with certain plural stems and -a with others, is appended to substantives acting as the subject of a predication.

 mam lanhin kayïiw-], "Coyote heard you"
 la·nit kayïiw-], "Coyote was heard"
 nɔ·sas-i 'amin pana' ṭew 'amin, "his paternal aunts will arrive at his house"
Substantives in a copulative predication and substantives used absolutively are also marked by the subjective case suffix.

 'ama' nɔ·ćɔ(')-] be·mamguć-], "and a clever fellow (is) Humming Bird"
 'anṭuw-] wiyhin kayïiw, " 'the shaman,' said Coyote"
 Ownership or possession is expressed by the possessive case suffix, -in.
 ṭa kayw-in t'ulɔs, "that (is) Coyote's bow"
Agency in a passive construction is also indicated by the possessive case.

 'axam̓ hɔ·yet diya·(')-in, "probably he was sent by the leader"

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[13] Nasalized vowels are not classified as phonemes, for they appear only in the affirmative particle.

Nonfinite verbal forms, such as gerundials and verbal nouns, cannot take a gram-matical subject; in these instances the possessive case is used to denote agency.

’iliktaw ’an(u)ṭw·un huloṣhun kaẏiw, "at the shaman's singing, Coyote sat down"; ’anuṭwun, in the possessive case, is the logical subject of the gerundial verb ’iliktaw.

lanhin ’ilka ’an(u)ṭw·un, "he heard the shaman's singing"; here ’anuṭwun is the logical subject of the verbal noun ’ilka, which, being the object of the predica-tion, appears in the objective case.

The direct object of a predication takes the objective case suffix, which varies in form according to the theme type membership of the substantive (see page 243).

mi’in ’ɔ·ṭ’on kač·a min, "soon he will steal your obsidian."
Substantives may stand in an objective relation to other substantives having a predicational force.

ṭa ’uṭ’a’ ḵe·xa·(’)-in, "that (is) the one who has stolen the money."

hina’ bine[·]t-] min kaẏw·a lanhin, "perhaps he heard your asking Coyote"; kaẏwa is the object of the verbal noun binet which, in turn, is the object of the main predication.

The locative ·w and the ablative ·nit have the function of expressing location or direction, the locative denoting "to, toward, into, in, at, on," the ablative "away from, out of."

’ama’ kaẏw(a)·w tanhin, "and he went toward Coyote"
’angi ma’ laga’ nim ṭe[·]·w, "will you spend the night at my house?"
’ama’ ṭa·-nit pil·nit yɔ’ke·hin ’aman, "and from that road they returned"
ṭan piçew’an ’ilḵ(a·)·nit, "he is pulling it out of the water."
The locative case has some special uses. It frequently expresses temporal location or duration.

wɔy(ɔ)·w ’amin, "at his birth"

yɔw ’ilken ’aman bɔny(ɔ)·w tɔẏnɔ[·]·w, "and they will sing for two nights"
Place names always have a locative form, regardless of their syntactic function in the sentence.

ťulɔn’an ’a[·]lt(a)·w, "Altaw is burning"; the place name ’altaw is the loca-tive form of ’a·lit/, "salt grass"

The indirect objective ·ni expresses a variety of indirective relational notions not covered by the locative or ablative.

’ama’ ṭaw pana·hin kaẏw(a·)·ni, "and there he arrived with Coyote"
dinhin na’an nɔ·ňɔ·’in ťunɔ[·]]l·nu, "we shielded the man from the wild·cat"
’angi naň ḵač·ni wa·nen, "will he give me obsidian?"
’a·ňi ’ugu’nɔḵ nan ’ilḵ(a·)·ni, "don't make me drink water!"

Substantives in apposition agree in case: see above, the locative bɔnyɔw tɔẏnɔw, "for two, for night," i.e., "for two nights," and the ablative ṭa·nit pilnit, "from that, from road," i.e., "from that road." Substantival phrases that have an attributive or limiting function may likewise appear in apposition to other sub-stantives.

pana' diy̓a·(')-in tew yɔlɔ[·]wč-in yɔkɔ·či, "he will arrive at the house of the leader, of the one who is assembling the people"

Although the substantive carries the heaviest syntactic load, there are some purely syntactic functions that may be expressed in the verb. These are subordinating functions, indicated by gerundial suffixes attached to the verb.

'ama' cawhin 'amič-mi, "and he shouted, having approached"; -mi, consequent gerundial

taxan'an kew mam bine·t-e·ni, "he is coming here to ask you"; -e·ni, resultative gerundial

'amič-tin kay̓win ga·gwiyhin, "being approached by Coyote, he cackled"; -tin, passive gerundial

Gerundials are true verbs in that they do not appear in any of the case forms. In this respect they differ from verbal nouns, which are also used to express subordinate predications.

xat(a)-w nim 'ilikhin, "during my eating, he sang"; -w, locative (of time), with the verbal noun xat/

Several of the conjunctive particles express ideas of a subordinating nature (see page 245). The use of these, however, entails no syntactic complications in the verb: e.g., pana·hin na', "I arrived," ki pana·hin na', "when I arrived..." Consequently, it is only the gerundial suffixes which formally mark the verb as a syntactically subordinate element.